

### FEATURED PRODUCTS

- Bridge Rectifiers
- Fast Recovery Rectifiers
- Schottky Rectifiers
- Standard Rectifiers
- Ultrafast Recovery Rectifiers

### RESOURCES

- For technical support, contact [Rectifiers@vishay.com](mailto:Rectifiers@vishay.com)
- For more information, contact [DiodesAmericas@vishay.com](mailto:DiodesAmericas@vishay.com), [DiodesEurope@vishay.com](mailto:DiodesEurope@vishay.com), and [DiodesAsia@vishay.com](mailto:DiodesAsia@vishay.com)

One of the World's Largest Manufacturers of  
Discrete Semiconductors and Passive Components





Rectifiers - Worldwide Leader in Power Rectifiers

TABLE OF CONTENTS

Featured Product Introduction ..... 3
Schottky Rectifiers ..... 7
• TMBS® (Trench MOS Barrier Schottky) Rectifiers..... 12
• High-Performance Schottky Rectifiers ..... 21
– HPS GEN 3.x (Planar Technology)..... 22
– HPS GEN 2.x (Planar Technology)..... 23
Ultrafast Recovery Rectifiers..... 32
• FRED Pt® (Fast Recovery Epitaxial Diodes)..... 36
• HEXFRED® ..... 44
• Ultrafast Avalanche Recovery Rectifiers..... 47
• Ultrafast Avalanche Rated Sinterglass Diodes ..... 48
Standard and Fast Recovery Rectifiers ..... 50
• Standard Rectifiers ..... 50
• High-Voltage Standard Recovery Diodes - Plastics ..... 52
• Standard Avalanche Recovery Rectifiers ..... 53
• Standard Avalanche Rated Sinterglass Diodes ..... 55
• ESD Capability Rectifiers ..... 56
• Fast Recovery Rectifiers ..... 57
• Fast Soft Recovery Rectifiers ..... 58
• Fast Avalanche Recovery Rectifiers ..... 61
• Fast Avalanche Rated Sinterglass Diodes ..... 62
Bridge Rectifiers..... 64
Rectifier Packages..... 68
Sample Package Construction..... 69

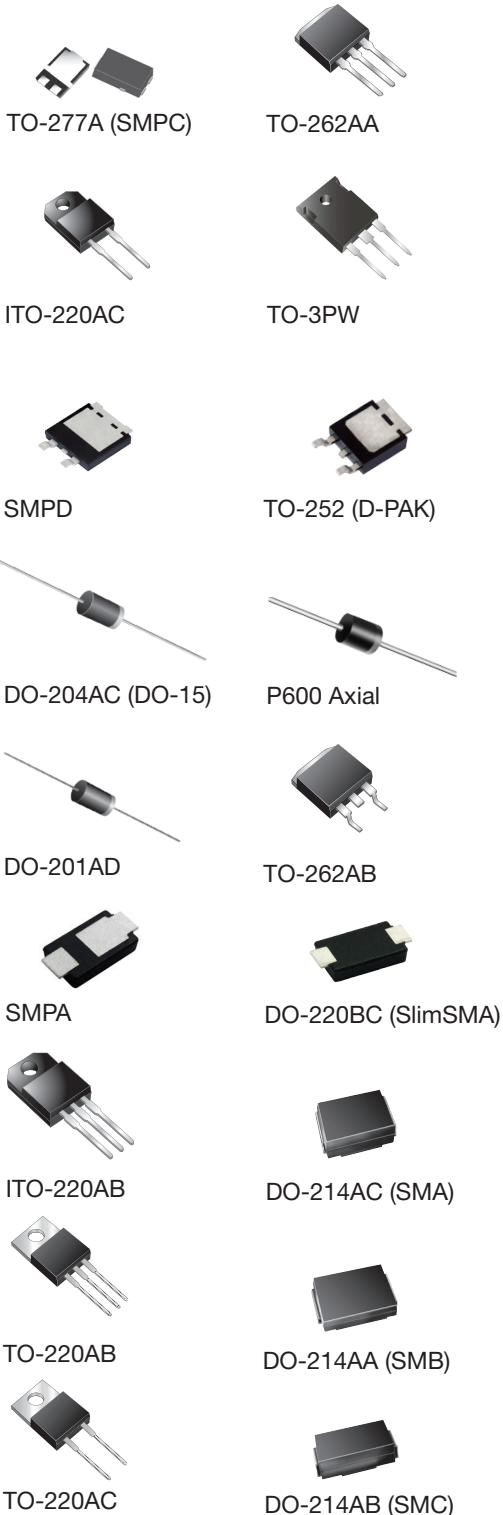


# RECTIFIERS

## Featured Product Information

Rectifiers - Worldwide Leader in Power Rectifiers

### Industry's First Commercial TMBS® - Trench MOS Barrier Schottky Rectifier Series



Vishay's patented Trench MOS Barrier Schottky (TMBS®) rectifiers are available with seven voltage ratings from 45 V to 200 V and several different package options to serve a wide range of system requirements. TMBS offers several advantages over planar Schottky rectifiers. As operating voltages move to 45 V and above, planar Schottky rectifiers tend to lose their advantage of fast switching speeds and low forward voltage drop to a substantial degree. The patented TMBS structure addresses this issue by diminishing minority carrier injections to the drift region, thus minimizing stored charges and improving switching speeds.

For detailed information, please refer to the TMBS section of this selector guide or visit the Vishay website for the latest information on available devices.

#### FEATURES

- Patented Trench structure
- Voltage ratings: 45 V, 50 V, 60 V, 80 V, 100 V, 120 V, 150 V, 170 V, 200 V
- Improved efficiency in AC/DC SMPS and DC/DC converters
- High power density and low forward voltage
- Multiple package options

#### APPLICATIONS

- Adaptors for LCD monitors and TVs, mini PCs
- PC and server power supplies
- AD/DC SMPS
- DC/DC converters
- Telecom and server OR-ing diodes
- Solar cell junction box as a bypass diode for protection



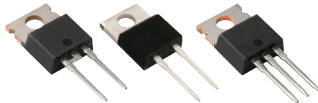
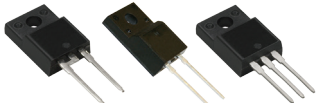
## FRED Pt® Series 200 V to 600 V, $T_j$ max 175 °C: Flexible Ultrafast Platform for Power Supplies and Inverters



SMF / SlimSMA / SMPC



SMA / SMB / SMC

TO-220AC / TO-220AB / Isolated TO-220AC  
(rated 8 A to 30 A)TO-220FPAC / AB  
(rated 8 A to 30 A)D-PAK (TO-252) / D²PAK (TO-263)  
(rated 4 A to 15 A) (rated 8 A to 30 A)I²PAK (TO-262)  
(rated 8 A to 30 A)TO-247AC  
(rated 30 A to 60 A)PowerTab®  
(rated 80 A to 150 A)

The Vishay Semiconductors FRED Pt® Gen 1 and Gen 2 series of ultrafast diodes offer designers a highly flexible solution that's equally at home in consumer and automotive applications.

With ratings from 200 V to 600 V and from 3 A to 150 A -- unique in the industry -- these series allow designers to increase the efficiency of power supplies with devices designed to minimize conduction and/or switching losses.

Their extreme low leakage current at high temperatures, careful design of chip terminations, and construction with high-quality materials make FRED Pt the ideal choice for automotive applications as well.

### FEATURES

- $V_{RRM}$  200 V to 600 V
- Same current (A) rating is available for devices optimized for lowest conduction losses or lowest switching losses
  - Lowest  $Q_{rr}$  at 125 °C
  - Lowest  $V_F$  at  $I_F$
- Improved efficiency in SMPS
- Soft recovery for reduced EMI at high di/dt
- $T_j$  (max) 175 °C
- AEC-Q101 qualified
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)
- Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.


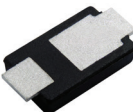

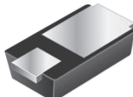

### APPLICATIONS

- Power factor correction (PFC) for switchmode power supplies in
  - Desktop PCs
  - Lighting/ballast
  - Servers and telecom
  - PDP, TVs, LCD, monitors
  - Game controllers
- ECU for fuel injection on diesel/gasoline-fueled systems
- Traction control systems
- Solar inverters
- Freewheeling diode for industrial applications



Rectifiers - Worldwide Leader in Power Rectifiers

### eSMP® Flat Type Surface-Mount Packages with Space-Saving Footprint

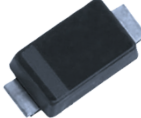

- SMP**  
 (3.8 mm x 2 mm x 1 mm)
- SMPA**  
 (5.2 mm x 2.6 mm x 0.95 mm)
- SMPC**  
 (6.7 mm x 4.8 mm x 1.1 mm)
- MicroSMP**  
 (2.5 mm x 1.3 mm x 0.65 mm)
- SMPD**  
 (12.63 mm x 10 mm x 1.7 mm)

The Vishay Semiconductors eSMP® flat type surface-mount packages enable higher current density and power efficiency with a unique design that promotes better thermal performance and reliability.

#### FEATURES

- Space saving miniature packages:
  - SMP (3.8 mm x 2 mm x 1 mm)
  - SMPA (5.2 mm x 2.6 mm x 0.95 mm)
  - SMPC (6.7 mm x 4.8 mm x 1.1 mm)
  - MicroSMP (2.5 mm x 1.3 mm x 0.65 mm)
  - SMPD (12.63 mm x 10 mm x 1.7 mm)
  - SMF (3.7 mm x 1.8 mm x 0.98 mm)
    - » Symmetrical leads
      - Wave and reflow solderable
  - SlimSMA (5.2 mm x 2.6 mm x 0.95 mm)
    - » Symmetrical leads
- Special wide bottom plate design enables better heat dissipation than other packages of similar sizes
- Low device height
- Low thermal resistance
- AEC-Q101 qualified
- Halogen-free versions available
- Available for Schottky, ultrafast, and standard rectifiers

#### SYMMETRICAL FLAT TYPES

- SMF**  
 (3.7 mm x 1.8 mm x 0.98 mm)
- SlimSMA**  
 (5.2 mm x 2.6 mm x 0.95 mm)

#### APPLICATIONS

- Telecom
- Automotive
- Computer
- Industrial
- Lighting
- DC/DC converters
- Free wheeling
- Mobile consumer electronics
- Solar cell junction box as a bypass diode for protection

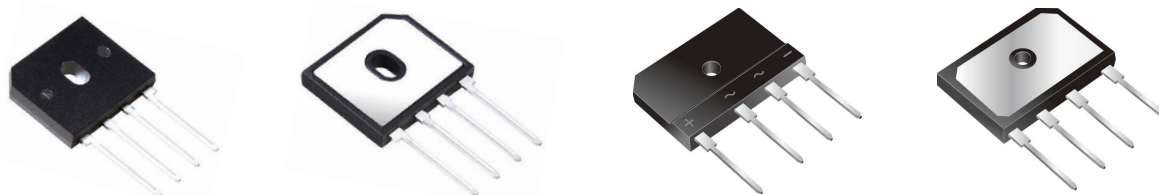
	<b>R<sub>θJM</sub></b>
<b>MicroSMP</b>	30 °C/W
<b>SMPA</b>	9 °C/W
<b>SMP</b>	15 °C/W
<b>SMPC</b>	3 °C/W
<b>SMPD</b>	1.0 °C/W
<b>SMF</b>	25 °C/W
<b>SlimSMA</b>	12 °C/W



# RECTIFIERS

## Featured Product Information

### New isoCink+™ Series Enhanced Power Bridge Rectifiers 10 A to 25 A (BU series) and 30 A to 45 A (PB series)



Vishay's new isoCink+™ power bridge rectifier series gives designers a space saving, high-current solution for bridge rectifiers in switchmode power supplies (SMPS), home appliances, audio/video equipment, and more. With highly efficient performance comparable to larger size bridge products, the low thermal resistance of power bridge devices reduces size requirements for heat sinks, since less heat needs to be dissipated. Offering a lead pitch and pin layout compatible with the conventional GBU and GSIB-55, isoCink+™ offers the designers the ability to upgrade system power without changing PCB layouts or heat sinking. A maximum solder temperature of 275 °C/10 s enables high reliability in manual soldering.

#### APPLICATIONS INCLUDE

- Primary rectification circuit of switch mode power supplies and adaptors for desktop PCs, servers, notebook PCs, plasma display panel (PDP) TVs, LCD TVs, and monitors
- Primary rectification circuit of inverters found in home appliances such as refrigerators, washing machines, air conditioners, and induction heater systems
- Primary rectification circuit in telecom SMPS

Part Number	Description	Package	$V_F$ at $I_F$ Per Chip, $T_j$
<a href="#">BU2506 to BU2510</a>	600 V to 1000 V 25 A single-phase bridge rectifier	BU	0.87 V typical at 12.5 A, 125 °C
<a href="#">BU2006 to BU2010</a>	600 V to 1000 V 20 A single-phase bridge rectifier	BU	0.85 V typical at 10 A, 125 °C
<a href="#">BU1506 to BU1510</a>	600 V to 1000 V 15 A single-phase bridge rectifier	BU	0.87 V typical at 7.5 A, 125 °C
<a href="#">BU1206 to BU1210</a>	600 V to 1000 V 12 A single-phase bridge rectifier	BU	0.88 V typical at 6 A, 125 °C
<a href="#">BU1006 to BU1010</a>	600 V to 1000 V 10 A single-phase bridge rectifier	BU	0.88 V typical at 5 A, 125 °C
<a href="#">PB3006 to PB3010</a>	600 V to 1000 V 30 A single-phase bridge rectifier	PB	0.97 V typical at 15 A, +125 °C
<a href="#">PB3506 to PB3510</a>	600 V to 1000 V 35 A single-phase bridge rectifier	PB	0.90 V typical at 17.5 A, +125 °C
<a href="#">PB4006 to PB4010</a>	600 V to 1000 V 40 A single-phase bridge rectifier	PB	0.94 V typical at 20 A, +125 °C
<a href="#">PB5006 to PB5010</a>	600 V to 1000 V 45 A single-phase bridge rectifier	PB	0.90 V typical at 22.5 A, +125 °C



## RECTIFIERS

## Schottky Rectifiers

**Schottky Rectifiers** are the ideal product for high-speed and low power loss applications. Their metal-silicon junctions and majority carrier condition result in extremely fast recovery times (less than 10 ns) and very low forward voltage drops. Vishay's unique sputtered metallization process and ion implanted guarding technology result in a highly reliable Schottky product. We offer our customers the opportunity to select the best device for their applications by providing the flexibility of different barrier heights.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
0.6	<a href="#">SB020 to SB060</a>	Plastic Axial	MPG06	20 - 60	0.55 / 0.70	0.6
1.0	<a href="#">1N5817 to 1N5819</a>	Plastic Axial	DO-204AL (DO-41)	20 - 40	0.45 - 0.60	1.0
1.0	<a href="#">BYM13-20 to BYM13-60</a>	Plastic SMD	DO-213AB (MELF)	20 - 60	0.50 - 0.70	1.0
1.0	<a href="#">MSS1P2L and MSS1P3L</a>	Plastic SMD	Micro SMP	20 - 30	0.50	1.0
1.0	<a href="#">MSS1P3 and MSS1P4</a>	Plastic SMD	Micro SMP	30 - 40	0.55	1.0
1.0	<a href="#">MSS1P5 and MSS1P6</a>	Plastic SMD	Micro SMP	50 - 60	0.68	1.0
1.0	<a href="#">SB120 to SB160</a>	Plastic Axial	DO-204AL (DO-41)	20 - 60	0.48 - 0.65	1.0
1.0	<a href="#">SB1H90 and SB1H100</a>	Plastic Axial	DO-204AL (DO-41)	90 - 100	0.77	1.0
1.0	<a href="#">SGL41-20 to SGL41-60</a>	Plastic SMD	DO-213AB (MELF)	20 - 60	0.50 - 0.70	1.0
1.0	<a href="#">SS12 to SS16</a>	Plastic SMD	DO-214AC (SMA)	20 - 60	0.50 - 0.75	1.0
1.0	<a href="#">B120 to B160</a>	Plastic SMD	DO-214AC (SMA)	20 - 60	0.52 - 0.75	1.0
1.0	<a href="#">SS1H9 and SS1H10</a>	Plastic SMD	DO-214AC (SMA)	90 - 100	0.77	1.0
1.0	<a href="#">SS1P3L and SS1P4L</a>	Plastic SMD	DO-220AA (SMP)	30 - 40	0.45 - 0.48	1.0
1.0	<a href="#">SS1P3 and SS1P4</a>	Plastic SMD	DO-220AA (SMP)	30 - 40	0.50 - 0.53	1.0
1.0	<a href="#">SS1P5L and SS1P6L</a>	Plastic SMD	DO-220AA (SMP)	50 - 60	0.59	1.0
1.1	<a href="#">SL02</a>	Plastic SMD	DO-219AB (SMF)	20	0.42	1.0
1.1	<a href="#">SL03</a>	Plastic SMD	DO-219AB (SMF)	30	0.45	1.0
1.1	<a href="#">SL04</a>	Plastic SMD	DO-219AB (SMF)	40	0.53	1.0
1.5	<a href="#">BYS10-25 to BYS10-45</a>	Plastic SMD	DO-214AC (SMA)	25 - 45	0.5	1.0
1.5	<a href="#">BYS11-90</a>	Plastic SMD	DO-214AC (SMA)	90	0.75	1.0
1.5	<a href="#">BYS12-90</a>	Plastic SMD	DO-214AC (SMA)	90	0.36/0.75	0.1/1.0
1.5	<a href="#">SL12 and SL13</a>	Plastic SMD	DO-214AC (SMA)	20 - 30	0.36 / 0.445	0.1 / 1.0
1.5	<a href="#">SS29 and SS210</a>	Plastic SMD	DO-214AA(SMB)	90 - 100	0.75/0.95	1.0/3.0
2.0	<a href="#">SB220 to SB260</a>	Plastic Axial	DO-204AC (DO-15)	20 - 60	0.5 / 0.68	2.0
2.0	<a href="#">SB220S to SB260S</a>	Plastic Axial	DO-204AL (DO-41)	20 - 60	0.55 / 0.70	2.0
2.0	<a href="#">SB2H90 and SB2H100</a>	Plastic Axial	DO-204AC (DO-15)	90 - 100	0.79	2.0
2.0	<a href="#">MSS2P2 and MSS2P3</a>	Plastic SMD	Micro SMP	20 - 30	0.6	2.0
2.0	<a href="#">B230LA and B240A</a>	Plastic SMD	DO-214AC (SMA)	30 - 40	0.50 - 0.55	2.0
2.0	<a href="#">SL22 and SL23</a>	Plastic SMD	DO-214AA (SMB)	20 - 30	0.395 / 0.44	1.0 / 2.0
2.0	<a href="#">SS22 to SS26</a>	Plastic SMD	DO-214AA (SMB)	20 - 60	0.50 - 0.70	2.0
2.0	<a href="#">SS22S, SS23S and SS24S</a>	Plastic SMD	DO-214AC (SMA)	20 - 40	0.55	2.0
2.0	<a href="#">SS25S and SS26S</a>	Plastic SMD	DO-214AC (SMA)	50 - 60	0.75	2.0
2.0	<a href="#">SS2H9 and SS2H10</a>	Plastic SMD	DO-214AA (SMB)	90 - 100	0.79	2.0
2.0	<a href="#">SS2P2, SS2P3 and SS2P4</a>	Plastic SMD	DO-220AA (SMP)	20 - 40	0.55	2.0
2.0	<a href="#">SS2P2L and SS2P3L</a>	Plastic SMD	DO-220AA (SMP)	20 - 30	0.5	2.0
2.0	<a href="#">SS2P5 and SS2P6</a>	Plastic SMD	DO-220AA (SMP)	50 - 60	0.7	2.0
2.0	<a href="#">SS2PH9 and SS2PH10</a>	Plastic SMD	DO-220AA (SMP)	90 - 100	0.8	2.0

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



## RECTIFIERS

## Schottky Rectifiers

Schottky Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
2.0	<a href="#">SSA23L and SSA24</a>	Plastic SMD	DO-214AC (SMA)	30 - 40	0.45 - 0.49	2.0
3.0	<a href="#">B330LA and B340A</a>	Plastic SMD	DO-214AC (SMA)	30 - 40	0.50 - 0.55	3.0
3.0	<a href="#">B340LB</a>	Plastic SMD	DO-214AA (SMB)	40	0.45	3.0
3.0	<a href="#">B350A and B360A</a>	Plastic SMD	DO-214AC (SMA)	50 - 60	0.72	3.0
3.0	<a href="#">B350B and B360B</a>	Plastic SMD	DO-214AA (SMB)	50 - 60	0.66	3.0
3.0	<a href="#">1N5820 to 1N5822</a>	Plastic Axial	DO-201AD	20 - 40	0.475 - 0.525	3.0
3.0	<a href="#">SB320 to SB360</a>	Plastic Axial	DO-201AD	20 - 60	0.49 - 0.68	3.0
3.0	<a href="#">SB3H90 and SB3H100</a>	Plastic Axial	DO-201AD	90 - 100	0.8	3.0
3.0	<a href="#">SS32 to SS36</a>	Plastic SMD	DO-214AB (SMC)	20 - 60	0.5 - 0.75	3.0
3.0	<a href="#">SS3H9 and SS3H10</a>	Plastic SMD	DO-214AB (SMC)	90 - 100	0.8	3.0
3.0	<a href="#">SS3P3</a>	Plastic SMD	DO-220AA (SMP)	30	0.58	3.0
3.0	<a href="#">SS3P4</a>	Plastic SMD	DO-220AA (SMP)	40	0.6	3.0
3.0	<a href="#">SS3P5 and SS3P6</a>	Plastic SMD	DO-220AA (SMP)	50 - 60	0.78	3.0
3.0	<a href="#">SSA33L and SSA34</a>	Plastic SMD	DO-214AC (SMA)	30 - 40	0.45 - 0.49	3.0
3.0	<a href="#">SS3P3L and SS3P4L</a>	Plastic SMD	TO-277A (SMPC)	30 - 40	0.47	3.0
3.0	<a href="#">SS3P5L and SS3P6L</a>	Plastic SMD	TO-277A (SMPC)	50 - 60	0.60	3.0
4.0	<a href="#">SL42 and SL43</a>	Plastic SMD	DO-214AB (SMC)	20 - 30	0.42 / 0.47	4.0 / 8.0
4.0	<a href="#">SL44</a>	Plastic SMD	DO-214AB (SMC)	40	0.44 / 0.50	4.0 / 8.0
4.0	<a href="#">SSB43L and SSB44</a>	Plastic SMD	DO-214AA (SMB)	30 - 40	0.45 - 0.49	4.0
5.0	<a href="#">SB520 to SB560</a>	Plastic Axial	DO-201AD	20 - 60	0.48 - 0.65	5.0
5.0	<a href="#">SB520A to SB560A</a>	Plastic Axial	DO-201AD	20 - 60	0.50 - 0.70	5.0
5.0	<a href="#">SB5H90 and SB5H100</a>	Plastic Axial	DO-201AD	90 - 100	0.8	5.0
5.0	<a href="#">SSC53L and SSC54</a>	Plastic SMD	DO-214AB (SMC)	30 - 40	0.45 - 0.49	5.0
5.0	<a href="#">SS5P3 and SS5P4</a>	Plastic SMD	TO-277A (SMPC)	50 - 60	0.52	5.0
5.0	<a href="#">SS5P5 and SS5P6</a>	Plastic SMD	TO-277A (SMPC)	50 - 60	0.69	5.0
5.0	<a href="#">SS5P9 and SS5P10</a>	Plastic SMD	TO-277A (SMPC)	90 - 100	0.88	5.0
6.0	<a href="#">SS6P4C</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	40	0.65	3.0
7.5	MBR735 to MBR760	Plastic Power-pack	TO-220AC	35 - 60	0.84 / 0.75(4)	15 / 7.5
7.5	<a href="#">MBRB735 to MBRB760</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.75(4)	15 / 7.5
7.5	MBRF735 to MBRF760	Isolated Power-pack	ITO-220AC	35 - 60	0.84 / 0.75(4)	15 / 7.5
7.5	MBR7H35 to MBR7H60	Plastic Power-pack	TO-220AC	35 - 60	0.63 / 0.73(4)	7.5
7.5	MBRB7H35 to MBRB7H60	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.73(4)	7.5
7.5	MBRF7H35 to MBRF7H60	Isolated Power-pack	ITO-220AC	35 - 60	0.63 / 0.73(4)	7.5
8.0	<a href="#">SS8P2L and SS8P3L</a>	Plastic SMD	TO-277A (SMPC)	20 - 30	0.57	8.0
8.0	<a href="#">SS8PH9 and SS8PH10</a>	Plastic SMD	TO-277A (SMPC)	90 - 100	0.9	8.0
8.0	<a href="#">SS8P2CL and SS8P3CL</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	20 - 30	0.54	4.0
8.0	<a href="#">SS8P3C and SS8P4C</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	30 - 40	0.58	4.0
8.0	<a href="#">SS8P5C and SS8P6C</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	50 - 60	0.70	4.0
10.0	<a href="#">MBR1035 to MBR1060</a>	Plastic Power-pack	TO-220AC	35 - 60	0.84 / 0.80(4)	20 / 10.0
10.0	<a href="#">MBRB1035 to MBRB1060</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.80(4)	20 / 10.0
10.0	MBRF1035 to MBRF1060	Isolated Power-pack	ITO-220AC	35 - 60	0.84 / 0.80(4)	20 / 10.0
10.0	MBR10H35 to MBR10H60	Plastic Power-pack	TO-220AC	35 - 60	0.63 / 0.71(4)	10

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)

3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product





## RECTIFIERS

## Schottky Rectifiers

Schottky Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
10.0	MBRB10H35 to MBRB10H60	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.71(4)	10
10.0	MBRF10H35 to MBRF10H60	Isolated Power-pack	ITO-220AC	35 - 60	0.63 / 0.71(4)	10
10.0	MBR10H90 and MBR10H100	Plastic Power-pack	TO-220AC	90 - 100	0.77	10
10.0	MBRB10H90 and MBR10H100	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.77	10
10.0	MBRF10H90 and MBR10H100	Isolated Power-pack	ITO-220AC	90 - 100	0.77	10
10.0	MBR10H90CT and MBR10H100CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	90 - 100	0.76	5.0
10.0	MBRB10H90CT and MBRB10H100CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.76	5.0
10.0	MBRF10H90CT and MBRF10H100CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.76	5.0
10.0	MBR10H150CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	0.88	5.0
10.0	SB10H150CT-1	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	0.88	5.0
10.0	MBRF10H150CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	0.88	5.0
10.0	SBL1030 and SBL1040	Plastic Power-pack	TO-220AC	30 - 40	0.6	10
10.0	SBLB1030 and SBLB1040	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.6	10
10.0	<a href="#">SBLF1030 and SBLF1040</a>	Isolated Power-pack	ITO-220AC	30 - 40	0.6	10
10.0	SBL1030CT and SBL1040CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	30 - 40	0.55	5.0
10.0	SBLB1030CT and SBLB1040CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	5.0
10.0	SBLF1030CT and SBLF1040CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.55	5.0
10.0	SBL10L25	Plastic Power-pack	TO-220AC	25	0.46	10
10.0	SBLB10L25	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	25	0.46	10
10.0	SBLF10L25	Isolated Power-pack	ITO-220AC	25	0.46	10
10.0	<a href="#">SBL10L30</a>	Plastic Power-pack	TO-220AC	30	0.52	10
10.0	SBLB10L30	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	30	0.52	10
10.0	SBLF10L30	Isolated Power-pack	ITO-220AC	30	0.52	10
10.0	<a href="#">SS10P2CL and SS10P3CL</a>	Plastic SMD	TO-277A (SMPC)	20 - 30	0.52	5.0
10.0	<a href="#">SS10P3C and SS10P4C</a>	Plastic SMD	TO-277A (SMPC)	30 - 40	0.53	5
10.0	<a href="#">SS10P3 and SS10P4</a>	Plastic SMD	TO-277A (SMPC)	30 - 40	0.56	10
10.0	<a href="#">SS10P5 and SS10P6</a>	Plastic SMD	TO-277A (SMPC)	50 - 60	0.67	10
10.0	<a href="#">SS10PH45</a>	Plastic SMD	TO-277A (SMPC)	45	0.72	10
10.0	<a href="#">SS10PH9 and SS10PH10</a>	Plastic SMD	TO-277A (SMPC)	90 - 100	0.88	10
12.0	<a href="#">SS12P2L and SS12P3L</a>	Plastic SMD	TO-277A (SMPC)	20 - 30	0.56	12
12.0	<a href="#">SS12P4C</a>	Plastic SMD	TO-277A (SMPC)	40	0.52	6
12.0	<a href="#">SS12P4S</a>	Plastic SMD	TO-277A (SMPC)	40	0.60	12
15.0	SB15H45	Plastic Axial	P600	45	0.64	15.0
15.0	<a href="#">MBR1535CT to MBR1560CT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.84 / 0.75(4)	15 / 7.5
15.0	MBRB1535CT to MBRB1560CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.75(4)	15 / 7.5
15.0	MBRF1535CT to MBRF1560CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.84 / 0.75(4)	15 / 7.5
15.0	MBR15H35CT to MBR15H60CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.63 / 0.73(4)	7.5
15.0	MBRB15H35CT to MBRB15H60CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.73(4)	7.5
15.0	MBRF15H35CT to MBRF15H60CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.63 / 0.73(4)	7.5
15.0	SS15P3S	Plastic SMD	TO-277A (SMPC)	30	0.57	15
16.0	<a href="#">MBR1635 to MBR1660</a>	Plastic Power-pack	TO-220AC	35 - 60	0.63 / 0.75(4)	16.0
16.0	<a href="#">MBRB1635 to MBRB1660</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.75(4)	16.0

Note:

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3. All Schottky die are planar with oxide passivation
4. 35 V to 45 V product/50 V to 60 V product



# RECTIFIERS

## Schottky Rectifiers

Schottky Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
16.0	MBRF1635 to MBRF1660	Isolated Power-pack	ITO-220AC	35 - 60	0.63 / 0.75(4)	16.0
16.0	MBR16H35 to MBR16H60	Plastic Power-pack	TO-220AC	35 - 60	0.66 / 0.73(4)	16.0
16.0	MBRB16H35 to MBRB16H60	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.66 / 0.73(4)	16.0
16.0	MBRF16H35 to MBRF16H60	Isolated Power-pack	ITO-220AC	35 - 60	0.66 / 0.73(4)	16.0
16.0	SBL1630CT and SBL1640CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	30 - 40	0.55	8.0
16.0	SBLB1630CT and SBLB1640CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	8.0
16.0	<b>SBLF1630CT and SBLF1640CT</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.55	8.0
20.0	MBR2035CT to MBR2060CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.84 / 0.80(4)	20 / 10.0
20.0	<b>MBRB2035CT to MBRB2060CT</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.80(4)	20 / 10.0
20.0	MBRF2035CT to MBRF2060CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.84 / 0.80(4)	20 / 10.0
20.0	MBR20H35CT to MBR20H60CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.63 / 0.71(4)	10.0
20.0	MBRB20H35CT to MBRB20H60CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.71(4)	10.0
20.0	MBRF20H35CT to MBRF20H60CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.63 / 0.71(4)	10.0
20.0	MBR20H90CT and MBR20H100CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	90 - 100	0.77	10.0
20.0	MBRB20H90CT and MBRB20H100CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.77	10.0
20.0	MBRF20H90CT and MBRF20H100CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.77	10.0
20.0	MBR20H90CTG and MBR20H100CTG	Plastic Power-pack <sup>(2)</sup>	TO-220AB	90 - 100	0.85	10.0
20.0	MBR20H150CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	0.9	10.0
20.0	SB20H150CT-1	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	0.9	10.0
20.0	MBRF20H150CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	0.9	10.0
20.0	MBR20H200CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	0.88	10.0
20.0	SB20H200CT-1	Power-pack SMD <sup>(2)</sup>	TO-262AA	200	0.88	10.0
20.0	MBRF20H200CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	200	0.88	10.0
20.0	<b>M2035S and M2045S</b>	Plastic Power-pack	TO-220AB	35 - 45	0.7	20.0
20.0	M12050C to M12060C	Plastic Power-pack <sup>(2)</sup>	TO-262AA	50 - 60	0.74	10.0
20.0	SBL2030CT and SBL2040CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	30 - 40	0.6	10.0
20.0	SBLB2030CT and SBLB2040CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.6	10.0
20.0	<b>SBLF2030CT and SBLF2040CT</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.6	10.0
20.0	SBL2030PT and SBL2040PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.55	10.0
25.0	SBL25L20CT to SBL25L30CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	20 - 30	0.49	12.5
25.0	SBLB25L20CT to SBLB25L30CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	20 - 30	0.49	12.5
25.0	<b>SBLF25L20CT to SBLF25L30CT</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	20 - 30	0.49	12.5
30.0	MBR2535CT to MBR2560CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.82 / 0.75(4)	30 / 15
30.0	MBRB2535CT to MBRB2560CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.82 / 0.75(4)	30 / 15
30.0	MBRF2535CT to MBRF2560CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.82 / 0.75(4)	30 / 15
30.0	MBR25H35CT to MBR25H60CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.64 / 0.70(4)	15
30.0	MBRB25H35CT to MBRB25H60CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.64 / 0.70(4)	15
30.0	MBRF25H35CT to MBRF25H60CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.64 / 0.70(4)	15
30.0	MBR3035CT and MBR3045CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 45	<sup>0.76</sup>	30
30.0	<b>MBRB3035CT and MBRB3045CT</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 45	0.76	30
30.0	MBRF3035CT and MBRF3045CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 45	0.76	30
30.0	MBR30H35CT to MBR30H60CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.62 / 0.68(4)	15
30.0	MBRB30H35CT to MBRB30H60CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.62 / 0.68(4)	15
30.0	MBRF30H35CT to MBRF30H60CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.62 / 0.68(4)	15
30.0	MBR3035PT to MBR3060PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.76 / 0.75(4)	30 / 20
30.0	MBR30H35PT to MBR30H60PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.66 / 0.74(4)	20
30.0	MBR30H90CT and MBR30H100CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	90 - 100	0.82	15
30.0	MBRF30H90CT and MBRF30H100CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.82	15

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4. 35 V to 45 V product/50 V to 60 V product



## RECTIFIERS

## Schottky Rectifiers

Schottky Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
30.0	MBRB30H90CT and MBRB30H100CT	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.82	15
30.0	MBR30H90PT and MBR30H100PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	90 - 100	0.82	15
30.0	MBR30H150CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	0.90	15
30.0	SB30H150CT-1	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	0.90	15
30.0	MBRF30H150CT	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	0.90	15
30.0	<b>M3035S and M3045S</b>	Plastic Power-pack	TO-220AB	35 - 45	0.70	30
30.0	<b>MB3035S and MB3045S</b>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 45	0.70	30
30.0	<b>MI3035S and MI3045S</b>	Plastic Power-pack	TO-262AA	35 - 45	0.70	30
30.0	<b>M3060C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.72	15
30.0	<b>MI3060C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.72	15
30.0	<b>MF3060C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.72	15
30.0	<b>M30L40C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	40	0.55	15
30.0	M30L45C	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	60	15
30.0	SBL3030PT and SBL3040PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.55	15
30.0	<b>SD241P</b>	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	45	0.47 / 0.60	10 / 20 (125 °C)
40.0	MBR4035PT to MBR4060PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.70 / 0.72(4)	20
40.0	MBR40H35CT to MBR40H60CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.64 / 0.68(4)	20
40.0	MBR40H35PT to MBR40H60PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.63 / 0.69(4)	20
40.0	SBL4030PT to SBL4040PT	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.58	20
60.0	MBR60100CT	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.82 / 1.0	30 / 60
60.0	<b>M6035C to M6060C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	35 - 60	0.61/0.65(4)	30
60.0	<b>M6035P to M6060P</b>	Plastic Power-pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.60 / 0.64(4)	30

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## RECTIFIERS

## Schottky Rectifiers

## TMBS® (Trench MOS Barrier Schottky) Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
2	VSB220S	Plastic Axial	DO-204AL (DO-41)	200	1.23	2.0
2	<a href="#">VSSA210</a>	Plastic SMD	DO-214AC (SMA)	100	0.70	2.0
2	<a href="#">VSB3200S</a>	Plastic Axial	DO-204AC (DO-15)	200	1.40	3.0
2	<a href="#">VSB3200</a>	Plastic Axial	DO-201AD	200	1.20	3.0
3	<a href="#">V3P6</a>	Plastic SMD	DO-220AA (SMP)	60	0.63	3.0
<b>3</b>	<b>V3PAL45</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>45</b>	<b>0.54</b>	<b>3.0</b>
<b>3</b>	<b>V3PAN50</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>50</b>	<b>0.54</b>	<b>3.0</b>
3	<a href="#">VSSA310S</a>	Plastic SMD	DO-214AC (SMA)	100	0.80	3.0
3	<a href="#">VSSB310</a>	Plastic SMD	DO-214AA(SMB)	100	0.7	3.0
3	<a href="#">VSSA36S</a>	Plastic SMD	DO-214AC (SMA)	60	0.63	3.0
3	<a href="#">VSSA3L6S</a>	Plastic SMD	DO-214AC (SMA)	60	0.58	3.0
<b>3</b>	<b>VSSAF3L45</b>	<b>Plastic SMD</b>	<b>DO-221AC (SlimSMA)</b>	<b>45</b>	<b>0.54</b>	<b>3.0</b>
3	<a href="#">VSSB3L6S</a>	Plastic SMD	DO-214AA(SMB)	60	0.59	3.0
<b>4</b>	<b>V4PAL45</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>45</b>	<b>0.57</b>	<b>4.0</b>
<b>4</b>	<b>V4PAN50</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>50</b>	<b>0.59</b>	<b>4.0</b>
4	<a href="#">VSSB410S</a>	Plastic SMD	DO-214AA(SMB)	100	0.77	4.0
4	<a href="#">VSSB420S</a>	Plastic SMD	DO-214AA(SMB)	200	1.9	4.0
<b>5</b>	<b>VSSAF5L45</b>	<b>Plastic SMD</b>	<b>DO-221AC (SlimSMA)</b>	<b>45</b>	<b>0.56</b>	<b>5.0</b>
5	<a href="#">VT5200</a>	Plastic Power-pack	TO-220AC	200	1.60	5.0
5	<a href="#">VSSC520S</a>	Plastic SMD	DO-214AB(SMC)	200	1.7	5.0
5	<a href="#">VFT5200</a>	Isolated Power-pack	ITO-220AC	200	1.60	5.0
5	<a href="#">VBT5200</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	200	1.60	5.0
5	<a href="#">VIT5200</a>	Plastic Power-pack	TO-262AA	200	1.60	5.0
5	<a href="#">VT5202</a>	Plastic Power-pack	TO-220AC	200	0.88	5.0
5	<a href="#">VBT5202</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	200	0.88	5.0
5	<a href="#">VIT5202</a>	Plastic Power-pack	TO-262AA	200	0.88	5.0
<b>6</b>	<b>V6WL45C</b>	<b>Power-pack SMD</b>	<b>TO-252 (D-PAK)</b>	<b>45</b>	<b>0.52</b>	<b>3.0</b>
<b>6</b>	<b>V6W60C</b>	<b>Power-pack SMD</b>	<b>TO-252 (D-PAK)</b>	<b>60</b>	<b>0.57</b>	<b>3.0</b>
<b>6</b>	<b>V6WM100C</b>	<b>Power-pack SMD</b>	<b>TO-252 (D-PAK)</b>	<b>100</b>	<b>0.74</b>	<b>3.0</b>
7	<a href="#">VT760</a>	Plastic Power-pack	TO-220AC	60	0.80	7.5
7	<a href="#">VFT760</a>	Isolated Power-pack	ITO-220AC	60	0.80	7.5
7	<a href="#">VBT760</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	60	0.80	7.5
7	<a href="#">VIT760</a>	Plastic Power-pack	TO-262AA	60	0.80	7.5
7	<a href="#">VSSB7L45</a>	Plastic SMD	DO-214AA(SMB)	45	0.57	7.0
8	<a href="#">V8P10</a>	Plastic SMD	TO-277A (SMPC)	100	0.68	8.0
8	<a href="#">V8P12</a>	Plastic SMD	TO-277A (SMPC)	120	0.84	8.0
8	<a href="#">V8P20</a>	Plastic SMD	TO-277A (SMPC)	200	1.40	8.0
<b>8</b>	<b>V8PAL45</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>45</b>	<b>0.57</b>	<b>8.0</b>
<b>8</b>	<b>V8PAN50</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>50</b>	<b>0.56</b>	<b>8.0</b>
<b>8</b>	<b>V8PAL50</b>	<b>Plastic SMD</b>	<b>DO-221BC (SMPA)</b>	<b>50</b>	<b>0.57</b>	<b>8.0</b>
<b>8</b>	<b>V8PM12</b>	<b>Plastic SMD</b>	<b>TO-277A (SMPC)</b>	<b>120</b>	<b>0.84</b>	<b>8.0</b>
<b>8</b>	<b>VSSC8L45</b>	<b>Plastic SMD</b>	<b>DO-214AB (SMC)</b>	<b>45</b>	<b>0.56</b>	<b>8.0</b>

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## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
10	<b>V10170C</b>	Plastic Power-pack	TO-220AB	170	1.03	5.0
10	<b>V10D45C</b>	Plastic SMD	TO-263AC (SMPD)	45	0.58	5.0
10	<b>V10D60C</b>	Plastic SMD	TO-263AC (SMPD)	60	0.70	5.0
10	<b>V10D100C</b>	Plastic SMD	TO-263AC (SMPD)	100	0.75	5.0
10	<b>V10D120C</b>	Plastic SMD	TO-263AC (SMPD)	120	0.94	5.0
10	<b>V10P10</b>	Plastic SMD	TO-277A (SMPC)	100	0.68	10
10	<b>V10P12</b>	Plastic SMD	TO-277A (SMPC)	120	0.82	10
10	<b>V10P20</b>	Plastic SMD	TO-277A (SMPC)	200	1.34	10
10	<b>V10P45</b>	Plastic SMD	TO-277A (SMPC)	45	0.57	10
10	<b>V10P45S</b>	Plastic SMD	TO-277A (SMPC)	45	0.57	10
10	<b>V10PL45</b>	Plastic SMD	TO-277A (SMPC)	45	0.52	10
10	<b>V10PM12</b>	Plastic SMD	TO-277A (SMPC)	120	0.83	10
10	<b>V10PN50</b>	Plastic SMD	TO-277A (SMPC)	50	0.55	10
10	<b>V10WL45</b>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	45	0.57	10
10	<b>V10WM100</b>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	100	0.75	10
10	<a href="#">MBR1090 and MBR10100</a>	Plastic Power-pack	TO-220AC	90 - 100	0.80	10
	<a href="#">MBRF1090 and MBRF10100</a>	Isolated Power-pack	ITO-220AC	90 - 100	0.80	10
	<a href="#">MBRB1090 and MBRB10100</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.80	10
10	<a href="#">MBR1090CT and MBR10100CT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	90 - 100	0.85	5.0
10	<a href="#">MBRF1090CT and MBRF10100CT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.85	5.0
10	<a href="#">VT1060C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.70	5.0
	<a href="#">VFT1060C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.70	5.0
	<a href="#">VBT1060C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.70	5.0
	<a href="#">VIT1060C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.70	5.0
10	<a href="#">VT1080C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	80	0.72	5.0
	<a href="#">VFT1080C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	80	0.72	5.0
	<a href="#">VBT1080C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	80	0.72	5.0
	<a href="#">VIT1080C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	80	0.72	5.0
10	<a href="#">VT1080S</a>	Plastic Power-pack	TO-220AB	80	0.81	10
	<a href="#">VFT1080S</a>	Isolated Power-pack	ITO-220AB	80	0.81	10
	<a href="#">VBT1080S</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	80	0.81	10
	<a href="#">VIT1080S</a>	Plastic Power-pack	TO-262AA	80	0.81	10
10	<a href="#">V10150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	1.41	5
	<a href="#">VFT10150C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	1.41	5
	<a href="#">VBT10150C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	1.41	5
	<a href="#">VIT10150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	1.41	5
10	<a href="#">V10150S</a>	Plastic Power-pack	TO-220AB	150	1.2	10
	<a href="#">VFT10150S</a>	Isolated Power-pack	ITO-220AB	150	1.2	10
	<a href="#">VBT10150S</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	150	1.2	10
	<a href="#">VIT10150S</a>	Plastic Power-pack	TO-262AA	150	1.2	10

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## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
10	<a href="#">VT10200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	1.60	5.0
	<a href="#">VFT10200C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	200	1.60	5.0
	<a href="#">VBT10200C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.60	5.0
	<a href="#">VIT10200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	1.60	5.0
10	<a href="#">VT10202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	0.88	5.0
	<a href="#">VBT10202C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.88	5.0
	<a href="#">VIT10202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	0.88	5.0
10	<a href="#">VT1045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.58	5.0
	<a href="#">VFT1045C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.58	5.0
	<a href="#">VBT1045C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.58	5.0
	<a href="#">VIT1045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	45	0.58	5.0
10	<a href="#">VT1045CBP</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.58	5.0
	<a href="#">VFT1045CBP</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.58	5.0
	<a href="#">VBT1045CBP</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.58	5.0
10	<a href="#">VT1045BP</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	45	0.68	10
	<a href="#">VFT1045BP</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	45	0.68	10
	<a href="#">VBT1045BP</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.68	10
12	<a href="#">V12P10</a>	Plastic SMD	TO-277A (SMPC)	100	0.70	12
	<a href="#">V12P12</a>	Plastic SMD	TO-277A (SMPC)	120	0.80	12
	<a href="#">V12PM12</a>	Plastic SMD	TO-277A (SMPC)	120	0.83	12
	<a href="#">V12W60C</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	60	0.62	6
	<a href="#">V12WM100C</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	100	0.75	6
15	<a href="#">V15P45</a>	Plastic SMD	TO-277A (SMPC)	45	0.58	15
15	<a href="#">V15P45S</a>	Plastic SMD	TO-277A (SMPC)	45	0.58	15
15	<a href="#">V15PL50</a>	Plastic SMD	TO-277A (SMPC)	50	0.57	15
15	<a href="#">V15PN50</a>	Plastic SMD	TO-277A (SMPC)	50	0.56	15
15	<a href="#">VSB1545</a>	Plastic Axial	P600	45	0.59	15
15	<a href="#">V15W60C</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	60	0.65	7.5
15	<a href="#">V15WL45C</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	45	0.56	7.5
15	<a href="#">VSB15L45</a>	Plastic Axial	P600	45	0.57	15
20	<a href="#">MBR2090CT and MBR20100CT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.80	10
	<a href="#">MBRF2090CT and MBRF20100CT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.80	10
	<a href="#">MBRB2090CT &amp; MBRB20100CT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.80	10
20	<a href="#">V20DL45</a>	Plastic SMD	TO-263AC (SMPD)	45	0.64	20
20	<a href="#">V20DL45BP</a>	Plastic SMD	TO-263AC (SMPD)	45	0.64	20
20	<a href="#">V20DM120C</a>	Plastic SMD	TO-263AC (SMPD)	120	0.93	10
20	<a href="#">V20PL50</a>	Plastic SMD	TO-277A (SMPC)	50	0.59	20
20	<a href="#">V20PL60</a>	Plastic SMD	TO-277A (SMPC)	60	0.59	20
20	<a href="#">V20W60C</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	60	0.65	10
20	<a href="#">V20WL45</a>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	45	0.62	20

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## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
20	<b>V20WM100C</b>	Plastic Power-pack <sup>(2)</sup>	TO-252 (D-PAK)	100	0.82	10
20	VSB2045	Plastic Axial	P600	45	0.58	20
20	<b>VSB20L45</b>	Plastic Axial	P600	45	0.56	20
20	<b>VT2045C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.58	10
	<b>VFT2045C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.58	10
	<b>VBT2045C</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.58	10
	<b>VIT2045C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	45	0.58	10
20	<b>VT2045CBP</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.58	10
	<b>VFT2045CBP</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.58	10
	<b>VBT2045CBP</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.58	10
20	<b>VT2045BP</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	45	0.66	20
	<b>VFT2045BP</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	45	0.66	20
	<b>VBT2045BP</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.66	20
20	VT2060C	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.65	10
	VFT2060C	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.65	10
	VBT2060C	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.65	10
	VIT2060C	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.65	10
20	VT2060G	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.90	10
	VFT2060G	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.90	10
	VBT2060G	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.90	10
	VIT2060G	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.90	10
20	VT2080C	Plastic Power-pack <sup>(2)</sup>	TO-220AB	80	0.81	10
	VFT2080C	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	80	0.81	10
	VBT2080C	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	80	0.81	10
	VIT2080C	Plastic Power-pack <sup>(2)</sup>	TO-262AA	80	0.81	10
20	VT2080S	Plastic Power-pack	TO-220AB	80	0.92	20
	VFT2080S	Isolated Power-pack	ITO-220AB	80	0.92	20
	VBT2080S	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	80	0.92	20
	VIT2080S	Plastic Power-pack	TO-262AA	80	0.92	20
20	V20100C	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.79	10
	VF20100C	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.79	10
	VB20100C	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.79	10
	VI20100C	Plastic Power-pack <sup>(2)</sup>	TO-262AA	100	0.79	10
20	V20100R	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.90	10
	VF20100R	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.90	10
20	V20100S	Plastic Power-pack	TO-220AB	100	0.90	20
	VB20100S	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	100	0.90	20
	VF20100S	Isolated Power-pack	ITO-220AB	100	0.90	20
	VI20100S	Plastic Power-pack	TO-262AA	100	0.90	20
20	V20100SG	Plastic Power-pack	TO-220AB	100	1.07	20
	VF20100SG	Isolated Power-pack	ITO-220AB	100	1.07	20
	VB20100SG	Plastic Power-pack	TO-263AB (D <sup>2</sup> PAK)	100	1.07	20

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## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
20	<a href="#">VI20100SG</a>	Plastic Power-pack	TO-262AA	100	1.07	20
20	<a href="#">V20120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.90	10
	<a href="#">VF20120C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	120	0.90	10
	<a href="#">VB20120C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	120	0.90	10
	<a href="#">VI20120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	120	0.90	10
20	<a href="#">V20M120C</a>	<b>Plastic Power-pack<sup>(2)</sup></b>	<b>TO-220AB</b>	<b>120</b>	<b>0.91</b>	<b>10</b>
	<a href="#">VF20M120C</a>	<b>Isolated Power-pack<sup>(2)</sup></b>	<b>ITO-220AB</b>	<b>120</b>	<b>0.91</b>	<b>10</b>
	<a href="#">VB20M120C</a>	<b>Power-pack SMD<sup>(2)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>120</b>	<b>0.91</b>	<b>10</b>
	<a href="#">VI20M120C</a>	<b>Plastic Power-pack<sup>(2)</sup></b>	<b>TO-262AA</b>	<b>120</b>	<b>0.91</b>	<b>10</b>
20	<a href="#">V20120S</a>	Plastic Power-pack	TO-220AB	120	1.12	20
	<a href="#">VF20120S</a>	Isolated Power-pack	ITO-220AB	120	1.12	20
	<a href="#">VB20120S</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	120	1.12	20
	<a href="#">VI20120S</a>	Plastic Power-pack	TO-262AA	120	1.12	20
20	<a href="#">V20120SG</a>	Plastic Power-pack	TO-220AB	120	1.33	20
	<a href="#">VF20120SG</a>	Isolated Power-pack	ITO-220AB	120	1.33	20
	<a href="#">VB20120SG</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	120	1.33	20
	<a href="#">VI20120SG</a>	Plastic Power-pack	TO-262AA	120	1.33	20
20	<a href="#">V20150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	1.20	10
	<a href="#">VF20150C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	1.20	10
	<a href="#">VB20150C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	1.20	10
	<a href="#">VI20150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	1.20	10
20	<a href="#">V20150S</a>	<b>Plastic Power-pack</b>	<b>TO-220AB</b>	<b>150</b>	<b>1.43</b>	<b>20</b>
	<a href="#">VF20150S</a>	<b>Isolated Power-pack</b>	<b>ITO-220AB</b>	<b>150</b>	<b>1.43</b>	<b>20</b>
	<a href="#">VB20150S</a>	<b>Power-pack SMD</b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>150</b>	<b>1.43</b>	<b>20</b>
	<a href="#">VI20150S</a>	<b>Plastic Power-pack</b>	<b>TO-262AA</b>	<b>150</b>	<b>1.43</b>	<b>20</b>
20	<a href="#">V20150SG</a>	<b>Plastic Power-pack</b>	<b>TO-220AB</b>	<b>150</b>	<b>1.60</b>	<b>20</b>
	<a href="#">VF20150SG</a>	<b>Isolated Power-pack</b>	<b>ITO-220AB</b>	<b>150</b>	<b>1.60</b>	<b>20</b>
	<a href="#">VB20150SG</a>	<b>Power-pack SMD</b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>150</b>	<b>1.60</b>	<b>20</b>
	<a href="#">VI20150SG</a>	<b>Plastic Power-pack</b>	<b>TO-262AA</b>	<b>150</b>	<b>1.60</b>	<b>20</b>
20	<a href="#">V20200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	1.60	10
	<a href="#">VF20200C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	200	1.60	10
	<a href="#">VB20200C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.60	10
	<a href="#">VI20200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	1.60	10
20	<a href="#">V20202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	0.90	10
	<a href="#">VB20202C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.90	10
	<a href="#">VI20202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	0.90	10
20	<a href="#">V20200G</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	1.70	10
	<a href="#">VF20200G</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	200	1.70	10
	<a href="#">VB20200G</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.70	10
	<a href="#">VI20200G</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	1.70	10

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## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

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		Family <sup>(3)</sup>	Type		(V)	(A)
20	<b>V20200G</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	0.92	10
	<b>VB20200G</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.92	10
	<b>VI20200G</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	0.92	10
25	<b>V25PL60</b>	Plastic SMD	TO-277A (SMPC)	60	0.63	25
30	<b>V30D45C</b>	Plastic SMD	TO-263AC (SMPD)	45	0.57	15
30	<b>V30DL45</b>	Plastic SMD	TO-263AC (SMPD)	45	0.65	30
30	<b>V30DL45BP</b>	Plastic SMD	TO-263AC (SMPD)	45	0.65	30
30	<b>V30D60C</b>	Plastic SMD	TO-263AC (SMPD)	60	0.70	15
30	<b>V30D60CL</b>	Plastic SMD	TO-263AC (SMPD)	60	0.61	15
30	<b>V30DL50C</b>	Plastic SMD	TO-263AC (SMPD)	50	0.57	15
30	<b>V30DM120C</b>	Plastic SMD	TO-263AC (SMPD)	120	0.97	15
30	<b>VT3045C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.57	15
	<b>VFT3045C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.57	15
	<b>VBT3045C</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.57	15
	<b>VIT3045C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	45	0.57	15
30	<b>VT3045CBP</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.57	15
	<b>VFT3045CBP</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.57	15
	<b>VBT3045CBP</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.57	15
30	<b>VT3045BP</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	45	0.70	30
	<b>VFT3045BP</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	45	0.70	30
	<b>VBT3045BP</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.70	30
30	<b>VT3060C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.70	15
	<b>VFT3060C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.70	15
	<b>VBT3060C</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.70	15
	<b>VIT3060C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.70	15
30	<b>VT3060G</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	60	0.73	15
	<b>VFT3060G</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	60	0.73	15
	<b>VBT3060G</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.73	15
	<b>VIT3060G</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	60	0.73	15
30	<b>VT3080C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	80	0.82	15
	<b>VFT3080C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	80	0.82	15
	<b>VBT3080C</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	80	0.82	15
	<b>VIT3080C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	80	0.82	15
30	<b>VT3080S</b>	Plastic Power-pack	TO-220AB	80	0.95	30
	<b>VFT3080S</b>	Isolated Power-pack	ITO-220AB	80	0.95	30
	<b>VBT3080S</b>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	80	0.95	30
	<b>VIT3080S</b>	Plastic Power-pack	TO-262AA	80	0.95	30
30	<b>V30100C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.80	15
	<b>VF30100C</b>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.80	15
	<b>VB30100C</b>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.80	15
	<b>VI30100C</b>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	100	0.80	15

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)



## RECTIFIERS

## Schottky Rectifiers

TMBS®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
30	<a href="#">V30100S</a>	Plastic Power-pack	TO-220AB	100	0.91	30
	<a href="#">VF30100S</a>	Isolated Power-pack	ITO-220AB	100	0.91	30
	<a href="#">VB30100S</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	100	0.91	30
	<a href="#">VI30100S</a>	Plastic Power-pack	TO-262AA	100	0.91	30
30	<a href="#">V30100SG</a>	Plastic Power-pack	TO-220AB	120	1.00	30
	<a href="#">VF30100SG</a>	Isolated Power-pack	ITO-220AB	120	1.00	30
	<a href="#">VB30100SG</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	120	1.00	30
	<a href="#">VI30100SG</a>	Plastic Power-pack	TO-262AA	120	1.00	30
30	<a href="#">V30120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.97	15
	<a href="#">VF30120C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	120	0.97	15
	<a href="#">VB30120C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	120	0.97	15
	<a href="#">VI30120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	120	0.97	15
30	<b><a href="#">V30M120C</a></b>	<b>Plastic Power-pack<sup>(2)</sup></b>	<b>TO-220AB</b>	<b>120</b>	<b>0.98</b>	<b>15</b>
	<b><a href="#">VF30M120C</a></b>	<b>Isolated Power-pack<sup>(2)</sup></b>	<b>ITO-220AB</b>	<b>120</b>	<b>0.98</b>	<b>15</b>
	<b><a href="#">VB30M120C</a></b>	<b>Power-pack SMD<sup>(2)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>120</b>	<b>0.98</b>	<b>15</b>
	<b><a href="#">VI30M120C</a></b>	<b>Plastic Power-pack<sup>(2)</sup></b>	<b>TO-262AA</b>	<b>120</b>	<b>0.98</b>	<b>15</b>
30	<a href="#">V30120S</a>	Plastic Power-pack	TO-220AB	120	1.10	30
	<a href="#">VF30120S</a>	Isolated Power-pack	ITO-220AB	120	1.10	30
	<a href="#">VB30120S</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	120	1.10	30
	<a href="#">VI30120S</a>	Plastic Power-pack	TO-262AA	120	1.10	30
30	<a href="#">V30120SG</a>	Plastic Power-pack	TO-220AB	120	1.28	30
	<a href="#">VF30120SG</a>	Isolated Power-pack	ITO-220AB	120	1.28	30
	<a href="#">VB30120SG</a>	Power-pack SMD	TO-263AB (D <sup>2</sup> PAK)	120	1.28	30
	<a href="#">VI30120SG</a>	Plastic Power-pack	TO-262AA	120	1.28	30
30	<a href="#">V30150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	1.36	15
	<a href="#">VF30150C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	1.36	15
	<a href="#">VB30150C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	1.36	15
	<a href="#">VI30150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	1.36	15
30	<a href="#">V30200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	1.10	15
	<a href="#">VF30200C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	200	1.10	15
	<a href="#">VB30200C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.10	15
	<a href="#">VI30200C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	1.10	15
30	<a href="#">V30202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	200	0.88	15
	<a href="#">VB30202C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.88	15
	<a href="#">VI30202C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	200	0.88	15
30	<a href="#">V30100PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.91	15
40	<a href="#">V40DL45</a>	Plastic SMD	TO-263AC (SMPD)	45	0.66	40
40	<a href="#">V40DL45BP</a>	Plastic SMD	TO-263AC (SMPD)	45	0.66	40

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)



## RECTIFIERS

## Schottky Rectifiers

Rectifiers - Worldwide Leader in Power Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family <sup>(3)</sup>	Type		(V)	(A)
40	<a href="#">VT4045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.58	20
	<a href="#">VFT4045C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.58	20
	<a href="#">VBT4045C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.58	20
	<a href="#">VIT4045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	45	0.58	20
40	<a href="#">VT4045BP</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	45	0.67	40
	<a href="#">VFT4045BP</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	45	0.67	40
	<a href="#">VBT4045BP</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.67	40
40	<a href="#">V40100C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.73	20
	<a href="#">VF40100C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.73	20
	<a href="#">VB40100C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.73	20
	<a href="#">VI40100C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	100	0.73	20
40	<a href="#">V40100G</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	100	0.81	20
	<a href="#">VF40100G</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	100	0.81	20
	<a href="#">VB40100G</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.81	20
	<a href="#">VI40100G</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	100	0.81	20
40	<a href="#">V40100K</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.82	20
40	<a href="#">V40120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.88	20
	<a href="#">VF40120C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	120	0.88	20
	<a href="#">VB40120C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	120	0.88	20
	<a href="#">VI40120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	120	0.88	20
40	<a href="#">V40M120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.89	20
	<a href="#">VF40M120C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	120	0.89	20
	<a href="#">VB40M120C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	120	0.89	20
	<a href="#">VI40M120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	120	0.89	20
40	<a href="#">V40150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	1.43	20
	<a href="#">VF40150C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	150	1.43	20
	<a href="#">VB40150C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	1.43	20
	<a href="#">VI40150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	150	1.43	20
40	<a href="#">V40170C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	170	1.2	20
40	<a href="#">V40100PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.77	20
40	<a href="#">V40100PGW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.85	20
40	<a href="#">V40170PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	170	0.95	20
40	<a href="#">V40D100C</a>	Plastic SMD	TO-263AC (SMPD)	100	0.75	20
40	<a href="#">V40D120C</a>	Plastic SMD	TO-263AC (SMPD)	120	0.89	20
40	<a href="#">V40DM120C</a>	Plastic SMD	TO-263AC (SMPD)	120	0.89	20
40	<a href="#">V40M150C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	150	1.43	20
50	<a href="#">V50100PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.84	25
60	<a href="#">VT6045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.64	30
	<a href="#">VFT6045C</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.64	30
	<a href="#">VBT6045C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.64	30
	<a href="#">VIT6045C</a>	Plastic Power-pack <sup>(2)</sup>	TO-262AA	45	0.64	30

Note:

1. Bold text indicates new product
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)



## RECTIFIERS

## Schottky Rectifiers

Rectifiers - Worldwide Leader in Power Rectifiers

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family <sup>(3)</sup>	Type		(V)	(A)
60	<a href="#">VT6045CBP</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.64	30
	<a href="#">VFT6045CBP</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AB	45	0.64	30
	<a href="#">VBT6045CBP</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.64	30
60	<a href="#">V60100C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	100	0.79	30
	<a href="#">VB60100C</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	100	0.79	30
60	<a href="#">V60120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.95	30
	<a href="#">VB60120C</a>	Plastic Power-pack <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	120	0.95	30
60	<b>V60170G</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	170	1.02	30
60	<a href="#">V60100PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.86	30
60	<a href="#">V60200PGW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	200	1.48	30
60	<b>V60D45C</b>	Plastic SMD	TO-263AC (SMPD)	45	0.64	30
60	<b>V60D100C</b>	Plastic SMD	TO-263AC (SMPD)	100	0.81	30
60	<b>V60D120C</b>	Plastic SMD	TO-263AC (SMPD)	120	0.96	30
60	<b>V60M120C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.97	30
60	<b>VT60L45PW</b>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	45	0.57	30
60	<b>VT60M45C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	45	0.68	30
60	<b>VT60M120C</b>	Plastic Power-pack <sup>(2)</sup>	TO-220AB	120	0.97	30
80	<a href="#">V80100PW</a>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	100	0.84	40
80	<b>V80170PW</b>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	170	0.91	40
80	<b>V80H150PW</b>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	150	0.91	40
80	<b>VT80L45PW</b>	Plastic Power-pack <sup>(2)</sup>	TO-3PW	45	0.58	40

Note:

1. Bold text indicates new product
2. Dual center-tapped device ( $V_F$  limit at  $I_F$  is per diode)



## RECTIFIERS

## Schottky Rectifiers

**High-performance Schottky diodes** are offered with forward current ratings of 1 A to 175 A and voltage ratings of 15 V to 150 V, a wide range that covers virtually all Schottky applications. A complete portfolio of through-hole and SMD packages is available. In addition to its well-established standard planar Schottky technology, Vishay offers devices built on a second-generation Gen2.x planar technology that supports maximum junction temperatures up to 125 °C for OR-ing applications and up to 175 °C for most other applications requiring low leakage.

Each of these technologies offers specific advantages depending on the customer's application, including superior efficiency, avalanche capability, and the ability to withstand voltage spikes. In addition, a new range of devices built using a halogen free molding compound is available.

Our AEC-Q101 qualified planar Schottky devices meet the highest standards of quality for automotive applications with electrical parameters tested according to PAT and SYL. Our automotive products use a dedicated die in the front end operation and a dedicated part number at the back end, with device selection based on PAT and SYL statistical criteria. Target applications include on board electronics, ABS systems, power steering, and more.

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family	Type		(V)	(A)	
3.5	<a href="#">VS-30WQ04FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	40	0.49	3	150
3.5	<a href="#">VS-30WQ06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	60	0.53	3	150
3.5	<a href="#">VS-30WQ10FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	100	0.63	3	150
5.5	<a href="#">VS-50WQ04FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	40	0.44	5	150
5.5	<a href="#">VS-50WQ06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	60	0.54	5	150
5.5	<a href="#">VS-50WQ10FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	100	0.63	5	150
6	<a href="#">VS-6CWQ04FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	40	0.62	6	150
6	<a href="#">VS-6CWQ06FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	60	0.65	3	150
6	<a href="#">VS-6CWQ10FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	100	0.74	6	150
10	<a href="#">VS-10WQ045FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	45	0.53	10	175
12	<a href="#">VS-12CWQ04FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	40	0.64	6	150
12	<a href="#">VS-12CWQ06FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	60	0.72	6	150
12	<a href="#">VS-12CWQ10FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	100	0.78	6	150
20	<a href="#">VS-20CTQ045HN3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.68	10	175
100	<a href="#">VS-100BGQ015HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	15	0.42	100	125
100	<a href="#">VS-100BGQ030HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	30	0.51	100	150
100	<a href="#">VS-100BGQ045HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	45	0.68	100	150
100	<a href="#">VS-100BGQ100HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	100	0.77	100	175
175	<a href="#">VS-175BGQ030HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	30	0.49	175	150
175	<a href="#">VS-175BGQ045HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	45	0.64	175	150

Note:

1. Singled die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented
4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
8. RoHs compliant



## RECTIFIERS

## Schottky Rectifiers

## HPS GEN 3.x (Planar Technology)

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family	Type		(V)	(A)	
3	<a href="#">30BQ100GPBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	SMC	100	0.62	3	175
5	<a href="#">VS-50SQ100Gx</a>	Plastic Axial <sup>(1)(3)(8)</sup>	DO-204AR	60-80-100	0.52	5	175
5	<a href="#">VS-50SQ100Gx-M3</a>	<b>Plastic Axial<sup>(1)(3)(8)</sup></b>	<b>DO-204AR</b>	<b>60-80-100</b>	<b>0.52</b>	<b>5</b>	<b>175</b>
8	<a href="#">VS-8TQ100GSxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	D <sup>2</sup> PAK	80-100	0.58	8	175
8	<a href="#">VS-8TQ100GPBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	80-100	0.58	8	175
8	<a href="#">VS-8TQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(1)(6)</sup></b>	<b>TO-220AC</b>	<b>80-100</b>	<b>0.58</b>	<b>8</b>	<b>175</b>
16	<a href="#">VS-16CTQ100GSxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	D <sup>2</sup> PAK	60-80-100	0.69	8	175
16	<a href="#">VS-16CTQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	60-80-100	0.69	8	175
16	<a href="#">VS-16CTQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>60-80-100</b>	<b>0.69</b>	<b>8</b>	<b>175</b>
16	<a href="#">VS-16CTQ100G-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262	80-100	0.69	8	175
20	<a href="#">VS-MBRB20100CTGxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	D <sup>2</sup> PAK	100	0.85	10	175
20	<a href="#">VS-MBR20100CTG-1P</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262	80-100	0.85	10	175
30	<a href="#">VS-30CTQ100GSxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	D <sup>2</sup> PAK	80-100	0.82	15	175
30	<a href="#">VS-30CTQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	80-100	0.82	15	175
30	<a href="#">VS-30CTQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>80-100</b>	<b>0.82</b>	<b>15</b>	<b>175</b>
30	<a href="#">VS-30CTQ100G-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262	80-100	0.82	15	175
30	<a href="#">VS-30CPQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247	80-100	0.81	15	175
30	<a href="#">VS-30CPQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-247</b>	<b>80-100</b>	<b>0.81</b>	<b>15</b>	<b>175</b>
40	<a href="#">VS-43CTQ100GSxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	D <sup>2</sup> PAK	80-100	0.81	20	175
40	<a href="#">VS-43CTQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	100	0.81	20	175
40	<a href="#">VS-43CTQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>80-100</b>	<b>0.81</b>	<b>20</b>	<b>175</b>
40	<a href="#">VS-43CTQ100G-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262	80-100	0.81	20	175
40	<a href="#">VS-40CPQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247	80-100	0.75	20	175
40	<a href="#">VS-40CPQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-247</b>	<b>80-100</b>	<b>0.75</b>	<b>20</b>	<b>175</b>
60	<a href="#">VS-63CTQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	100	0.83	30	175
60	<a href="#">VS-63CTQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>100</b>	<b>0.83</b>	<b>30</b>	<b>175</b>
60	<a href="#">VS-63CPQ100GPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247	80-100	0.76	30	175
60	<a href="#">VS-63CPQ100G-N3</a>	<b>Power Plastic Through-Hole<sup>(2)(6)</sup></b>	<b>TO-247</b>	<b>80-100</b>	<b>0.76</b>	<b>30</b>	<b>175</b>

Note:

1. Singled die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
8. RoHs compliant



## RECTIFIERS

## Schottky Rectifiers

## HPS GEN 2.x (Planar Technology)

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
1	<a href="#">VS-MBRA120PBF</a>	Plastic SMD (1)(3)(8)	DO-214AC (SMA)	20	0.35	1	150
1	<a href="#">VS-10MQ040-M3</a>	<b>Plastic SMD (1)(3)(5)</b>	<b>DO-214AC (SMA)</b>	<b>40</b>	<b>0.49</b>	<b>1</b>	<b>150</b>
1	<a href="#">VS-MBRA140PBF</a>	Plastic SMD (1)(3)(8)	DO-214AC (SMA)	40	0.49	1	150
1	<a href="#">VS-10MQ060-M3</a>	<b>Plastic SMD (1)(3)(5)</b>	<b>DO-214AC (SMA)</b>	<b>60</b>	<b>0.57</b>	<b>1</b>	<b>150</b>
1	<a href="#">VS-10BQ015PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	15	0.32	1	125
1	<a href="#">VS-10BQ015-M3</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AA (SMB)</b>	<b>15</b>	<b>0.32</b>	<b>1</b>	<b>125</b>
1	<a href="#">VS-MBRS120PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	20	0.35	1	150
1	<a href="#">VS-10BQ030PBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AA (SMB)</b>	<b>30</b>	<b>0.30</b>	<b>1</b>	<b>150</b>
1	<a href="#">VS-MBRS130LPBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	30	0.30	1	125
1	<a href="#">VS-MBRS130PBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AA (SMB)</b>	<b>30</b>	<b>0.42</b>	<b>1</b>	<b>125</b>
1	<a href="#">VS-10BQ040PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	40	0.49	1	150
1	<a href="#">VS-10BQ040-M3</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AA (SMB)</b>	<b>40</b>	<b>0.49</b>	<b>1</b>	<b>150</b>
1	<a href="#">VS-MBRS140PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	40	0.53	1	150
1	<a href="#">VS-10BQ060PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	60	0.57	1	150
1	<a href="#">VS-10BQ060-M3</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	60	0.57	1	150
1	<a href="#">VS-10BQ100PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	100	0.62	1	175
1	<a href="#">VS-10BQ100-M3</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	100	0.62	1	175
1	<a href="#">VS-MBRS1100PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	90-100	0.62	1	175
1.5	<a href="#">VS-10MQ060NPBF</a>	Plastic SMD (1)(3)(8)	DO-214AC (SMA)	60	0.63	1.5	150
2	<a href="#">VS-20BQ030PBF</a>	Plastic SMD (1)(3)(8)	DO-214AA (SMB)	30	0.37	2	150
2	<a href="#">VS-20MQ040-M3</a>	Plastic SMD (1)(3)(5)	DO-214AC (SMA)	40	0.63	2	150
2	<a href="#">VS-20MQ060-M3</a>	Plastic SMD (1)(3)(5)	DO-214AC (SMA)	60	0.68	2	150
2	<a href="#">VS-20MQ100-M3</a>	Plastic SMD (1)(3)(5)	DO-214AC (SMA)	100	0.72	2	150
2.1	<a href="#">VS-10MQ040NPBF</a>	Plastic SMD (1)(3)(8)	DO-214AC (SMA)	40	0.56	1.5	150
2.1	<a href="#">VS-20MQ040PBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AC (SMA)</b>	<b>40</b>	<b>0.63</b>	<b>2</b>	<b>150</b>
2.1	<a href="#">VS-20MQ060PBF</a>	Plastic SMD (1)(3)(8)	DO-214AC (SMA)	60	0.68	2	150
2.1	<a href="#">VS-10MQ100NPBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AC (SMA)</b>	<b>100</b>	<b>0.68</b>	<b>1.5</b>	<b>150</b>
2.1	<a href="#">VS-10MQ100-M3</a>	Plastic SMD (1)(3)(5)	DO-214AC (SMA)	100	0.63	1	150
2.1	<a href="#">VS-20MQ100PBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AC (SMA)</b>	<b>100</b>	<b>0.72</b>	<b>2</b>	<b>150</b>
3	<a href="#">VS-15MQ040NPBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AC (SMA)</b>	<b>40</b>	<b>0.43</b>	<b>2</b>	<b>150</b>
3	<a href="#">VS-30BQ015-M3</a>	Plastic SMD (1)(3)(5)	DO-214AB (SMC)	15	0.30	3	125
3	<a href="#">VS-30BQ015PBF</a>	<b>Plastic SMD (1)(3)(8)</b>	<b>DO-214AB (SMC)</b>	<b>15</b>	<b>0.30</b>	<b>3</b>	<b>125</b>
3	<a href="#">VS-MBRS320PBF</a>	Plastic SMD (1)(3)(8)	DO-214AB (SMC)	20	0.36	3	150
3	<a href="#">VS-30MQ040-M3</a>	<b>Plastic SMD (1)(3)(5)</b>	<b>DO-214AC (SMA)</b>	<b>40</b>	<b>0.46</b>	<b>3</b>	<b>150</b>
3	<a href="#">VS-30BQ040-M3</a>	Plastic SMD (1)(3)(5)	DO-214AB (SMC)	40	0.43	3	150

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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
3	<a href="#">VS-30BQ040PBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	D0-214AB (SMC)	40	0.43	3	150
3	<a href="#">VS-MBRS340PBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	D0-214AB (SMC)	40	0.43	3	150
3	<a href="#">VS-30BQ060-M3</a>	Plastic SMD <sup>(1)(3)(5)</sup>	D0-214AB (SMC)	60	0.52	3	150
3	<a href="#">VS-30BQ060PBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	D0-214AB (SMC)	60	0.52	3	150
3	<a href="#">VS-30BQ100-M3</a>	Plastic SMD <sup>(1)(3)(5)</sup>	D0-214AB (SMC)	100	0.62	3	175
3	<a href="#">VS-30BQ100PBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	D0-214AB (SMC)	100	0.62	3	175
3	<a href="#">VS-MBRS360PBF</a>	Plastic SMD <sup>(1)(3)(8)</sup>	D0-214AB (SMC)	50-60	0.61	3	150
3	<a href="#">VS-MBRD320xPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	20	<b>0.49</b>	<b>3</b>	<b>150</b>
3	<a href="#">VS-MBRD320x-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	20	0.49	3	150
3	<a href="#">VS-MBRD330xPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	30	0.49	3	150
3	<a href="#">VS-MBRD330x-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	<b>30</b>	<b>0.49</b>	<b>3</b>	<b>150</b>
3	<a href="#">VS-MBRD340xPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	40	0.49	3	150
3	<a href="#">VS-MBRD340x-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	<b>40</b>	<b>0.49</b>	<b>3</b>	<b>150</b>
3.5	<a href="#">VS-30WQ03FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	30	0.35	3	150
3.5	<a href="#">VS-30WQ04FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	<b>40</b>	<b>0.49</b>	<b>3</b>	<b>150</b>
3.5	<a href="#">VS-30WQ04FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	40	0.49	3	150
3.5	<a href="#">VS-30WQ06FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	<b>60</b>	<b>0.53</b>	<b>3</b>	<b>150</b>
3.5	<a href="#">VS-30WQ06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	60	0.53	3	150
3.5	<a href="#">VS-30WQ10FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	100	0.63	3	150
3.5	<a href="#">VS-30WQ10FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	<b>100</b>	<b>0.63</b>	<b>3</b>	<b>150</b>
3.5	<a href="#">VS-30WQ03FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	<b>30</b>	<b>0.35</b>	<b>3</b>	<b>150</b>
5.5	<a href="#">VS-50WQ03FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	30	0.35	5	150
5.5	<a href="#">VS-50WQ03FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	30	0.35	5	150
5.5	<a href="#">VS-50WQ04FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	<b>40</b>	<b>0.44</b>	<b>5</b>	<b>150</b>
5.5	<a href="#">VS-50WQ04FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	40	0.44	5	150
5.5	<a href="#">VS-50WQ06FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	<b>60</b>	<b>0.54</b>	<b>5</b>	<b>150</b>
5.5	<a href="#">VS-50WQ06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	60	0.54	5	150
5.5	<a href="#">VS-50WQ10FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	100	0.63	5	150
5.5	<a href="#">VS-50WQ10FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	100	0.63	5	150
6	<a href="#">VS-6CWQ03FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	<b>30</b>	<b>0.46</b>	<b>6</b>	<b>150</b>
6	<a href="#">VS-6CWQ03FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	30	0.46	6	150
6	<a href="#">VS-6CWQ04FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	<b>40</b>	<b>0.62</b>	<b>6</b>	<b>150</b>
6	<a href="#">VS-6CWQ04FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	40	0.62	6	150
6	<a href="#">VS-6CWQ06FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	<b>60</b>	<b>0.65</b>	<b>3</b>	<b>150</b>
6	<a href="#">VS-6CWQ06FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	60	0.65	3	150

Note:

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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>j</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
6	<a href="#">VS-6CWQ10FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	100	0.74	6	150
6	<a href="#">VS-6CWQ10FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	100	0.74	6	150
6	<a href="#">VS-MBRD660CTxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	50-60	0.65	3	150
6	<a href="#">VS-MBRD660CTx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	50-60	0.65	3	150
6	<a href="#">VS-6TQ045SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.53	6	175
6	<a href="#">VS-6TQ045PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.53	6	175
6	<a href="#">VS-6TQ045-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.53	6	175
7.5	<a href="#">VS-MBRB745xPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.57	7.5	150
7.5	<a href="#">VS-MBR745PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.57	7.5	150
7.5	<a href="#">VS-MBR745-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.57	7.5	150
8	<a href="#">VS-8TQ100SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	80-100	0.58	8	175
8	<a href="#">VS-8TQ100PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	60-80-100	0.69	8	175
8	<a href="#">VS-8TQ100-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	60-80-100	0.69	8	175
10	<a href="#">VS-10WQ045FNxPBF</a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252AA - D-Pak	45	0.53	10	175
10	<a href="#">VS-10WQ045FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA - D-Pak	45	0.53	10	175
10	<a href="#">VS-10CTQ150SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	0.86	5	175
10	<a href="#">VS-10TQ045SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.49	10	175
10	<a href="#">VS-MBRB1045xPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.57	10	150
10	<a href="#">VS-10CTQ150-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	150	0.86	5	175
10	<a href="#">VS-10CTQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	150	0.86	5	175
10	<a href="#">VS-10CTQ150-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	150	0.86	5	175
10	<a href="#">VS-10TQ045PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.49	10	175
10	<a href="#">VS-10TQ045-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.49	10	175
10	<a href="#">VS-MBR1045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.57	10	150
10	<a href="#">VS-MBR1045-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.57	10	150
12	<a href="#">VS-12CWQ03FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	30	0.49	6	150
12	<a href="#">VS-12CWQ03FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	30	0.49	6	150
12	<a href="#">VS-12CWQ04FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	40	0.64	6	150
12	<a href="#">VS-12CWQ04FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	40	0.64	6	150
12	<a href="#">VS-12CWQ06FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	60	0.72	6	150
12	<a href="#">VS-12CWQ06FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	60	0.72	6	150
12	<a href="#">VS-12CWQ10FNxPBF</a>	Power Plastic SMD <sup>(2)(3)(8)</sup>	TO-252AA - D-Pak	100	0.78	6	150
12	<a href="#">VS-12CWQ10FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA - D-Pak	100	0.78	6	150
12	<a href="#">VS-12CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.64	6	175
12	<a href="#">VS-12TQ045SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.50	15	150

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none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented
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6. Halogen-free mould compound and RoHs compliant and totally lead-free
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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
12	<a href="#">VS-12CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.64	6	175
12	<a href="#">VS-12CTQ045-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.64	6	175
12	<a href="#">VS-12TQ045PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.50	12	150
12	<a href="#">VS-12TQ045-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.50	12	150
15	<a href="#">VS-15TQ060SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.56	15	150
15	<a href="#">VS-15CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.65	7.5	150
15	<a href="#">VS-MBRB1545CTxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.72	7.5	150
15	<a href="#">VS-15CTQ045-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.65	7.5	150
15	<a href="#">VS-MBR1545CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.72	7.5	150
15	<a href="#">VS-15TQ060PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	60	0.56	15	150
15	<a href="#">VS-15TQ060-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	60	0.56	15	150
15	<a href="#">VS-15CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.65	7.5	150
15	<a href="#">VS-15CTQ045-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.65	7.5	150
15	<a href="#">VS-MBR1545CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.72	7.5	150
15	<a href="#">VS-MBR1545CT-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.72	7.5	150
16	<a href="#">VS-MBRB1645xPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.57	16	150
16	<a href="#">VS-16CTQ100SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	80-100	0.69	8	175
16	<a href="#">VS-MBRB1645-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.57	16	150
16	<a href="#">VS-16CTQ100-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	80-100	0.69	8	175
16	<a href="#">VS-MBR1645PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.57	16	150
16	<a href="#">VS-MBR1645-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.57	16	150
18	<a href="#">VS-18TQ045PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45-50	0.53	18	175
18	<a href="#">VS-18TQ045-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45-50	0.53	18	175
16	<a href="#">VS-16CTQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	60-80-100	0.69	8	175
16	<a href="#">VS-16CTQ100-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	60-80-100	0.69	8	175
18	<a href="#">VS-18TQ045SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.53	18	175
19	<a href="#">VS-19TQ015SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	15	0.32	19	125
19	<a href="#">VS-19TQ015PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	15	0.32	19	125
19	<a href="#">VS-19TQ015-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	15	0.32	19	125
20	<a href="#">VS-20L15TSxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	15	0.33	20	125
20	<a href="#">VS-20CTQ150SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	0.77	10	175
20	<a href="#">VS-20CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.68	10	175
20	<a href="#">VS-20TQ045SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.51	10	150
20	<a href="#">VS-MBRB2045CTxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.72	10	150
20	<a href="#">VS-MBRB20100CTxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	80-90-100	0.85	10	150

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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
20	<a href="#">VS-20CTQ045-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	45	0.68	10	175
20	<a href="#">VS-20CTQ150-1PBF</a>	<b>Power Plastic Through-Hole <sup>(2)(5)</sup></b>	<b>TO-262 (I<sup>2</sup>PAK)</b>	<b>150</b>	<b>0.77</b>	<b>10</b>	<b>175</b>
20	<a href="#">VS-MBR2045CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.72	10	150
20	<a href="#">VS-MBR20100CT-1PBF</a>	<b>Power Plastic Through-Hole <sup>(2)(5)</sup></b>	<b>TO-262 (I<sup>2</sup>PAK)</b>	<b>80-90-100</b>	<b>0.85</b>	<b>10</b>	<b>150</b>
20	<a href="#">VS-20L15TPBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	15	0.33	20	125
20	<a href="#">VS-20L15T-N3</a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-220AC</b>	<b>15</b>	<b>0.33</b>	<b>20</b>	<b>125</b>
20	<a href="#">VS-20CTQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	150	0.77	10	175
20	<a href="#">VS-20CTQ150-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	150	0.77	10	175
20	<a href="#">VS-20CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.68	10	175
20	<a href="#">VS-20CTQ045-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.68	10	175
20	<a href="#">VS-20TQ045PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	35-40-45	0.51	10	150
20	<a href="#">VS-20TQ045-N3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	35-40-45	0.51	10	150
20	<a href="#">VS-MBR2045CTPBF</a>	<b>Power Plastic Through-Hole <sup>(2)(7)</sup></b>	<b>TO-220AB</b>	<b>35-40-45</b>	<b>0.72</b>	<b>10</b>	<b>150</b>
20	<a href="#">VS-MBR2045CT-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.72	10	150
20	<a href="#">VS-MBR20100CTK-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>60-80-100</b>	<b>0.65</b>	<b>10</b>	<b>175</b>
25	<a href="#">VS-25CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	35-40-45	0.64	12.5	150
25	<a href="#">VS-MBRB2545CTxPBF</a>	<b>Power Plastic SMD <sup>(2)(3)(5)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>45</b>	<b>0.73</b>	<b>12.5</b>	<b>150</b>
25	<a href="#">VS-MBR2545CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.73	12.5	150
25	<a href="#">VS-25CTQ045-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	35-40-45	0.64	12.5	150
25	<a href="#">VS-25CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.64	12.5	150
25	<a href="#">VS-25CTQ045-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	35-40-45	0.64	12.5	150
25	<a href="#">VS-MBR2545CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	45	0.73	12.5	150
25	<a href="#">VS-MBR2545CT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>45</b>	<b>0.73</b>	<b>12.5</b>	<b>150</b>
30	<a href="#">VS-32CTQ030SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	30	0.53	15	150
30	<a href="#">VS-MBRB3030CTLxPBF</a>	<b>Power Plastic SMD <sup>(2)(3)(5)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>30</b>	<b>0.51</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-30CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.70	15	175
30	<a href="#">VS-MBRB3045CTxPBF</a>	<b>Power Plastic SMD <sup>(2)(3)(5)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>45</b>	<b>0.72</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-30CTQ060SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.71	15	150
30	<a href="#">VS-30CTQ100SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	80-100	0.82	15	175
30	<a href="#">VS-30L30CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	30	0.50	15	150
30	<a href="#">VS-32CTQ030-1PBF</a>	<b>Power Plastic Through-Hole <sup>(2)(5)</sup></b>	<b>TO-262 (I<sup>2</sup>PAK)</b>	<b>30</b>	<b>0.53</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-30CTQ045-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	45	0.70	15	175
30	<a href="#">VS-MBR3045CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	45	0.72	15	150
30	<a href="#">VS-30CTQ060-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	60	0.71	15	150
30	<a href="#">VS-30CTQ100-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	80-100	0.82	15	175

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HPS GEN 2.x (Planar Technology), continued

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		Family <sup>(3)</sup>	Type		(V)	(A)	
30	<a href="#">VS-30L30CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	30	0.50	15	150
30	<a href="#">VS-30L30CT-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	30	0.50	15	150
30	<a href="#">VS-MBR3045CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	45	0.72	15	150
30	<a href="#">VS-MBR3045CT-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	45	0.72	15	150
30	<a href="#">VS-32CTQ030PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	25-30	0.53	15	150
30	<a href="#">VS-32CTQ030-N3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	25-30	0.53	15	150
30	<a href="#">VS-30CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	35-40-45	0.70	15	175
30	<a href="#">VS-30CTQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>35-40-45</b>	<b>0.70</b>	<b>15</b>	<b>175</b>
30	<a href="#">VS-30CTQ060PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	50-60	0.71	15	150
30	<a href="#">VS-30CTQ060-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>50-60</b>	<b>0.71</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-30CTQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	80-100	0.65	15	175
30	<a href="#">VS-30CTQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>80-100</b>	<b>0.65</b>	<b>15</b>	<b>175</b>
30	<a href="#">VS-30CPQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	150	0.93	15	175
30	<a href="#">VS-30CPQ150-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>150</b>	<b>0.93</b>	<b>15</b>	<b>175</b>
30	<a href="#">VS-30CPQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	35-40-45	0.64	15	150
30	<a href="#">VS-30CPQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>35-40-45</b>	<b>0.64</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-MBR3045WTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	35-40-45	0.72	30	150
30	<a href="#">VS-MBR3045WT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>35-40-45</b>	<b>0.72</b>	<b>30</b>	<b>150</b>
30	<a href="#">VS-30CPQ060PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	50-60	0.70	15	150
30	<a href="#">VS-30CPQ060-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>50-60</b>	<b>0.70</b>	<b>15</b>	<b>150</b>
30	<a href="#">VS-30CPQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	80-90-100	0.81	15	175
30	<a href="#">VS-30CPQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>80-90-100</b>	<b>0.81</b>	<b>15</b>	<b>175</b>
40	<a href="#">VS-40L15CTSxPBF</a>	Power Plastic SMD <sup>(2)(3)(7)</sup>	TO-263AB (D <sup>2</sup> PAK)	15	0.50	20	125
40	<a href="#">VS-47CTQ020SxPBF</a>	Power Plastic SMD <sup>(2)(3)(7)</sup>	TO-263AB (D <sup>2</sup> PAK)	20	0.42	20	150
40	<a href="#">VS-42CTQ030SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	30	0.51	20	150
40	<a href="#">VS-40CTQ045SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.67	20	150
40	<a href="#">VS-MBRB4045CTxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	45	0.75	20	150
40	<a href="#">VS-48CTQ060SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	60	0.75	20	150
40	<a href="#">VS-40CTQ150SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	150	0.85	20	175
40	<a href="#">VS-43CTQ100SxPBF</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	80-100	0.81	20	175
40	<a href="#">VS-40L15CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	15	0.50	20	125
40	<a href="#">VS-47CTQ020-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	20	0.42	20	150
40	<a href="#">VS-42CTQ030-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	30	0.51	20	150
40	<a href="#">VS-40CTQ045-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	45	0.67	20	150
40	<a href="#">VS-MBR4045CT-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	45	0.75	20	150

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none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>J</sub> Max (°C)
		Family <sup>(3)</sup>	Type		(V)	(A)	
40	<a href="#">VS-48CTQ060-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	60	0.75	20	150
40	<a href="#">VS-40CTQ150-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	150	0.85	20	175
40	<a href="#">VS-43CTQ100-1PBF</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	80-100	0.81	20	175
40	<a href="#">VS-40L15CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	15	0.50	20	125
40	<a href="#">VS-40L15CT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>15</b>	<b>0.5</b>	<b>20</b>	<b>125</b>
40	<a href="#">VS-47CTQ020PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	20	0.42	20	150
40	<a href="#">VS-47CTQ020-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>20</b>	<b>0.42</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-42CTQ030PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	30	0.51	20	150
40	<a href="#">VS-42CTQ030-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>30</b>	<b>0.51</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-40CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	45	0.67	20	150
40	<a href="#">VS-40CTQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>45</b>	<b>0.67</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-MBR4045CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AC	45	0.75	20	150
40	<a href="#">VS-MBR4045CT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AC</b>	<b>45</b>	<b>0.75</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-48CTQ060PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	60	0.75	20	150
40	<a href="#">VS-48CTQ060-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>60</b>	<b>0.75</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-43CTQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	100	0.81	20	175
40	<a href="#">VS-43CTQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>100</b>	<b>0.81</b>	<b>20</b>	<b>175</b>
40	<a href="#">VS-40CTQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	150	0.85	20	175
40	<a href="#">VS-40CTQ150-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>150</b>	<b>0.85</b>	<b>20</b>	<b>175</b>
40	<a href="#">VS-40L15CWPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	15	0.50	40	125
40	<a href="#">VS-40L15CW-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>15</b>	<b>0.50</b>	<b>40</b>	<b>125</b>
40	<a href="#">VS-MBR40L15CWPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	15	0.50	20	125
40	<a href="#">VS-MBR40L15CW-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>15</b>	<b>0.50</b>	<b>20</b>	<b>125</b>
40	<a href="#">VS-40L40CWPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	40	0.70	20	150
40	<a href="#">VS-40L40CW-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>40</b>	<b>0.70</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-40L45CWPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	45	0.70	20	150
40	<a href="#">VS-40L45CW-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>45</b>	<b>0.70</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-MBR4045WTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	45	0.72	40	150
40	<a href="#">VS-MBR4045WT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>45</b>	<b>0.72</b>	<b>40</b>	<b>150</b>
40	<a href="#">VS-MBR4060WTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	60	0.62	40	150
40	<a href="#">VS-MBR4060WT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>60</b>	<b>0.62</b>	<b>40</b>	<b>150</b>
40	<a href="#">VS-40CPQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	35-40-45	0.56	20	150
40	<a href="#">VS-40CPQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>35-40-45</b>	<b>0.56</b>	<b>20</b>	<b>150</b>
40	<a href="#">VS-40CPQ060PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	50-60	0.64	20	150
40	<a href="#">VS-40CPQ060-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>50-60</b>	<b>0.64</b>	<b>20</b>	<b>150</b>

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## RECTIFIERS

## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

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		Family <sup>(3)</sup>	Type		(V)	(A)	
40	<a href="#">VS-40CPQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	80-100	0.75	20	175
40	<a href="#">VS-40CPQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>80-100</b>	<b>0.75</b>	<b>20</b>	<b>175</b>
50	<a href="#">VS-52CPQ030PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	30	0.49	25	150
50	<a href="#">VS-52CPQ030-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>30</b>	<b>0.49</b>	<b>25</b>	<b>150</b>
60	<a href="#">VS-62CTQ030PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AC	30	0.59	30	150
60	<a href="#">VS-62CTQ030-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AC</b>	<b>30</b>	<b>0.59</b>	<b>30</b>	<b>150</b>
60	<a href="#">VS-63CTQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	100	0.83	30	175
60	<a href="#">VS-63CTQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>100</b>	<b>0.83</b>	<b>30</b>	<b>175</b>
60	<a href="#">VS-60CTQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	150	0.87	30	175
60	<a href="#">VS-60CTQ150-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>150</b>	<b>0.87</b>	<b>30</b>	<b>175</b>
60	<a href="#">VS-60CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AC	35-40-45	0.75	30	150
60	<a href="#">VS-60CTQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AC</b>	<b>35-40-45</b>	<b>0.75</b>	<b>30</b>	<b>150</b>
60	<a href="#">VS-61CTQ045PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AC	35-40-45	0.74	30	175
60	<a href="#">VS-61CTQ045-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AC</b>	<b>35-40-45</b>	<b>0.74</b>	<b>30</b>	<b>175</b>
60	<a href="#">VS-MBR6045WTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	45	0.55	30	150
60	<a href="#">VS-MBR6045WT-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>45</b>	<b>0.55</b>	<b>30</b>	<b>150</b>
60	<a href="#">VS-63CPQ100PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	100	0.76	30	175
60	<a href="#">VS-63CPQ100-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>100</b>	<b>0.76</b>	<b>30</b>	<b>175</b>
60	<a href="#">VS-60CPQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	150	0.77	30	175
60	<a href="#">VS-60CPQ150-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>150</b>	<b>0.77</b>	<b>30</b>	<b>175</b>
65	<a href="#">VS-65PQ015PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	15	0.46	65	125
65	<a href="#">VS-65PQ015-N3</a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>15</b>	<b>0.46</b>	<b>65</b>	<b>125</b>
70	<a href="#">VS-72CPQ030PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	30	0.58	35	150
70	<a href="#">VS-72CPQ030-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>30</b>	<b>0.58</b>	<b>35</b>	<b>150</b>
80	<a href="#">VS-80CPQ020PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	20	0.46	40	150
80	<a href="#">VS-80CPQ020-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>20</b>	<b>0.46</b>	<b>40</b>	<b>150</b>
80	<a href="#">VS-80CPQ150PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	150	0.85	40	175
80	<a href="#">VS-80CPQ150-N3</a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>150</b>	<b>0.85</b>	<b>40</b>	<b>175</b>
80	<a href="#">VS-85CNQ015APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	15	0.42	40	125
80	<a href="#">VS-87CNQ020APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	20	0.39	40	150
80	<a href="#">VS-82CNQ030APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	30	0.47	40	150
80	<a href="#">VS-88CNQ060APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	60	0.67	40	150
80	<a href="#">VS-80CNQ045APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	40-45	0.61	40	150
80	<a href="#">VS-81CNQ045APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	40-45	0.66	40	175
80	<a href="#">VS-83CNQ100APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	80-100	0.82	40	175

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## Schottky Rectifiers

HPS GEN 2.x (Planar Technology), continued

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		Family <sup>(3)</sup>	Type		(V)	(A)	
80	<a href="#">VS-85CNQ015ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	15	0.42	40	125
80	<a href="#">VS-87CNQ020ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	20	0.39	40	150
80	<a href="#">VS-82CNQ030ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	30	0.47	40	150
80	<a href="#">VS-88CNQ060ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	60	0.67	40	150
80	<a href="#">VS-80CNQ045ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	35-40-45	0.61	40	150
80	<a href="#">VS-81CNQ045ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	35-40-45	0.66	40	175
80	<a href="#">VS-83CNQ100ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	80-100	0.82	40	175
80	<a href="#">VS-85CNQ015ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	15	0.42	40	125
80	<a href="#">VS-87CNQ020ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	20	0.39	40	150
80	<a href="#">VS-82CNQ030ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	30	0.47	40	150
80	<a href="#">VS-88CNQ060ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	60	0.67	40	150
80	<a href="#">VS-80CNQ045ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	35-40-45	0.61	40	150
80	<a href="#">VS-81CNQ045ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	35-40-45	0.66	40	175
80	<a href="#">VS-83CNQ100ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	80-100	0.82	40	175
100	<a href="#">VS-100BGQ015</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	15	0.42	100	125
100	<a href="#">VS-100BGQ030</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	30	0.51	100	150
100	<a href="#">VS-100BGQ045</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	45	0.68	100	150
100	<a href="#">VS-100BGQ100</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	100	0.77	100	175
110	<a href="#">VS-115CNQ015APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	15	0.43	55	125
110	<a href="#">VS-112CNQ030APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	30	0.51	55	150
110	<a href="#">VS-110CNQ045APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	45	0.69	55	150
110	<a href="#">VS-111CNQ045APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	45	0.69	55	175
110	<a href="#">VS-113CNQ100APBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8	100	0.79	33	175
110	<a href="#">VS-115CNQ015ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	15	0.43	55	125
110	<a href="#">VS-112CNQ030ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	30	0.51	55	150
110	<a href="#">VS-111CNQ045ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	45	0.69	55	175
110	<a href="#">VS-113CNQ100ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	100	0.79	55	175
110	<a href="#">VS-110CNQ045ASLPBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	D61-8-SL	40-45	0.69	55	150
110	<a href="#">VS-115CNQ015ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	15	0.43	55	125
110	<a href="#">VS-112CNQ030ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	30	0.51	55	150
110	<a href="#">VS-110CNQ045ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	45	0.69	55	150
110	<a href="#">VS-111CNQ045ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	45	0.69	55	175
110	<a href="#">VS-113CNQ100ASMPBF</a>	Power Plastic SMD <sup>(2)(8)</sup>	D61-8-SM	100	0.79	55	175
175	<a href="#">VS-175BGQ030</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	30	0.49	175	150
175	<a href="#">VS-175BGQ045</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	PowerTab™	45	0.64	175	150

Note:

1. Singled die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
8. RoHs compliant



## RECTIFIERS

## Ultrafast Recovery Rectifiers

**Ultrafast Recovery Rectifiers** have very fast reverse recovery times (as low as 15 ns) and voltage levels as high as 1500 V. They are ideally suited for very high frequency switching power supplies, inverters, and freewheeling diodes. Both platinum-doped types with excellent high-temperature leakage current and gold-doped types for soft reverse recovery with excellent recovery temperature stability are offered.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>rr</sub> (ns)
		Family <sup>(3)</sup>	Type		(V)	(A)	
0.6	<a href="#">UG06A thru UG06D</a>	Plastic Axial <sup>(2)</sup>	MPG06	50 - 200	0.95	0.6	15
1.0	<a href="#">ES1A thru ES1D</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 200	0.92	1.0	15
<b>1.0</b>	<b><a href="#">ES1PB, ES1PC &amp; ES1PD</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-220AA (SMP)</b>	<b>100 - 200</b>	<b>0.865 / 0.92</b>	<b>0.6 / 1.0</b>	<b>15</b>
1.0	<a href="#">ESH1B, ESH1C &amp; ESH1D</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	100 - 200	0.87 / 0.90	0.7 / 1.0	25
<b>1.0</b>	<b><a href="#">ESH1PB, ESH1PC &amp; ESH1PD</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-220AA (SMP)</b>	<b>100 - 200</b>	<b>0.86 / 0.90</b>	<b>0.7 / 1.0</b>	<b>25</b>
1.0	<a href="#">MUR120</a>	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	200	0.88	1.0	25
1.0	<a href="#">MUR140 &amp; MUR160</a>	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	400 - 600	1.25	1.0	50
1.0	<a href="#">MURS120</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	200	0.88	1.0	25
1.0	<a href="#">MURS140 &amp; MURS160</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	400 - 600	1.25	1.0	50
1.0	<a href="#">UF4001 thru UF4007</a>	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 1000	1.0 / 1.7	1.0	50 / 75
1.0	<a href="#">UG1A thru UG1D</a>	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 200	0.95	1.0	15
1.0	<a href="#">US1A thru US1M</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 1000	1.0 / 1.7	1.0	50 / 75
1.2	<a href="#">ES07B</a>	Plastic SMD	DO-219AB (SMF)	100	0.98	1.0	25
1.2	<a href="#">ES07D</a>	Plastic SMD	DO-219AB (SMF)	200	0.98	1.0	25
1.5	<a href="#">BYG20D thru BYG20J</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	200 - 600	1.30	1.0	75
1.5	<a href="#">BYG23M</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	1000	1.70	1.0	75
2.0	<a href="#">BYG22A thru BYG22D</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 200	1.10	2.0	25
2.0	<a href="#">ES2A thru ES2D</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 - 200	0.90	2.0	20
2.0	<a href="#">ES2F &amp; ES2G</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	300 - 400	1.10	2.0	35
2.0	<a href="#">ESH2B, ESH2C &amp; ESH2D</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	100 - 200	0.93	2.0	25
<b>2.0</b>	<b><a href="#">ESH2PB, ESH2PC &amp; ESH2PD</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-220AA (SMP)</b>	<b>100 - 200</b>	<b>0.98</b>	<b>2.0</b>	<b>25</b>
<b>2.0</b>	<b><a href="#">MURS240 &amp; MURS260</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-214AA (SMB)</b>	<b>400 - 600</b>	<b>1.45</b>	<b>2.0</b>	<b>50</b>
2.0	<a href="#">SBYV27-50 thru SBYV27-200</a>	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	50 - 200	1.07	3.0	15
<b>2.0</b>	<b><a href="#">U2B, U2C &amp; U2D</a></b>	<b>Plastic Axial<sup>(4)</sup></b>	<b>DO-214AA (SMB)</b>	<b>100 - 200</b>	<b>0.90</b>	<b>2.0</b>	<b>20</b>
2.0	<a href="#">UG2A thru UG2D</a>	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	50 - 200	0.95	2.0	15
2.0	<a href="#">UG2F &amp; UG2G</a>	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	300 - 400	1.10	2.0	35
<b>2.0</b>	<b><a href="#">USB260</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-214AA (SMB)</b>	<b>600</b>	<b>1.60</b>	<b>2.0</b>	<b>30</b>
3.0	<a href="#">31GF4</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	400	1.25	3.0	30
3.0	<a href="#">31GF6</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	600	1.60	3.0	30
3.0	<a href="#">ES3A thru ES3D</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 200	0.90	3.0	20
3.0	<a href="#">ES3F &amp; ES3G</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	300 - 400	1.10	3.0	35
3.0	<a href="#">ESH3B, ESH3C &amp; ESH3D</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	100 - 200	0.90	3.0	25
3.0	<a href="#">MURS320</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	200	0.88	3.0	25
3.0	<a href="#">MURS340 &amp; MURS360</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	400 & 600	1.25 / 1.28	3.0 / 4.0	50
<b>3.0</b>	<b><a href="#">MURS340S &amp; MURS360S</a></b>	<b>Plastic Axial<sup>(2)</sup></b>	<b>DO-214AA (SMB)</b>	<b>400 &amp; 600</b>	<b>1.45</b>	<b>3.0</b>	<b>50</b>

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
4. Oxide planar die





## RECTIFIERS

## Ultrafast Recovery Rectifiers

Ultrafast Recovery Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>rr</sub> (ns)
		Family <sup>(3)</sup>	Type		(V)	(A)	
<b>3.0</b>	<b>U3B, U3C &amp; U3D</b>	<b>Plastic SMD<sup>(4)</sup></b>	<b>DO-214AB (SMC)</b>	<b>100 - 200</b>	<b>0.90</b>	<b>3.0</b>	<b>20</b>
3.0	<a href="#">UF5400 thru UF5408</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 1000	1.0 / 1.7	3.0	50 / 75
3.5	<a href="#">SBYV28-50 thru SBYV28-200</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 200	1.10	3.5	20
4.0	<a href="#">MUR420</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	200	0.89	4.0	25
4.0	<a href="#">MUR440 &amp; MUR460</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	400 - 600	1.28	4.0	50
4.0	<a href="#">UG4A thru UG4D</a>	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 200	0.95	4.0	20
5.0	<a href="#">GUR5H60</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	600	1.80	5.0	30
5.0	<a href="#">GURB5H60</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.80	5.0	30
5.0	<a href="#">GURF5H60</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	600	1.80	5.0	30
5.0	<a href="#">UG5HT &amp; UG5JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	5.0	25
5.0	<a href="#">UGB5HT &amp; UGB5JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	5.0	25
5.0	<a href="#">UGF5HT &amp; UGF5JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	5.0	25
6.0	<a href="#">FEP6AT thru FEP6DT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	0.98	3.0	35
6.0	<a href="#">FEPB6AT thru FEPB6DT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	0.98	3.0	35
6.0	<a href="#">FEPF6AT thru FEPF6DT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	0.98	3.0	35
8.0	<a href="#">BYV29-300 &amp; BYV29-400</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	300 - 400	1.25	8.0	35
8.0	<a href="#">BYV29B-300 &amp; BYV29B-400</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.25	8.0	35
8.0	<a href="#">BYV29F-300 &amp; BYV29F-400</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	300 - 400	1.25	8.0	35
8.0	<a href="#">BYW29-50 thru BYW29-200</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 200	1.30	20	25
8.0	<a href="#">BYWB29-50 thru BYWB29-200</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	1.30	20	25
8.0	<a href="#">BYWF29-50 thru BYWF29-200</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	50 - 200	1.30	20	25
8.0	<a href="#">FES8AT thru FES8JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
8.0	<a href="#">FESB8AT thru FESB8JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
8.0	<a href="#">FESF8AT thru FESF8JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
<b>8.0</b>	<b>U8BT thru U8DT</b>	<b>Plastic Power-pack<sup>(4)</sup></b>	<b>TO-220AC</b>	<b>100 - 200</b>	<b>1.02</b>	<b>8.0</b>	<b>20</b>
<b>8.0</b>	<b>UF8BT thru UF8DT</b>	<b>Isolated Power-pack<sup>(4)</sup></b>	<b>ITO-220AC</b>	<b>100 - 200</b>	<b>1.02</b>	<b>8.0</b>	<b>20</b>
<b>8.0</b>	<b>UB8BT thru UB8DT</b>	<b>Power-pack SMD<sup>(4)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>100 - 200</b>	<b>1.02</b>	<b>8.0</b>	<b>20</b>
8.0	<a href="#">GI1401 thru GI1404</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 200	0.98	8.0	35
8.0	<a href="#">GIB1401 thru GIB1404</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	0.98	8.0	35
8.0	<a href="#">UG8AT thru UG8DT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 200	1.00	8.0	20
8.0	<a href="#">UGB8AT thru UGB8DT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	1.00	8.0	20
8.0	<a href="#">UGF8AT thru UGF8DT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	50 - 200	1.00	8.0	20
8.0	<a href="#">UG8FT &amp; UG8GT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	300 - 400	1.25	8.0	35
8.0	<a href="#">UGB8FT &amp; UGB8GT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.25	8.0	35
8.0	<a href="#">UGF8FT &amp; UGF8GT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	300 - 400	1.25	8.0	35
8.0	<a href="#">UG8HT &amp; UG8JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	8.0	25
8.0	<a href="#">UGB8HT &amp; UGB8JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	8.0	25
8.0	<a href="#">UGF8HT &amp; UGF8JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	8.0	25

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
4. Oxide planar die



## RECTIFIERS

## Ultrafast Recovery Rectifiers

Ultrafast Recovery Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		T <sub>rr</sub> (ns)
		Family <sup>(3)</sup>	Type		(V)	(A)	
8.0	<a href="#">UG8HCT &amp; UG8JCT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	500 - 600	1.75	4.0	25
8.0	<a href="#">UGB8HCT &amp; UGB8JCT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	4.0	25
8.0	<a href="#">UGF8HCT &amp; UGF8JCT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	500 - 600	1.75	4.0	25
10	<a href="#">BYQ28E-100 thru BYQ28E-200</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-220AB	100 - 200	1.10	5.0	20
10	<a href="#">BYQ28EB-100 thru BYQ28EB-200</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	100 - 200	1.10	5.0	20
10	<a href="#">BYQ28EF-100 thru BYQ28EF-200</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	100 - 200	1.10	5.0	20
10	<a href="#">BYT28-300 &amp; BYT28-400</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	300 - 400	1.30	5.0	35
10	<a href="#">BYT28B-300 &amp; BYT28B-400</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.30	5.0	35
10	<a href="#">BYT28F-300 &amp; BYT28F-400</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	300 - 400	1.30	5.0	35
10	<a href="#">UG10BCT thru UG10DCT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	100 - 200	1.10	5.0	20
10	<a href="#">UGB10BCT thru UGB10DCT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	100 - 200	1.10	5.0	20
10	<a href="#">UGF10BCT thru UGF10DCT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	100 - 200	1.10	5.0	20
10	<a href="#">UG10FCT &amp; UG10GCT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	300 - 400	1.30	5.0	35
10	<a href="#">UGB10FCT &amp; UGB10GCT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.30	5.0	35
10	<a href="#">UGF10FCT &amp; UGF10GCT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	300 - 400	1.30	5.0	35
<b>10</b>	<b><a href="#">U10BCT thru U10DCT</a></b>	<b>Plastic Power-pack<sup>(3)(4)</sup></b>	<b>TO-220AB</b>	<b>100 - 200</b>	<b>1.10</b>	<b>5.0</b>	<b>20</b>
<b>10</b>	<b><a href="#">UB10BCT thru UB10DCT</a></b>	<b>Power-pack SMD<sup>(3)(4)</sup></b>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	<b>100 - 200</b>	<b>1.10</b>	<b>5.0</b>	<b>20</b>
<b>10</b>	<b><a href="#">UF10BCT thru UF10DCT</a></b>	<b>Isolated Power-pack<sup>(3)(4)</sup></b>	<b>ITO-220AB</b>	<b>100 - 200</b>	<b>1.10</b>	<b>5.0</b>	<b>20</b>
12	<a href="#">UG12HT &amp; UG12JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	12	30
12	<a href="#">UGB12HT &amp; UGB12JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	12	30
12	<a href="#">UGF12HT &amp; UGF12JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	12	30
15	<a href="#">UG15HT &amp; UG15JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	15	35
15	<a href="#">UGB15HT &amp; UGB15JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	15	35
15	<a href="#">UGF15HT &amp; UGF15JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	15	35
16	<a href="#">FEP16AT thru FEP16JT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	<a href="#">FEPB16AT thru FEPB16JT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	<a href="#">FEPF16AT thru FEPF16JT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	50 - 600	0.95 / 1.30 / 1.50	8	35 / 50
16	<a href="#">FES16AT thru FES16JT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	<a href="#">FESB16AT thru FESB16JT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	<a href="#">FESF16AT thru FESF16JT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	50 - 600	0.975 / 1.30 / 1.50	16	35 / 50
16	<a href="#">GI2401 thru GI2404</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	0.98	8.0	35
16	<a href="#">GIB2401 thru GIB2404</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	0.98	8.0	35

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
4. Oxide planar die



## RECTIFIERS

## Ultrafast Recovery Rectifiers

Ultrafast Recovery Rectifiers, continued

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$		$T_{rr}$ (ns)
		Family <sup>(3)</sup>	Type		(V)	(A)	
16	<b><a href="#">U16BCT thru U16DCT</a></b>	Plastic Power-pack <sup>(3)(4)</sup>	<b>TO-220AB</b>	100 - 200	1.10	8.0	35
16	<b><a href="#">UB16BCT thru UB16DCT</a></b>	Power-pack SMD <sup>(3)(4)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	100 - 200	1.10	8.0	35
18	<a href="#">BYV32-50 thru BYV32-200</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	1.15	20	25
18	<a href="#">BYVB32-50 thru BYVB32-200</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	1.15	20	25
18	<a href="#">BYVF32-50 thru BYVF32-200</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	1.15	20	25
18	<a href="#">UG18ACT thru UG18DCT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	1.10	9.0	20
18	<a href="#">UGB18ACT thru UGB18DCT</a>	Power-pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	1.10	9.0	20
18	<a href="#">UGF18ACT thru UGF18DCT</a>	Isolated Power-pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	1.10	9.0	20
20	<b><a href="#">U20BCT thru U20DCT</a></b>	Plastic Power-pack <sup>(3)(4)</sup>	<b>TO-220AB</b>	100 - 200	1.00	10	35
20	<b><a href="#">UB20BCT thru UB20DCT</a></b>	Power-pack SMD <sup>(3)(4)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	100 - 200	1.00	10	35
30	<a href="#">FEP30AP thru FEP30JP</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-247AD	50 - 600	0.95 / 1.3 / 1.5	15	35 / 50
30	<b><a href="#">U30BCT thru U30DCT</a></b>	Plastic Power-pack <sup>(3)(4)</sup>	<b>TO-220AB</b>	100 - 200	1.05	15	25
30	<b><a href="#">UB30BCT thru UB30DCT</a></b>	Power-pack SMD <sup>(3)(4)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	100 - 200	1.05	15	25
30	<a href="#">UG30APT thru UG30DPT</a>	Plastic Power-pack <sup>(2)(3)</sup>	TO-247AD	50 - 200	1.00	15	25

Note:

1. Bold text indicates new product
2. Glass passivated die

3. Dual center-tapped device ( $V_F$  limit at  $I_F$  is per diode)
4. Oxide planar die



## RECTIFIERS

## Ultrafast Recovery Rectifiers

**FRED Pt® (Fast Recovery Epitaxial Diodes)** products are based on a Pt doping technology that allows a maximum junction temperature up to 175 °C. A highly flexible  $V_F / Q_{rr}$  ratio and maximum current ratings of 1 A to 175 A allow FRED Pt products to be used in all major applications. Devices are offered in plastic packages or as bare die. In addition, a new range of devices built with a halogen-free molding compound components is offered. Our AEC-Q101 qualified FRED Pt devices meet the highest standards of quality for automotive applications with electrical parameters tested according to PAT and SYL. Our automotive products use a dedicated die in the front end operation and a dedicated part number at the back end, with device selection based on PAT and SYL statistical criteria. Target applications include battery charging systems, EH/HEV vehicles, HID lighting, and more.

## FRED Pt® AEC-Q101 Automotive

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>r</sub> at 25 °C		Typ Q <sub>rr</sub> at 125 °C
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)
1	<a href="#">VS-1EFH01WHM3</a>	Plastic SMD	DO-219AB (SMF)	100	0.80	1	16	1A, 200A/us, 160V	13
1	<a href="#">VS-1EFH02WHM3</a>	Plastic SMD	DO-219AB (SMF)	200	0.80	1	16	1A, 200A/us, 160V	13
2	<a href="#">VS-2EJH02HM3</a>	Plastic SMD	DO-221AC (SlimSMA)	200	0.77	2	17	2 A, 200 A/μs, 160 V	17
2	<a href="#">VS-2EJH01HM3</a>	Plastic SMD	DO-221AC (SlimSMA)	100	0.77	2	17	2 A, 200 A/μs, 160 V	17
2	<a href="#">VS-2EGH02HM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AA (SMB)	200	0.90	2	21	2 A, 200 A/μs, 100 V	28
3	<a href="#">VS-3EJH02HM3</a>	Plastic SMD	DO-221AC (SlimSMA)	200	0.78	3	18	3 A, 200 A/μs, 160 V	23
3	<a href="#">VS-3EJH01HM3</a>	Plastic SMD	DO-221AC (SlimSMA)	100	0.78	3	18	3 A, 200 A/μs, 160 V	23
4	<a href="#">VS-4ESH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.93	4	20	4A, 200A/us, 160V	22
4	<a href="#">VS-4ESH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.93	4	20	4A, 200A/us, 160V	20
4	<a href="#">VS-4CSH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.95	2	16	2A, 200A/us, 160V	16
4	<a href="#">VS-4CSH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.95	2	16	2A, 200A/us, 160V	16
4	<a href="#">VS-4EWH02FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	200	0.95	4	20	3 A, 200 A/μs, 390 V	20 at R.T.
5	<a href="#">VS-5EWH06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.85	5	21	5 A, 200 A/μs, 390 V	33 at R.T.
6	<a href="#">VS-6ESH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.94	6	22	6A, 200A/us, 160V	27
6	<a href="#">VS-6ESH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.94	6	22	6A, 200A/us, 160V	27
6	<a href="#">VS-6CSH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.94	3	20	3A, 200A/us, 160V	23
6	<a href="#">VS-6CSH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.94	3	20	3A, 200A/us, 160V	23
6	<a href="#">VS-6CWH02FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	1.00	3	19	3 A, 200 A/μs, 160 V	60 at R.T.
6	<a href="#">VS-MURD62OCTHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	1.2	6	19	3 A, 200 A/μs, 160 V	60
6	<a href="#">VS-6EWH06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.10	6	21	6 A, 200 A/μs, 390 V	33 at R.T.
6	<a href="#">VS-6EWH06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	3.10	6	16	6 A, 200 A/μs, 390 V	19 at R.T.
6	<a href="#">VS-6ESU06HM3</a>	Plastic SMD	TO-277A (SMPC)	600	1.30	6	58	6A, 500A/us, 400V	290
6	<a href="#">VS-6ESH06HM3</a>	Plastic SMD	TO-277A (SMPC)	600	1.80	6	40	6A, 500A/us, 400V	140
8	<a href="#">VS-8EWH06FNHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.40	8	25	8 A, 200 A/μs, 390 V	25 at R.T.
8	<a href="#">VS-8CWH02FNHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	0.95	4	20	4 A, 200 A/μs, 160 V	20 at R.T.
8	<a href="#">VS-8CSH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.95	4	18	4A, 200A/us, 160V	18
8	<a href="#">VS-8CSH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.95	4	18	4A, 200A/us, 160V	18
10	<a href="#">VS-10CSH01HM3</a>	Plastic SMD	TO-277A (SMPC)	100	0.98	5	18	5A, 200A/us, 160V	18
10	<a href="#">VS-10CSH02HM3</a>	Plastic SMD	TO-277A (SMPC)	200	0.98	5	18	5A, 200A/us, 160V	18

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented
- Bold text indicates new product
- Halogen-free mould compound and RoHs compliant
- Halogen-free mould compound and RoHs compliant and totally lead-free
- RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request



## RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt<sup>®</sup> AEC-Q101 Automotive, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C		Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)	
15	<a href="#">VS-ETH1506SHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.25	15	29	15 A, 200 A/μs, 390 V	280	
15	<a href="#">VS-ETH1506S-1HM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.25	15	29	15 A, 200 A/μs, 390 V	280	
16	<a href="#">VS-16CTU04HN3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	400	1.3	8	43	8 A, 200 A/μs, 200 V	210	
20	<a href="#">VS-MURB2020CTHM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.15	16	21	10 A, 200 A/μs, 160 V	25 at R.T.	
20	<a href="#">VS-MURB2020CT-1HM3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.15	16	21	10 A, 200 A/μs, 160 V	25 at R.T.	
30	<a href="#">VS-EPU3006HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580	
30	<a href="#">VS-APU3006HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580	
30	<a href="#">VS-30EPH06HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	600	2.6	30	31	30 A, 200 A/μs, 200 V	345	
30	<a href="#">VS-ETU3006SHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580	
30	<a href="#">VS-ETU3006S-1HM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580	
30	<a href="#">VS-ETH3006SHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.6	30	26	30 A, 200 A/μs, 200 V	280	
30	<a href="#">VS-ETH3006S-1HM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.6	30	26	30 A, 200 A/μs, 200 V	280	
60	<a href="#">VS-60APU06HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC ( Mod )	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394	
60	<a href="#">VS-60EPU06HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC ( Mod )	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394	
80	<a href="#">VS-80EBU02HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	200	1.13	80	32	80 A, 200 A/μs, 160 V	240	
80	<a href="#">VS-80EBU04HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	400	1.3	80	87	80 A, 200 A/μs, 200 V	1300	
80	<a href="#">VS-EBU8006HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	600	1.53	80	98	50 A, 200 A/μs, 390 V	1650	
150	<a href="#">VS-150EBU02HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	200	1.13	150	34	150 A, 200 A/μs, 160 V	300	
150	<a href="#">VS-150EBU04HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	400	1.3	150	98	150 A, 200 A/μs, 390 V	1740	
150	<a href="#">VS-EBU15006HF4</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	POWERTAB <sup>®</sup>	600	1.3	150	105	150 A, 200 A/μs, 390 V	2350	

FRED Pt<sup>®</sup> standard product portfolio

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C		Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)	
1	<a href="#">VS-1EFH01W-M3</a>	Plastic SMD	DO-219AB (SMF)	100	0.80	1	16	1A, 200A/μs, 160V	13	
1	<a href="#">VS-1EFH02W-M3</a>	Plastic SMD	DO-219AB (SMF)	200	0.80	1	16	1A, 200A/μs, 160V	13	
2	<a href="#">VS-2EJH02-M3</a>	Plastic SMD	DO-221AC (SlimSMA)	200	0.77	2	17	2 A, 200 A/μs, 160 V	17	
2	<a href="#">VS-2EJH01-M3</a>	Plastic SMD	DO-221AC (SlimSMA)	100	0.77	2	17	2 A, 200 A/μs, 160 V	17	
3	<a href="#">VS-3EJH02-M3</a>	Plastic SMD	DO-221AC (SlimSMA)	200	0.78	3	18	3 A, 200 A/μs, 160 V	23	
3	<a href="#">VS-3EJH01-M3</a>	Plastic SMD	DO-221AC (SlimSMA)	100	0.78	3	18	3 A, 200 A/μs, 160 V	23	
3	<a href="#">VS-3EMH06-M3/5AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AC (SMA)	600	1.70	3	35	3 A, 200 A/μs, 390 V	98	
3	<a href="#">VS-3EMU06-M3/5AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AC (SMA)	600	1.35	3	41	3 A, 200 A/μs, 390 V	193	
3	<a href="#">VS-3EGH06-M3/5BT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AA (SMB)	600	1.70	3	35	3 A, 200 A/μs, 390 V	98	
3	<a href="#">VS-3EGU06-M3/5BT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AA (SMB)	600	1.35	3	41	3 A, 200 A/μs, 390 V	193	
4	<a href="#">VS-4ESH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.93	4	20	4A, 200A/μs, 160V	22	

Note:

1. Single die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request



## RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C		Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)	
4	<a href="#">VS-4ESH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.93	4	20	4A, 200A/μs, 160V	20	
4	<a href="#">VS-4CSH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.95	2	16	2A, 200A/μs, 160V	16	
4	<a href="#">VS-4CSH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.95	2	16	2A, 200A/μs, 160V	16	
4	<a href="#">VS-4EGH06-M3/5BT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AB (SMC)	600	1.85	4	30	4 A, 200 A/μs, 390 V	103	
4	<a href="#">VS-4EGU06-M3/5BT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AB (SMC)	600	1.30	4	45	4 A, 200 A/μs, 390 V	280	
4	<a href="#">VS-4ECH06-M3/9AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AA (SMB)	600	1.95	4	30	4 A, 200 A/μs, 390 V	104	
4	<a href="#">VS-4ECU06-M3/9AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AA (SMB)	600	1.30	4	45	4 A, 200 A/μs, 390 V	300	
5	<a href="#">VS-5ECH06-M3/9AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AB (SMC)	600	1.95	5	30	5 A, 200 A/μs, 390 V	111	
5	<a href="#">VS-5ECU06-M3/9AT</a>	Plastic SMD <sup>(1)(3)(5)</sup>	DO-214AB (SMC)	600	1.35	5	45	5 A, 200 A/μs, 390 V	347	
4	<a href="#">VS-4EWH02FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	200	0.95	4	20	3 A, 200 A/μs, 390 V	20 at R.T.	
5	<a href="#">VS-5EWH06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.85	5	21	5 A, 200 A/μs, 390 V	33 at R.T.	
5	<a href="#">VS-5EWL06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.25	5	154	5 A, 200 A/μs, 390 V	826 at R.T.	
5	<a href="#">VS-5EWX06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.90	5	16	5 A, 200 A/μs, 390 V	19 at R.T.	
6	<a href="#">VS-6ESH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.94	6	22	6A, 200A/μs, 160V	27	
6	<a href="#">VS-6ESH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.94	6	22	6A, 200A/μs, 160V	27	
6	<a href="#">VS-6CSH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.94	3	20	3A, 200A/μs, 160V	23	
6	<a href="#">VS-6CSH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.94	3	20	3A, 200A/μs, 160V	23	
6	<a href="#">VS-6CWH02FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	1.00	3	19	3 A, 200 A/μs, 160 V	60 at R.T.	
6	<a href="#">VS-MURD620CTx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	1.2	6	19	3 A, 200 A/μs, 160 V	60	
6	<a href="#">VS-6EWH06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.10	6	21	6 A, 200 A/μs, 390 V	33 at R.T.	
6	<a href="#">VS-6EWL06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.35	6	173	6 A, 200 A/μs, 390 V	988 at R.T.	
6	<a href="#">VS-6EWX06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	3.10	6	16	6 A, 200 A/μs, 390 V	19 at R.T.	
6	<a href="#">VS-6ESU06-M3</a>	Plastic SMD	TO-277A (SMPC)	600	1.30	6	58	6A, 500A/μs, 400V	290	
6	<a href="#">VS-6ESH06-M3</a>	Plastic SMD	TO-277A (SMPC)	600	1.80	6	40	6A, 500A/μs, 400V	140	
8	<a href="#">VS-8S2TH06I-M</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	ITO-220AC	600	3.1	8	11	8 A, 200 A/μs, 390 V	35	
8	<a href="#">VS-MUR820PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.	
8	<a href="#">VS-MUR820-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.	
8	<a href="#">VS-8ETH03PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	300	1.25	8	27	8 A, 200 A/μs, 200 V	106	
8	<a href="#">VS-8ETH03-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	300	1.25	8	27	8 A, 200 A/μs, 200 V	106	
8	<a href="#">VS-8ETU04PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	400	1.3	8	43	8 A, 200 A/μs, 200 V	210	
8	<a href="#">VS-8ETU04-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	400	1.3	8	43	8 A, 200 A/μs, 200 V	210	
8	<a href="#">VS-8ETH06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-ETH0806-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	2.65	8	21	8 A, 200 A/μs, 400 V	110	
8	<a href="#">VS-8ETH06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETL06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	

Note:

1. Single die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request



## RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C		Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)	
8	<a href="#">VS-ETL0806-M3</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-8ETL06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-8ETX06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-ETX0806-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	3.40	8	17	8 A, 200 A/μs, 400 V	72	
8	<a href="#">VS-8ETX06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-ETU0805-M3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	1.25	8	25	8 A, 200 A/μs, 400 V	450	
8	<a href="#">VS-ETH0805FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	1.25	8	50	8 A, 200 A/μs, 400 V	450	
8	<a href="#">VS-ETH0806FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	2.4	8	50	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETH06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETH06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETL06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-ETL0806FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	1.07	8	180	8 A, 200 A/μs, 400 V	2400	
8	<a href="#">VS-8ETL06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-8ETX06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-ETX0806FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	3.40	8	17	8 A, 200 A/μs, 400 V	72	
8	<a href="#">VS-8ETX06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-8EWH02FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	200	0.97	8	24	8 A, 200 A/μs, 160 V	27 at R.T.	
8	<a href="#">VS-8CWH02FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	0.95	4	20	4 A, 200 A/μs, 160 V	20 at R.T.	
8	<a href="#">VS-8EWH06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.40	8	25	8 A, 200 A/μs, 390 V	25 at R.T.	
8	<a href="#">VS-8EWL06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.05	8	170	8 A, 200 A/μs, 390 V	1300 at R.T.	
8	<a href="#">VS-8EWX06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	3.40	8	17	8 A, 200 A/μs, 390 V	20 at R.T.	
8	<a href="#">VS-MURB820-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.	
8	<a href="#">VS-8ETH03-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	300	1.25	8	27	8 A, 200 A/μs, 200 V	106	
8	<a href="#">VS-8ETU04-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	400	1.3	8	43	8 A, 200 A/μs, 200 V	210	
8	<a href="#">VS-8ETH06-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETL06-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-8ETX06-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-MURB820xPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.	
8	<a href="#">VS-8ETH03SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	300	1.25	8	27	8 A, 200 A/μs, 200 V	106	
8	<a href="#">VS-8ETU04SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	400	1.3	8	43	8 A, 200 A/μs, 200 V	210	
8	<a href="#">VS-8ETH06SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.4	8	25	8 A, 200 A/μs, 400 V	120	
8	<a href="#">VS-8ETL06SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.05	8	170	8 A, 200 A/μs, 400 V	2200	
8	<a href="#">VS-8ETX06SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	3	8	17	8 A, 200 A/μs, 400 V	88	
8	<a href="#">VS-8CSH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.95	4	18	4A, 200A/us, 160V	18	
8	<a href="#">VS-8CSH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.95	4	18	4A, 200A/us, 160V	18	

Note:

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TR = tape and reel centered (for DPAK only)  
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## RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C (ns)	Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)
10	<a href="#">VS-10CSH01-M3</a>	Plastic SMD	TO-277A (SMPC)	100	0.98	5	18	5A, 200A/μs, 160V	18
10	<a href="#">VS-10CSH02-M3</a>	Plastic SMD	TO-277A (SMPC)	200	0.98	5	18	5A, 200A/μs, 160V	18
10	<a href="#">VS-MUR1020CTPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AB	200	1.25	10	24	5 A, 200 A/μs, 160 V	76
10	<a href="#">VS-MUR1020CT-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	200	1.25	10	24	5 A, 200 A/μs, 160 V	76
10	<a href="#">VS-10CWH02FNx-M3</a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-252AA (DPAK)	200	0.98	5	21	5 A, 200 A/μs, 160 V	20 at R.T.
10	<a href="#">VS-MURB1020CT-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	1.25	10	24	5 A, 200 A/μs, 160 V	76
10	<a href="#">VS-MURB1020CTxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.25	10	24	5 A, 200 A/μs, 160 V	76
12	<a href="#">VS-12EWH06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.50	12	26	12 A, 200 A/μs, 390 V	48 at R.T.
15	<a href="#">VS-MUR1520PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	200	1.05	15	22	15 A, 200 A/μs, 160 V	90
15	<a href="#">VS-MUR1520-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	200	1.05	15	22	15 A, 200 A/μs, 160 V	90
15	<a href="#">VS-15ETH03PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	300	1.25	15	32	15 A, 200 A/μs, 200 V	137
15	<a href="#">VS-15ETH03-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	300	1.25	15	32	15 A, 200 A/μs, 200 V	137
15	<a href="#">VS-15ETH06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETH1506-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	2.45	15	29	15 A, 200 A/μs, 390 V	240
15	<a href="#">VS-15ETH06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETU1506-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	1.9	15	40	15 A, 200 A/μs, 390 V	730
15	<a href="#">VS-15ETL06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-ETL1506-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	1.07	15	210	15 A, 200 A/μs, 390 V	4000
15	<a href="#">VS-15ETL06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-15ETX06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-ETX1506-M3</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-220AC	600	3.40	15	20	15 A, 200 A/μs, 390 V	135
15	<a href="#">VS-15ETX06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-15ETH06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETH1506FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-15ETH06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETU1506FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	1.9	15	40	15 A, 200 A/μs, 390 V	730
15	<a href="#">VS-15ETL06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-ETL1506FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	1.07	15	210	15 A, 200 A/μs, 390 V	4000
15	<a href="#">VS-15ETL06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-15ETX06PPPBF</a>	Isolated Power Plastic <sup>(1)(7)</sup>	TO-220FPAC	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-ETX1506FP-M3</a>	Isolated Power Plastic <sup>(1)(5)</sup>	TO-220FPAC	600	3.40	15	20	15 A, 200 A/μs, 390 V	135
15	<a href="#">VS-15ETX06FP-N3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAC	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-15AWL06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.05	15	250	15 A, 200 A/μs, 390 V	4000
15	<a href="#">VS-15EWH06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	2.10	15	31	15 A, 200 A/μs, 390 V	60 at R.T.
15	<a href="#">VS-15EWL06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252AA (DPAK)	600	1.05	15	250	15 A, 200 A/μs, 390 V	4000

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
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- Bold text indicates new product
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## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C (ns)	Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di/dt, V <sub>R</sub> )	(nC)
15	<a href="#">VS-15EWX06FNx-M3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-252AA (DPAK)</b>	600	3.20	15	22	15 A, 200 A/μs, 390 V	29 at R.T.
15	<a href="#">VS-MURB1520-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	1.05	15	22	15 A, 200 A/μs, 160 V	90
15	<a href="#">VS-15ETH03-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	300	1.25	15	32	15 A, 200 A/μs, 200 V	137
15	<a href="#">VS-15ETH06-1PBF</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETH1506-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	<b>TO-262 (I<sup>2</sup>PAK)</b>	600	2.25	15	29	15 A, 200 A/μs, 390 V	280
15	<a href="#">VS-15ETL06-1PBF</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-ETL1506-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	<b>TO-262 (I<sup>2</sup>PAK)</b>	600	1.07	15	210	15 A, 200 A/μs, 390 V	4000
15	<a href="#">VS-ETU1506-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	<b>TO-262 (I<sup>2</sup>PAK)</b>	600	1.9	15	40	15A, 200 A/us, 390 V	730
15	<a href="#">VS-15ETX06-1PBF</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-ETX1506-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	<b>TO-262 (I<sup>2</sup>PAK)</b>	600	3.4	15	20	15 A, 200 A/μs, 390 V	140
15	<a href="#">VS-MURB1520xPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.05	15	22	15 A, 200 A/μs, 160 V	90
15	<a href="#">VS-15ETH03SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	300	1.25	15	32	15 A, 200 A/μs, 200 V	137
15	<a href="#">VS-15ETH06SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.2	15	29	15 A, 200 A/μs, 390 V	300
15	<a href="#">VS-ETH1506Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	600	2.25	15	29	15 A, 200 A/μs, 390 V	280
15	<a href="#">VS-ETU1506Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	600	1.9	15	40	15 A, 200 A/μs, 390 V	730
15	<a href="#">VS-15ETL06SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.05	15	220	15 A, 200 A/μs, 390 V	4300
15	<a href="#">VS-ETL1506Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	600	1.07	15	210	15 A, 200 A/μs, 390 V	4000
15	<a href="#">VS-15ETX06SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	3.2	15	22	15 A, 200 A/μs, 390 V	150
15	<a href="#">VS-ETX1506Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-263AB (D<sup>2</sup>PAK)</b>	600	3.4	15	20	15 A, 200 A/μs, 390 V	140
16	<a href="#">VS-MUR1620CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.
16	<a href="#">VS-MUR1620CT-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.
16	<a href="#">VS-16CTU04PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	400	1.3	8	43	8A, 200 A/μs, 200 V	210
16	<a href="#">VS-16CTU04-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	400	1.3	8	43	8 A, 200 A/μs, 200 V	210
16	<a href="#">VS-MURB1620CT-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.
16	<a href="#">VS-16CTU04-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	400	1.3	8	43	8 A, 200 A/μs, 200 V	210
16	<a href="#">VS-MURB1620CTxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	0.975	8	20	8 A, 200 A/μs, 160 V	23 at R.T.
16	<a href="#">VS-16CTU04SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	400	1.3	8	43	8 A, 200 A/μs, 200 V	210
20	<a href="#">VS-MUR2020CTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	200	1.15	16	21	10 A, 200 A/μs, 160 V	25 at R.T.
20	<a href="#">VS-MUR2020CT-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	200	1.15	16	21	10 A, 200 A/μs, 160 V	25 at R.T.
20	<a href="#">VS-20CTH03PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	300	1.25	10	31	10 A, 200 A/μs, 200 V	120
20	<a href="#">VS-20CTH03-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	300	1.25	10	31	10 A, 200 A/μs, 200 V	120
20	<a href="#">VS-20CTH03FPBF</a>	Isolated Power Plastic <sup>(2)(7)</sup>	TO-220FPAB	300	1.25	10	31	10 A, 200 A/μs, 200 V	120
20	<a href="#">VS-20CTH03FP-N3</a>	Isolated Power Plastic <sup>(2)(6)</sup>	<b>TO-220FPAB</b>	300	1.25	10	31	10 A, 200 A/μs, 200 V	120
20	<a href="#">VS-MURB2020CT-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	1.15	16	21	10 A, 200 A/us, 160 V	25 at R.T.
20	<a href="#">VS-20CTH03-1PBF(A)</a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	300	1.25	10	31	10 A, 200 A/μs, 200 V	120

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented
- Bold text indicates new product
- Halogen-free mould compound and RoHs compliant
- Halogen-free mould compound and RoHs compliant and totally lead-free
- RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request



# RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C (ns)	Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)
20	<a href="#">VS-MURB2020CTxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.15	16	21	10 A, 200 A/μs, 160 V	25 at R.T.
20	<a href="#">VS-20CTH03SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	300	1.25	10	31	10 A, 200 A/μs, 200 V	120
30	<a href="#">VS-30CTH02PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	200	1.05	15	26	15 A, 200 A/μs, 160 V	37 at R.T.
30	<a href="#">VS-30CTH02-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>200</b>	<b>1.05</b>	<b>15</b>	<b>26</b>	<b>15 A, 200 A/μs, 160 V</b>	<b>37 at R.T.</b>
30	<a href="#">VS-30CTH03PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	300	1.25	15	33	15 A, 200 A/μs, 200 V	160
30	<a href="#">VS-30CTH03-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-220AB</b>	<b>300</b>	<b>1.25</b>	<b>15</b>	<b>33</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>160</b>
30	<a href="#">VS-30ETH06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	2.6	30	31	30 A, 200 A/μs, 200 V	345
30	<a href="#">VS-ETH3006-M3</a>	<b>Power Plastic Through-Hole <sup>(1)(5)</sup></b>	<b>TO-220AC</b>	<b>600</b>	<b>2.65</b>	<b>30</b>	<b>26</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>280</b>
30	<a href="#">VS-ETU3006-M3</a>	<b>Power Plastic Through-Hole <sup>(1)(5)</sup></b>	<b>TO-220AC</b>	<b>600</b>	<b>2.00</b>	<b>30</b>	<b>45</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>580</b>
30	<a href="#">VS-30ETH06-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-220AC</b>	<b>600</b>	<b>2.6</b>	<b>30</b>	<b>31</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>345</b>
30	<a href="#">VS-30CTH02FPPBF</a>	Isolated Power Plastic <sup>(2)(7)</sup>	TO-220FPAB	200	1.05	15	26	15 A, 200 A/μs, 160 V	37 at R.T.
30	<a href="#">VS-30CTH02FP-N3</a>	<b>Isolated Power Plastic <sup>(2)(6)</sup></b>	<b>TO-220FPAB</b>	<b>200</b>	<b>1.05</b>	<b>15</b>	<b>26</b>	<b>15 A, 200 A/μs, 160 V</b>	<b>37 at R.T.</b>
30	<a href="#">VS-30ETH06FP-F3</a>	Isolated Power Plastic <sup>(1)(6)</sup>	TO-220FPAB	600	2.60	30	31	30 A, 200 A/μs, 200 V	345
30	<a href="#">VS-ETH3006FP-M3</a>	<b>Isolated Power Plastic <sup>(1)(5)</sup></b>	<b>TO-220FPAB</b>	<b>600</b>	<b>2.65</b>	<b>30</b>	<b>26</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>280</b>
30	<a href="#">VS-ETU3006FP-M3</a>	<b>Isolated Power Plastic <sup>(1)(5)</sup></b>	<b>TO-220FPAB</b>	<b>600</b>	<b>2.00</b>	<b>30</b>	<b>45</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>580</b>
30	<a href="#">VS-30ETH06FP-N3</a>	<b>Isolated Power Plastic <sup>(1)(6)</sup></b>	<b>TO-220FPAB</b>	<b>600</b>	<b>2.6</b>	<b>30</b>	<b>31</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>345</b>
30	<a href="#">VS-MUR3020WTPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	200	1.05	15	22	15 A, 200 A/μs, 160 V	19 at R.T.
30	<a href="#">VS-MUR3020WT-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>200</b>	<b>1.05</b>	<b>15</b>	<b>22</b>	<b>15 A, 200 A/μs, 160 V</b>	<b>19 at R.T.</b>
30	<a href="#">VS-30CPH03PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	300	1.25	15	33	15 A, 200 A/μs, 200 V	160
30	<a href="#">VS-30CPH03-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>300</b>	<b>1.25</b>	<b>15</b>	<b>33</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>160</b>
30	<a href="#">VS-30CPU04PBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	400	1.25	15	46	15 A, 200 A/μs, 200 V	345
30	<a href="#">VS-30CPU04-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(2)(6)</sup></b>	<b>TO-247AC</b>	<b>400</b>	<b>1.25</b>	<b>15</b>	<b>46</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>345</b>
30	<a href="#">VS-30EPH03PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	300	1.25	30	38	30 A, 200 A/μs, 200 V	190
30	<a href="#">VS-30EPH03-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>300</b>	<b>1.25</b>	<b>30</b>	<b>38</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>190</b>
30	<a href="#">VS-30EPH06PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	2.6	30	31	30 A, 200 A/μs, 200 V	345
30	<a href="#">VS-30EPH06-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>2.6</b>	<b>30</b>	<b>31</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>345</b>
30	<a href="#">VS-APH3006-F3</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/μs, 200 V	280
30	<a href="#">VS-APH3006-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>2.60</b>	<b>30</b>	<b>36</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>280</b>
30	<a href="#">VS-EPH3006-F3</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	2.60	30	36	30 A, 200 A/μs, 200 V	280
30	<a href="#">VS-EPH3006-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>2.60</b>	<b>30</b>	<b>36</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>280</b>
30	<a href="#">VS-EPU3006-F3</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580
30	<a href="#">VS-EPU3006-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>2.00</b>	<b>30</b>	<b>45</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>580</b>
30	<a href="#">VS-APU3006-F3</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580
30	<a href="#">VS-APU3006-N3<sup>(A)</sup></a>	<b>Power Plastic Through-Hole <sup>(1)(6)</sup></b>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>2.00</b>	<b>30</b>	<b>45</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>580</b>
30	<a href="#">VS-30CTH02-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	200	1.05	15	26	15 A, 200 A/μs, 160 V	37 at R.T.
30	<a href="#">VS-30ETH06-1PBF</a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	2.6	30	31	30 A, 200 A/μs, 200 V	345

1. Single die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request

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## RECTIFIERS

## Ultrafast Recovery Rectifiers

FRED Pt® standard product portfolio, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at 25 °C (ns)	Typ Q <sub>rr</sub> at 125 °C	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di/dt, V <sub>R</sub> )	(nC)
30	<a href="#">VS-ETH3006-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	2.6	30	26	30 A, 200 A/μs, 200 V	280
30	<a href="#">VS-ETU3006-1-M3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580
30	<a href="#">VS-30CTH02SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	200	1.05	15	26	15 A, 200 A/μs, 160 V	37 at R.T.
30	<a href="#">VS-30ETH06SxPBF</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.6	30	31	30 A, 200 A/μs, 200 V	345
30	<a href="#">VS-ETH3006Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.6	30	26	30 A, 200 A/μs, 200 V	280
30	<a href="#">VS-ETU3006Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.00	30	45	30 A, 200 A/μs, 200 V	580
60	<a href="#">VS-60CPU02-F</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	200	1.1	30	30	30 A, 200 A/μs, 160 V	160
60	<a href="#">VS-60CPU02-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	200	1.1	30	30	30 A, 200 A/μs, 160 V	160
60	<a href="#">VS-60CPH03PBF</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	300	1.25	30	39	30 A, 200 A/μs, 200 V	214
60	<a href="#">VS-60CPH03-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	300	1.25	30	39	30 A, 200 A/μs, 200 V	214
60	<a href="#">VS-60CPU04-F3</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	400	1.30	30	65	30 A, 200 A/μs, 200 V	874
60	<a href="#">VS-60CPU04-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	400	1.30	30	65	30 A, 200 A/μs, 200 V	874
60	<a href="#">VS-60CPU06-F</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	600	1.65	30	42	30 A, 200 A/μs, 200 V	630
60	<a href="#">VS-60CPU06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	600	1.65	30	42	30 A, 200 A/μs, 200 V	630
60	<a href="#">VS-60APU02PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC ( mod )	200	1.08	60	28	60 A, 200 A/μs, 160 V	220
60	<a href="#">VS-60APU02-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC ( Mod )	200	1.08	60	28	60 A, 200 A/μs, 160 V	220
60	<a href="#">VS-60APU04PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC ( mod )	400	1.25	60	85	60 A, 200 A/μs, 200 V	1120
60	<a href="#">VS-60APU04-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC ( Mod )	400	1.25	60	85	60 A, 200 A/μs, 200 V	1120
60	<a href="#">VS-60APU06PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC ( mod )	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394
60	<a href="#">VS-60APU06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC ( Mod )	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394
60	<a href="#">VS-60EPU02PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/μs, 160 V	220
60	<a href="#">VS-60EPU02-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	200	1.08	60	28	60 A, 200 A/μs, 160 V	220
60	<a href="#">VS-60EPU04PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/μs, 200 V	1120
60	<a href="#">VS-60EPU04-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	400	1.25	60	85	60 A, 200 A/μs, 200 V	1120
60	<a href="#">VS-60EPU06PBF</a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394
60	<a href="#">VS-60EPU06-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	1.68	60	81	60 A, 200 A/μs, 200 V	1394
80	<a href="#">VS-80EBU02<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	POWERTAB®	200	1.13	80	32	80 A, 200 A/μs, 160 V	240
80	<a href="#">VS-80EBU04<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	POWERTAB®	400	1.3	80	87	80 A, 200 A/μs, 200 V	1300
80	<a href="#">VS-80CPU02-F3</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	200	0.90	40	33	40 A, 200 A/μs, 200 V	216
80	<a href="#">VS-80CPU02-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	200	0.90	40	33	40 A, 200 A/μs, 200 V	216
80	<a href="#">VS-80CPH03-F3</a>	Power Plastic Through-Hole <sup>(2)(8)</sup>	TO-247AC	300	1.25	40	41	40 A, 200 A/μs, 200 V	265
80	<a href="#">VS-80CPH03-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	300	1.25	40	41	40 A, 200 A/μs, 200 V	265
150	<a href="#">VS-150EBU02<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	POWERTAB®	200	1.13	150	34	150 A, 200 A/μs, 160 V	300
150	<a href="#">VS-150EBU04<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(8)</sup>	POWERTAB®	400	1.3	150	93	150 A, 200 A/μs, 200 V	1740

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented
- Bold text indicates new product
- Halogen-free mould compound and RoHs compliant
- Halogen-free mould compound and RoHs compliant and totally lead-free
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## RECTIFIERS

## Ultrafast Recovery Rectifiers

Vishay's **HEXFRED<sup>®</sup>** technology combines the benefits of our ultrafast planar technology with a proprietary Schottky barrier based inner structure that enables soft and fast recovery behavior at any di/dt condition. For this reason, Vishay HEXFRED technology is the preferred choice for antiparallel diodes working with IGBTs and for power supplies working at high switching speeds. In addition, a new range products built with a halogen-free molding compound is available.

Our AEC-Q101 qualified HEXFRED devices meet the highest standards of quality for automotive applications with electrical parameters tested according to PAT and SYL. Our automotive products use a dedicated die in the front end operation and a dedicated part number at the back end, with device selection based on PAT and SYL statistical criteria. Target applications include battery charging systems, battery charging systems, EH/HEV vehicles, HID lighting, and more.

HEXFRED<sup>®</sup> AEC-Q101 Automotive

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at see setup (ns)	Typ Q <sub>rr</sub> at see setup	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>r</sub> )	(nC)
4	<a href="#">VS-HFA04SD60SHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252 (DPAK)	600	1.8	4	28	4 A, 200 A/μs, 200 V	70
8	<a href="#">VS-HFA08TB60HM3</a>	Power Plastic Thru Hole <sup>(1)(6)</sup>	TO-220AC	600	1.7	8	37	4A, 200A/us, 200V	65
16	<a href="#">VS-HFA16PB120HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	1200	3	16	90	16 A, 200 A/μs, 200 V	680
25	<a href="#">VS-HFA25TB60HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	600	1.7	25	50	25 A, 200 A/μs, 200 V	420
25	<a href="#">VS-HFA25TB60SHM3</a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.7	25	50	25 A, 200 A/μs, 200 V	420
30	<a href="#">VS-HFA30TA60CHN3</a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	600	2	30	42	15 A, 200 A/μs, 200 V	220
30	<a href="#">VS-HFA30PB120HN3</a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	1200	4.1	30	110	30 A, 200 A/μs, 200 V	1540

HEXFRED<sup>®</sup> standard product portfolio

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at see setup (ns)	Typ Q <sub>rr</sub> at see setup	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>r</sub> )	(nC)
4	<a href="#">VS-HFA04TB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.8	4	28	4 A, 200 A/μs, 200 V	70
4	<a href="#">VS-HFA04TB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	<b>600</b>	<b>1.8</b>	<b>4</b>	<b>28</b>	<b>4 A, 200 A/μs, 200 V</b>	<b>70</b>
4	<a href="#">VS-HFA04SD60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252 (DPAK)	600	1.8	4	28	4 A, 200 A/μs, 200 V	70
4	<a href="#">VS-HFA04SD60Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-252 (DPAK)	<b>600</b>	<b>1.8</b>	<b>4</b>	<b>28</b>	<b>4 A, 200 A/μs, 200 V</b>	<b>70</b>
4	<a href="#">VS-HFA04TB60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.8	4	28	4 A, 200 A/μs, 200 V	70
6	<a href="#">VS-HFA06TB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	1200	3	6	53	6 A, 200 A/μs, 200 V	233
6	<a href="#">VS-HFA06TB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-220AC	<b>1200</b>	<b>3</b>	<b>6</b>	<b>53</b>	<b>6 A, 200 A/μs, 200 V</b>	<b>233</b>
6	<a href="#">VS-HFA06PB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	1200	3	6	53	6 A, 200 A/μs, 200 V	233
6	<a href="#">VS-HFA06PB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	TO-247AC (mod)	<b>1200</b>	<b>3</b>	<b>6</b>	<b>53</b>	<b>6 A, 200 A/μs, 200 V</b>	<b>233</b>
6	<a href="#">VS-HFA06TB120SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	1200	3	6	53	6 A, 200 A/μs, 200 V	233
8	<a href="#">VS-HFA08TA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	600	2.2	8	28	4 A, 200 A/μs, 200 V	70
8	<a href="#">VS-HFA08TA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	TO-220AB	<b>600</b>	<b>2.2</b>	<b>8</b>	<b>28</b>	<b>4 A, 200 A/μs, 200 V</b>	<b>70</b>
8	<a href="#">VS-HFA08TB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.7	8	37	8 A, 200 A/μs, 200 V	124

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
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- Bold text indicates new product
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## RECTIFIERS

## Ultrafast Recovery Rectifiers

HEXFRED®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at see setup (ns)	Typ Q <sub>rr</sub> at see setup	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)
8	<a href="#">VS-HFA08TB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-220AC</b>	<b>600</b>	<b>1.7</b>	<b>8</b>	<b>37</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>124</b>
8	<a href="#">VS-HFA08PB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	1.7	8	37	8 A, 200 A/μs, 200 V	124
8	<a href="#">VS-HFA08PB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>1.7</b>	<b>8</b>	<b>37</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>124</b>
8	<a href="#">VS-HFA08SD60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(8)</sup>	TO-252 (DPAK)	600	1.7	8	37	8 A, 200 A/μs, 200 V	124
8	<a href="#">VS-HFA08SD60Sx-M3<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	<b>TO-252 (DPAK)</b>	<b>600</b>	<b>1.7</b>	<b>8</b>	<b>37</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>124</b>
8	<a href="#">VS-HFA08TA60CSxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.2	8	28	4 A, 200 A/μs, 200 V	70
8	<a href="#">VS-HFA08TB60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.7	8	37	8 A, 200 A/μs, 200 V	124
8	<a href="#">VS-HFA08TB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	1200	3.3	8	63	8 A, 200 A/μs, 200 V	335
8	<a href="#">VS-HFA08TB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-220AC</b>	<b>1200</b>	<b>3.3</b>	<b>8</b>	<b>63</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>335</b>
8	<a href="#">VS-HFA08PB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	1200	3.3	8	63	8 A, 200 A/μs, 200 V	335
8	<a href="#">VS-HFA08PB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	<b>1200</b>	<b>3.3</b>	<b>8</b>	<b>63</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>335</b>
8	<a href="#">VS-HFA08TB120SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	1200	3.3	8	63	8 A, 200 A/μs, 200 V	335
12	<a href="#">VS-HFA12PA120CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	1200	3.9	12	53	6 A, 200 A/μs, 200 V	233
12	<a href="#">VS-HFA12PA120C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>1200</b>	<b>3.9</b>	<b>12</b>	<b>53</b>	<b>6 A, 200 A/μs, 200 V</b>	<b>233</b>
15	<a href="#">VS-HFA15TB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.7	15	42	15 A, 200 A/μs, 200 V	241
15	<a href="#">VS-HFA15TB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-220AC</b>	<b>600</b>	<b>1.7</b>	<b>15</b>	<b>42</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>241</b>
15	<a href="#">VS-HFA15PB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	1.7	15	42	15 A, 200 A/μs, 200 V	241
15	<a href="#">VS-HFA15PB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	<b>600</b>	<b>1.7</b>	<b>15</b>	<b>42</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>241</b>
15	<a href="#">VS-HFA15TB60-1PBF<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(5)</sup>	TO-262 (I <sup>2</sup> PAK)	600	1.7	15	42	15 A, 200 A/μs, 200 V	241
15	<a href="#">VS-HFA15TB60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.7	15	50	15 A, 200 A/μs, 200 V	241
16	<a href="#">VS-HFA16TA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	600	2.1	16	37	8 A, 200 A/μs, 200 V	124
16	<a href="#">VS-HFA16TA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	<b>600</b>	<b>2.1</b>	<b>16</b>	<b>37</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>124</b>
16	<a href="#">VS-HFA16PA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	600	2.1	16	37	8 A, 200 A/μs, 200 V	124
16	<a href="#">VS-HFA16PA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>600</b>	<b>2.1</b>	<b>16</b>	<b>37</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>124</b>
16	<a href="#">VS-HFA16TA60CSxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2.1	16	37	8 A, 200 A/μs, 200 V	124
16	<a href="#">VS-HFA16TB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	1200	3	16	90	16 A, 200 A/μs, 200 V	680
16	<a href="#">VS-HFA16TB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-220AC</b>	<b>1200</b>	<b>3</b>	<b>16</b>	<b>90</b>	<b>16 A, 200 A/μs, 200 V</b>	<b>680</b>
16	<a href="#">VS-HFA16PA120CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	1200	4.3	16	63	8 A, 200 A/μs, 200 V	335
16	<a href="#">VS-HFA16PA120C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>1200</b>	<b>4.3</b>	<b>16</b>	<b>63</b>	<b>8 A, 200 A/μs, 200 V</b>	<b>335</b>
16	<a href="#">VS-HFA16PB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	1200	3	16	90	16 A, 200 A/μs, 200 V	680
16	<a href="#">VS-HFA16PB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	<b>1200</b>	<b>3</b>	<b>16</b>	<b>90</b>	<b>16 A, 200 A/μs, 200 V</b>	<b>680</b>
16	<a href="#">VS-HFA16TB120SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	1200	3	16	90	16 A, 200 A/μs, 200 V	680
25	<a href="#">VS-HFA25TB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-220AC	600	1.7	25	50	25 A, 200 A/μs, 200 V	420
25	<a href="#">VS-HFA25TB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-220AC</b>	<b>600</b>	<b>1.7</b>	<b>25</b>	<b>50</b>	<b>25 A, 200 A/μs, 200 V</b>	<b>420</b>
25	<a href="#">VS-HFA25PB60PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	600	1.7	25	50	25 A, 200 A/μs, 200 V	420

Note:

- Single die device
- Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
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## RECTIFIERS

## Ultrafast Recovery Rectifiers

HEXFRED®, continued

I <sub>F(AV)</sub> (A)	Device <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>		Typ t <sub>rr</sub> at see setup (ns)	Typ Q <sub>rr</sub> at see setup	
		Family	Type		(V)	(A)		setup (I <sub>F</sub> , di <sub>F</sub> /dt, V <sub>R</sub> )	(nC)
25	<a href="#">VS-HFA25PB60-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	600	1.7	25	50	25 A, 200 A/μs, 200 V	420
25	<a href="#">VS-HFA25TB60SxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(1)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	1.7	25	50	25 A, 200 A/μs, 200 V	420
30	<a href="#">VS-HFA30TA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-220AB	600	2	30	42	15 A, 200 A/μs, 200 V	220
30	<a href="#">VS-HFA30TA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-220AB</b>	<b>600</b>	<b>2</b>	<b>30</b>	<b>42</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>220</b>
30	<a href="#">VS-HFA30PA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	600	2	30	42	15 A, 200 A/μs, 200 V	220
30	<a href="#">VS-HFA30PA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>600</b>	<b>2</b>	<b>30</b>	<b>42</b>	<b>15 A, 200 A/μs, 200 V</b>	<b>220</b>
30	<a href="#">VS-HFA30TA60CSxPBF<sup>(A)</sup></a>	Power Plastic SMD <sup>(2)(3)(5)</sup>	TO-263AB (D <sup>2</sup> PAK)	600	2	30	42	15 A, 200 A/μs, 200 V	220
30	<a href="#">VS-HFA30PB120PBF</a>	Power Plastic Through-Hole <sup>(1)(7)</sup>	TO-247AC (mod)	1200	4.1	30	110	30 A, 200 A/μs, 200 V	1540
30	<a href="#">VS-HFA30PB120-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(1)(6)</sup>	<b>TO-247AC (mod)</b>	<b>1200</b>	<b>4.1</b>	<b>30</b>	<b>110</b>	<b>30 A, 200 A/μs, 200 V</b>	<b>1540</b>
32	<a href="#">VS-HFA32PA120CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	1200	3.93	32	90	16 A, 200 A/μs, 200 V	680
32	<a href="#">VS-HFA32PA120C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>1200</b>	<b>3.93</b>	<b>32</b>	<b>90</b>	<b>16 A, 200 A/μs, 200 V</b>	<b>680</b>
50	<a href="#">VS-HFA50PA60CPBF</a>	Power Plastic Through-Hole <sup>(2)(7)</sup>	TO-247AC	600	2	50	50	25 A, 200 A/μs, 200 V	420
50	<a href="#">VS-HFA50PA60C-N3<sup>(A)</sup></a>	Power Plastic Through-Hole <sup>(2)(6)</sup>	<b>TO-247AC</b>	<b>600</b>	<b>2</b>	<b>50</b>	<b>50</b>	<b>25 A, 200 A/μs, 200 V</b>	<b>420</b>

Note:

1. Single die device
2. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen-free mould compound and RoHs compliant
6. Halogen-free mould compound and RoHs compliant and totally lead-free
7. RoHs compliant and totally lead-free
- A. Automotive Grade Device available on request



## RECTIFIERS

## Ultrafast Recovery Rectifiers

## Ultrafast Avalanche Recovery Rectifiers

$I_{F(AV)}$ (A)	Device	Package		$V_{RRM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{rr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)	$T_J, T_{STG}$ Max. (°C)
		Family	Type							
1.0	<a href="#">AU1PD</a>	Plastic SMD	D0-220AA (SMP)	200	1.5	1.0	75	20	1.0	175
1.0	<a href="#">AU1PG</a>	Plastic SMD	D0-220AA (SMP)	400	1.5	1.0	75	20	1.0	175
1.0	<a href="#">AU1PJ</a>	Plastic SMD	D0-220AA (SMP)	600	1.5	1.0	75	20	1.0	175
1.0	<a href="#">AU1PK</a>	Plastic SMD	D0-220AA (SMP)	800	1.85	1.0	75	20	1.0	175
1.0	<a href="#">AU1PM</a>	Plastic SMD	D0-220AA (SMP)	1000	1.85	1.0	75	20	1.0	175
1.0	<a href="#">BYG23T</a>	Plastic SMD	D0-214AC (SMA)	1300	1.9	1.0	75	5	0.4	150
1.5	<a href="#">BYG20D</a>	Plastic SMD	D0-214AC (SMA)	200	1.4	1.5	75	20	1.0	150
1.5	<a href="#">BYG20G</a>	Plastic SMD	D0-214AC (SMA)	400	1.4	1.5	75	20	1.0	150
1.5	<a href="#">BYG20J</a>	Plastic SMD	D0-214AC (SMA)	600	1.4	1.5	75	20	1.0	150
1.5	<a href="#">BYG23M</a>	Plastic SMD	D0-214AC (SMA)	1000	1.7	1.0	75	20	1.0	150
2.0	<a href="#">AU2PD</a>	Plastic SMD	T0-277A (SMPC)	200	1.9	2.0	75	20	2.5	175
2.0	<a href="#">AU2PG</a>	Plastic SMD	T0-277A (SMPC)	400	1.9	2.0	75	20	2.5	175
2.0	<a href="#">AU2PJ</a>	Plastic SMD	T0-277A (SMPC)	600	1.9	2.0	75	20	2.5	175
2.0	<a href="#">AU2PK</a>	Plastic SMD	T0-277A (SMPC)	800	2.5	2.0	75	20	2.5	175
2.0	<a href="#">AU2PM</a>	Plastic SMD	T0-277A (SMPC)	1000	2.5	2.0	75	20	2.5	175
2.0	<a href="#">BYG22A</a>	Plastic SMD	D0-214AC (SMA)	50	1.1	2.0	25	20	1.0	150
2.0	<a href="#">BYG22B</a>	Plastic SMD	D0-214AC (SMA)	100	1.1	2.0	25	20	1.0	150
2.0	<a href="#">BYG22D</a>	Plastic SMD	D0-214AC (SMA)	200	1.1	2.0	25	20	1.0	150
3.0	<a href="#">AU3PD</a>	Plastic SMD	T0-277A (SMPC)	200	1.9	3.0	75	20	2.5	175
3.0	<a href="#">AU3PG</a>	Plastic SMD	T0-277A (SMPC)	400	1.9	3.0	75	20	2.5	175
3.0	<a href="#">AU3PJ</a>	Plastic SMD	T0-277A (SMPC)	600	1.9	3.0	75	20	2.5	175
3.0	<a href="#">AU3PK</a>	Plastic SMD	T0-277A (SMPC)	800	2.5	3.0	75	20	2.5	175
3.0	<a href="#">AU3PM</a>	Plastic SMD	T0-277A (SMPC)	1000	2.5	3.0	75	20	2.5	175

Rectifiers - Worldwide Leader in Power Rectifiers



## RECTIFIERS

## Ultrafast Recovery Rectifiers

## Ultrafast Avalanche Rated Sinterglass Diodes

$I_{F(AV)}$ (A)	Device	Package		$V_R$ $V_{RRM}$ $V_{RWM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{rr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)
		Family	Type						
1.0	<a href="#">BYV26A</a>	Sinterglass - Axial	SOD-57	200	2.5	1	30	10	1.0
1.0	<a href="#">BYV26B</a>	Sinterglass - Axial	SOD-57	400	2.5	1	30	10	1.0
1.0	<a href="#">BYV26C</a>	Sinterglass - Axial	SOD-57	600	2.5	1	30	10	1.0
1.0	<a href="#">BYV26D</a>	Sinterglass - Axial	SOD-57	800	2.5	1	75	10	1.0
1.0	<a href="#">BYV26E</a>	Sinterglass - Axial	SOD-57	1000	2.5	1	75	10	1.0
1.0	<a href="#">SF1200</a>	Sinterglass - Axial	SOD-57	1200	3.4	1	75	10	0.4
1.0	<a href="#">SF1600</a>	Sinterglass - Axial	SOD-57	1600	3.4	1	75	10	0.4
1.0	<a href="#">SF4001</a>	Sinterglass - Axial	SOD-57	50	1.0	1	50	10	0.4
1.0	<a href="#">SF4002</a>	Sinterglass - Axial	SOD-57	100	1.0	1	50	10	0.4
1.0	<a href="#">SF4003</a>	Sinterglass - Axial	SOD-57	200	1.0	1	50	10	0.4
1.0	<a href="#">SF4004</a>	Sinterglass - Axial	SOD-57	400	1.0	1	50	10	0.4
1.0	<a href="#">SF4005</a>	Sinterglass - Axial	SOD-57	600	1.7	1	75	10	0.4
1.0	<a href="#">SF4006</a>	Sinterglass - Axial	SOD-57	800	1.7	1	75	10	0.4
1.0	<a href="#">SF4007</a>	Sinterglass - Axial	SOD-57	100	1.7	1	75	10	0.4
1.9	<a href="#">BYT53A</a>	Sinterglass - Axial	SOD-57	50	1.1	1	50	20	1.0
1.9	<a href="#">BYT53B</a>	Sinterglass - Axial	SOD-57	100	1.1	1	50	20	1.0
1.9	<a href="#">BYT53C</a>	Sinterglass - Axial	SOD-57	150	1.1	1	50	20	1.0
1.9	<a href="#">BYT53D</a>	Sinterglass - Axial	SOD-57	200	1.1	1	50	20	1.0
1.9	<a href="#">BYT53F</a>	Sinterglass - Axial	SOD-57	300	1.1	1	50	20	1.0
1.9	<a href="#">BYT53G</a>	Sinterglass - Axial	SOD-57	400	1.1	1	50	20	1.0
2.0	<a href="#">BYV27-100</a>	Sinterglass - Axial	SOD-57	100	1.07	3	25	20	1.0
2.0	<a href="#">BYV27-150</a>	Sinterglass - Axial	SOD-57	150	1.07	3	25	20	1.0
2.0	<a href="#">BYV27-200</a>	Sinterglass - Axial	SOD-57	200	1.07	3	25	20	1.0
2.0	<a href="#">BYV27-50</a>	Sinterglass - Axial	SOD-57	50	1.07	3	25	20	1.0
2.0	<a href="#">BYV27-600</a>	Sinterglass - Axial	SOD-57	600	1.35	3	40	10	0.4
3.0	<a href="#">BYW178</a>	Sinterglass - Axial	SOD-64	800	1.9	3	60	20	0.4
3.0	<a href="#">SF5400</a>	Sinterglass - Axial	SOD-64	50	1.1	3	50	10	0.4
3.0	<a href="#">SF5401</a>	Sinterglass - Axial	SOD-64	100	1.1	3	50	10	0.4
3.0	<a href="#">SF5402</a>	Sinterglass - Axial	SOD-64	200	1.1	3	50	10	0.4
3.0	<a href="#">SF5403</a>	Sinterglass - Axial	SOD-64	300	1.1	3	50	10	0.4
3.0	<a href="#">SF5404</a>	Sinterglass - Axial	SOD-64	400	1.1	3	50	10	0.4
3.0	<a href="#">SF5405</a>	Sinterglass - Axial	SOD-64	500	1.7	3	75	10	0.4
3.0	<a href="#">SF5406</a>	Sinterglass - Axial	SOD-64	600	1.7	3	75	10	0.4
3.0	<a href="#">SF5407</a>	Sinterglass - Axial	SOD-64	800	1.7	3	75	10	0.4

Note:

 $E_R$  = pulse energy in avalanche mode





## RECTIFIERS

## Ultrafast Recovery Rectifiers

Ultrafast Avalanche Rated Sinterglass Diodes, continued

$I_{F(AV)}$ (A)	Device	Package		$V_R$ $V_{RRM}$ $V_{RWM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{tr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)
		Family	Type						
3.0	<a href="#">SF5408</a>	Sinterglass - Axial	SOD-64	1000	1.7	3	75	10	0.4
3.5	<a href="#">BYV28-100</a>	Sinterglass - Axial	SOD-64	100	1.1	5	30	20	1.0
3.5	<a href="#">BYV28-150</a>	Sinterglass - Axial	SOD-64	150	1.1	5	30	20	1.0
3.5	<a href="#">BYV28-200</a>	Sinterglass - Axial	SOD-64	200	1.1	5	30	20	1.0
3.5	<a href="#">BYV28-50</a>	Sinterglass - Axial	SOD-64	50	1.1	5	30	20	1.0
3.5	<a href="#">BYV28-600</a>	Sinterglass - Axial	SOD-64	600	1.35	5	50	20	1.0
4.0	<a href="#">BYV98-100</a>	Sinterglass - Axial	SOD-64	150	1.1	5	35	20	1.0
4.0	<a href="#">BYV98-150</a>	Sinterglass - Axial	SOD-64	150	1.1	5	35	20	1.0
4.0	<a href="#">BYV98-200</a>	Sinterglass - Axial	SOD-64	200	1.1	5	35	20	1.0
4.0	<a href="#">BYV98-50</a>	Sinterglass - Axial	SOD-64	100	1.1	5	35	20	1.0

Note:

 $E_R$  = pulse energy in avalanche mode



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

**Standard Rectifiers** are for low-frequency general purpose use in consumer applications. Typical reverse recovery times are approximately 2  $\mu$ s. These products are offered with forward current ratings of 0.25 A to 8 A and reverse voltages as high as 4000 V. They are available in plastic, glass, and SUPERRECTIFIER® constructions.

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family	Type		(V)	(A)
0.25	<a href="#">GI250-1 to GI250-4</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	1000 - 4000	3.5	0.25
0.25	<a href="#">GP02-20 to GP02-40</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	2000 - 4000	3.0	1.0
0.5	<a href="#">GL34A to GL34J</a>	SUPERRECTIFIER®SMD	DO-213AA (MiniMELF)	50 - 600	1.2 / 1.3	0.5
0.8	<a href="#">GP08A to GP08J</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	50 - 600	1.3	0.8
1.0	<a href="#">1N3611GP to 1N3614GP and 1N3957GP</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	200 - 1000	1	1.0
1.0	<a href="#">1N4001 to 1N4007</a>	Plastic Axial	DO-204AL (DO-41)	50 - 1000	1.1	1.0
1.0	<a href="#">1N4001GP to 1N4007GP</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	50 - 1000	1.1	1.0
1.0	<a href="#">1N4245GP to 1N4249GP</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	200 - 1000	1.2	1.0
1.0	<a href="#">1N4383GP to 1N4385GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	200 - 600	1	1.0
1.0	<a href="#">1N4585GP and 1N4586GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	800 - 1000	1	1.0
1.0	<a href="#">1N5059GP to 1N5062GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	200 - 800	1.2	1.0
1.0	<a href="#">1N5614GP to 1N5622GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	200 - 1000	1.2	1.0
1.0	<a href="#">1N6478 to 1N6484</a>	SUPERRECTIFIER®SMD	DO-213AB (MELF)	50 - 1000	1.1	1.0
1.0	<a href="#">BYM10-50 to BYM10-1000</a>	SUPERRECTIFIER®SMD	DO-213AB (MELF)	50 - 1000	1.1 / 1.2	1.0
1.0	<a href="#">GF1A to GF1M</a>	SUPERRECTIFIER®SMD	DO-214BA (GF1)	50 - 1000	1.1 / 1.2	1.0
1.0	<a href="#">GI1-1200GP to GI1-1600GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	1200 - 1600	1.1	1.0
1.0	<a href="#">GL41A to GL41Y</a>	SUPERRECTIFIER®SMD	DO-213AB (MELF)	50 - 1600	1.1 / 1.2	1.0
1.0	<a href="#">GP10A to GP10Y</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	50 - 1600	1.1 / 1.2 / 1.3	1.0
1.0	<a href="#">GP10AE to GP10YE</a>	SUPERRECTIFIER®Axial	DO-204AL (DO-41)	50 - 1000	1.1 / 1.2 / 1.3	1.0
1.0	<a href="#">GPP10A to GPP10M</a>	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 1000	1.1	1.0
1.0	<a href="#">M100A to M100M</a>	Plastic Axial	DO-204AL (DO-41)	50 - 1000	1.0 / 1.1	1.0
1.0	<a href="#">MPG06A to MPG06M</a>	Plastic Axial <sup>(2)</sup>	MPG06	50 - 1000	1.1	1.0
1.0	<a href="#">S1A to S1M</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 1000	1.1	1.0
1.0	<a href="#">S1PB to S1PM</a>	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 - 1000	1.1	1.0
2.0	<a href="#">SA2B to SA2M</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	100 - 1000	1.1	2.0
1.5	<a href="#">1N5391 to 1N5399</a>	Plastic Axial	DO-204AC (DO-15)	50 - 1000	1.4	1.5
1.5	<a href="#">1N5391GP to 1N5399GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	50 - 1000	1.4	1.5
1.5	<a href="#">BY448GP</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	1650	1.6	3.0
1.5	<a href="#">CGP15</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	1400	1.1	1.0
1.5	<a href="#">DGP15</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	1500	1.1	1.0
1.5	<a href="#">GP15A to GP15M</a>	SUPERRECTIFIER®Axial	DO-204AC (DO-15)	50 - 1000	1.1	1.5
1.5	<a href="#">S2A thru S2M</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 - 1000	1.15	1.5
1.5	<a href="#">S07D</a>	Plastic SMD	DO-219AB (SMF)	200	1.1	1.0

Note:

1. Bold text indicates new product

2. Glass passivated die

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A = 50 V, B = 100 V, C = 150 V, D = 200 V, F = 300 V, G = 400 V,

H = 500 V, J = 600 V, K = 800 V, M = 1000 V, N = 1100 V, Q = 1200 V,

T = 1300 V, V = 1400 V, W = 1500 V, and Y = 1600 V



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

Standard Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family	Type		(V)	(A)
1.5	<a href="#">S07G</a>	Plastic SMD	DO-219AB (SMF)	400	1.1	1.0
1.5	<a href="#">S07J</a>	Plastic SMD	DO-219AB (SMF)	600	1.1	1.0
1.5	<a href="#">S07M</a>	Plastic SMD	DO-219AB (SMF)	1000	1.1	1.0
2.0	<a href="#">SB2D to SB2M</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	200 - 1000	1.15	2.0
2.5	<a href="#">BY228GP</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	1500	1.6	2.5
3.0	<a href="#">1N5400 to 1N5408</a>	Plastic Axial	DO-201AD	50 - 1000	1.2	3.0
3.0	<a href="#">1N5624GP to 1N5627GP</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	200 - 800	1.0	3.0
3.0	<a href="#">BY251GP to BY255GP</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	200 - 1300	1.1	3.0
3.0	<a href="#">BY251P to BY255P</a>	Plastic Axia	DO-201AD	200 - 1300	1.1	3.0
3.0	<a href="#">CGP30</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	1400	1.2	3.0
3.0	<a href="#">DGP30</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	1500	1.2	3.0
3.0	<a href="#">GP30A to GP30M</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	50 - 1000	1.1 / 1.2	3.0
3.0	<a href="#">GI500 to GI510</a>	Plastic Axial	DO-201AD	50 - 1000	1.1	9.4
3.0	<a href="#">P300A to P300M</a>	Plastic Axial	DO-201AD	50 - 1000	1.2	3.0
3.0	<a href="#">S3A to S3M</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 1000	1.15	2.5
4.0	<a href="#">S4PB to S4PM</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	100 - 1000	1.10	4.0
<b>5.0</b>	<b><a href="#">S5A to S5M</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-214AB (SMC)</b>	<b>50 - 1000</b>	<b>1.15</b>	<b>5.0</b>
<b>5.0</b>	<b><a href="#">S5MS</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-214AB (SMC)</b>	<b>1000</b>	<b>1.15</b>	<b>5.0</b>
<b>5.0</b>	<b><a href="#">S5PMS</a></b>	<b>Plastic SMD<sup>(2)</sup></b>	<b>TO-277A (SMPC)</b>	<b>1000</b>	<b>1.15</b>	<b>5.0</b>
6.0	<a href="#">GI750 to GI758</a>	Plastic Axial	P600	50 - 800	0.90 / 0.95	6.0
6.0	<a href="#">GPP60A to GPP60G</a>	Plastic Axial <sup>(2)</sup>	P600	50 - 400	1.1	6.0
6.0	<a href="#">P600A to P600M</a>	Plastic Axial	P600	50 - 1000	0.9 / 1.0	6.0
8.0	<a href="#">NS8AT to NS8MT</a>	Plastic Power-pack <sup>(2)</sup>	TO-220AC	50 - 1000	1.1	8.0
8.0	<a href="#">NSB8AT to NSB8MT</a>	Power-pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 1000	1.1	8.0
8.0	<a href="#">NSF8AT to NSF8MT</a>	Isolated Power-pack <sup>(2)</sup>	ITO-220AC	50 - 1000	1.1	8.0

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"y" designates reverse voltage, where:

A = 50 V, B = 100 V, C = 150 V, D = 200 V, F = 300 V, G = 400 V,

H = 500 V, J = 600 V, K = 800 V, M = 1000 V, N = 1100 V, Q = 1200 V,

T = 1300 V, V = 1400 V, W = 1500 V, and Y = 1600 V



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## High-Voltage Standard Recovery Diodes – Plastic

I <sub>F(AV)</sub> (A)	Device <sup>(3)(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub>	
		Family	Type		(V)	(A)
8.0	<a href="#">VS-8EWS02SxPBF and VS-8EWS12SxPBF</a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (D-PAK)	800 - 1200	1.10	8.0
8.0	<a href="#">VS-8EWS02Sx-M3 and VS-8EWS12Sx-M3<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (D-PAK)	800 - 1200	<b>1.10</b>	<b>8.0</b>
8.0	<a href="#">VS-8EWS16SxPBF</a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (D-PAK)	1600	1.10	8.0
8.0	<a href="#">VS-8EWS16Sx-M3<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)</sup>	<b>TO-252 (D-PAK)</b>	<b>1600</b>	<b>1.10</b>	<b>8.0</b>
10.0	<a href="#">VS-10ETS08PBF and VS-10ETS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	1.10	10.0
10.0	<a href="#">VS-10ETS08-M3 and VS-10ETS12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	<b>1.10</b>	<b>10.0</b>
10.0	<a href="#">VS-10ETS08FPPBF and VS-10ETS12FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	800 - 1200	1.10	10.0
10.0	<a href="#">VS-10ETS08FP-M3 and VS-10ETS12FP-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	800 - 1200	<b>1.10</b>	<b>10.0</b>
10.0	<a href="#">VS-10ETS08SxPBF<sup>(5)</sup> to VS-10ETS12SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	800 - 1200	1.10	10
20.0	<a href="#">VS-20ETS08PBF and VS-20ETS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	1.10	20.0
20.0	<a href="#">VS-20ETS08-M3 and VS-20ETS12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	<b>1.10</b>	<b>20.0</b>
20.0	<a href="#">VS-20ETS16PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	1600	1.10	20.0
20.0	<a href="#">VS-20ETS16-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	<b>1600</b>	<b>1.10</b>	<b>20.0</b>
20.0	<a href="#">VS-20ATS08PBF and VS-20ATS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AB	800 - 1200	1.10	20.0
20.0	<a href="#">VS-20ATS08-M3 and VS-20ATS12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AB	800 - 1200	<b>1.10</b>	<b>20.0</b>
20.0	<a href="#">VS-20ETS08FPPBF and VS-20ETS12FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	800 - 1200	1.10	20.0
20.0	<a href="#">VS-20ETS08FP-M3 and VS-20ETS12FP-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	800 - 1200	<b>1.10</b>	<b>20.0</b>
20.0	<a href="#">VS-20ETS08SxPBF<sup>(5)</sup> to VS-20ETS12SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	800 - 1200	1.10	20
25.0	<a href="#">VS-25ETS08SxPBF<sup>(5)</sup> to VS-25ETS12SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	800 - 1200	1.14	25
40.0	<a href="#">VS-40EPS08PBF and VS-40EPS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	800 - 1200	1.10	40.0
40.0	<a href="#">VS-40EPS08-M3 and VS-40EPS12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	800 - 1200	<b>1.10</b>	<b>40.0</b>
40.0	<a href="#">VS-40EPS16PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1600	1.14	40.0
40.0	<a href="#">VS-40EPS16-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	<b>1600</b>	<b>1.14</b>	<b>40.0</b>
60.0	<a href="#">VS-60EPS08PBF and VS-60EPS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	800 - 1200	1.09	60.0

Note:

1. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

4. Bold text indicates new product
5. Halogen free



# RECTIFIERS

## Standard and Fast Recovery Rectifiers

High-Voltage Standard Recovery Diodes – Plastic, continued

$I_{F(AV)}$ (A)	Device <sup>(3)(4)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family	Type		(V)	(A)
60.0	<a href="#">VS-60EPS08-M3 and VS-60EPS12-M3<sup>(6)</sup></a>	<b>Power Plastic Through-Hole<sup>(2)</sup></b>	<b>TO-247AC modified (2 pins)</b>	<b>800 - 1200</b>	<b>1.09</b>	<b>60.0</b>
60.0	<a href="#">VS-60EPS16PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1600	1.07	60.0
60.0	<a href="#">VS-60EPS16-M3<sup>(6)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1600	1.07	60.0
80.0	<a href="#">VS-80APS08PBF and VS-80APS12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	800 - 1200	1.17	80.0
80.0	<a href="#">VS-80APS08-M3 and VS-80APS12-M3<sup>(6)</sup></a>	<b>Power Plastic Through-Hole<sup>(2)</sup></b>	<b>TO-247AC modified (2 pins)</b>	<b>800 - 1200</b>	<b>1.17</b>	<b>80.0</b>
80.0	<a href="#">VS-80APS16PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1600	1.17	80.0
80.0	<a href="#">VS-80APS16-M3<sup>(6)</sup></a>	<b>Power Plastic Through-Hole<sup>(2)</sup></b>	<b>TO-247AC modified (2 pins)</b>	<b>1600</b>	<b>1.17</b>	<b>80.0</b>

Note:

- Dual center-tapped device ( $V_F$  limit at  $I_F$  is per diode)
- Single die device
- x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
TRR = tape and reel right oriented

- Bold text indicates new product
- Halogen free



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## Standard Avalanche Recovery Rectifiers

$I_{F(AV)}$ (A)	Device	Package		$V_{RRM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{rr}$ typ. (ns)	$E_R$ (mJ)	At $I_R$ (A)	$T_J, T_{STG}$ Max. (°C)
		Family	Type							
1.5	<a href="#">AS1PD</a>	Plastic SMD	DO-220AA (SMP)	200	1.15	1.5	1500	20	1.0	175
1.5	<a href="#">AS1PG</a>	Plastic SMD	DO-220AA (SMP)	400	1.15	1.5	1500	20	1.0	175
1.5	<a href="#">AS1PJ</a>	Plastic SMD	DO-220AA (SMP)	600	1.15	1.5	1500	20	1.0	175
1.5	<a href="#">AS1PK</a>	Plastic SMD	DO-220AA (SMP)	800	1.15	1.5	1500	20	1.0	175
1.5	<a href="#">AS1PM</a>	Plastic SMD	DO-220AA (SMP)	1000	1.15	1.5	1500	20	1.0	175
1.5	<a href="#">BYG10D</a>	Plastic SMD	DO-214AC (SMA)	200	1.15	1.5	4000 (1)	20	1.0	150
1.5	<a href="#">BYG10G</a>	Plastic SMD	DO-214AC (SMA)	400	1.15	1.5	4000 (1)	20	1.0	150
1.5	<a href="#">BYG10J</a>	Plastic SMD	DO-214AC (SMA)	600	1.15	1.5	4000 (1)	20	1.0	150
1.5	<a href="#">BYG10K</a>	Plastic SMD	DO-214AC (SMA)	800	1.15	1.5	4000 (1)	20	1.0	150
1.5	<a href="#">BYG10M</a>	Plastic SMD	DO-214AC (SMA)	1000	1.15	1.5	4000 (1)	20	1.0	150
1.5	<a href="#">BYG10Y</a>	Plastic SMD	DO-214AC (SMA)	1600	1.15	1.5	4000 (1)	20	1.0	150
3.0	<a href="#">AS3BJ</a>	Plastic SMD	DO-214AA (SMB)	600	1.05	3.0	1500	20	2.5	175
3.0	<a href="#">AS3PD</a>	Plastic SMD	DO-214AA (SMB)	200	1.1	3.0	1200	20	2.5	175
3.0	<a href="#">AS3PG</a>	Plastic SMD	DO-214AA (SMB)	400	1.1	3.0	1200	20	2.5	175
3.0	<a href="#">AS3PJ</a>	Plastic SMD	DO-214AA (SMB)	600	1.1	3.0	1200	20	2.5	175
3.0	<a href="#">AS3PK</a>	Plastic SMD	DO-214AA (SMB)	800	1.1	3.0	1200	20	2.5	175
3.0	<a href="#">AS3PM</a>	Plastic SMD	DO-214AA (SMB)	1000	1.1	3.0	1200	20	2.5	175
4.0	<a href="#">AS4PD</a>	Plastic SMD	TO-277A (SMPC)	200	1.1	4.0	1800	20	2.5	175
4.0	<a href="#">AS4PG</a>	Plastic SMD	TO-277A (SMPC)	400	1.1	4.0	1800	20	2.5	175
4.0	<a href="#">AS4PJ</a>	Plastic SMD	TO-277A (SMPC)	600	1.1	4.0	1800	20	2.5	175
4.0	<a href="#">AS4PK</a>	Plastic SMD	TO-277A (SMPC)	800	1.1	4.0	1800	20	2.5	175
4.0	<a href="#">AS4PM</a>	Plastic SMD	TO-277A (SMPC)	1000	1.1	4.0	1800	20	2.5	175

Note:

(1) Maximum value

Rectifiers - Worldwide Leader in Power Rectifiers



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## Standard Avalanche Rated Sinterglass Diodes

$I_{F(AV)}$ (A)	Device	Package		$V_R$ $V_{RRM}$ $V_{RWM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{tr}$ max. (ns)	$E_R$ (mJ)	At $I_R$ (A)
		Family	Type						
0.35	<a href="#">BYT62</a>	Sinterglass - Axial	SOD-57	2400	3.0	0.2	5	60	1.0
1.5	<a href="#">BYT51A</a>	Sinterglass - Axial	SOD-57	50	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51B</a>	Sinterglass - Axial	SOD-57	100	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51D</a>	Sinterglass - Axial	SOD-57	200	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51G</a>	Sinterglass - Axial	SOD-57	400	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51J</a>	Sinterglass - Axial	SOD-57	600	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51K</a>	Sinterglass - Axial	SOD-57	800	1.1	1.0	4	20	1.0
1.5	<a href="#">BYT51M</a>	Sinterglass - Axial	SOD-57	1000	1.1	1.0	4	20	1.0
2.0	<a href="#">1N5059</a>	Sinterglass - Axial	SOD-57	200	1.0	1.0	4	20	1.0
2.0	<a href="#">1N5060</a>	Sinterglass - Axial	SOD-57	400	1.0	1.0	4	20	1.0
2.0	<a href="#">1N5061</a>	Sinterglass - Axial	SOD-57	600	1.0	1.0	4	20	1.0
2.0	<a href="#">1N5062</a>	Sinterglass - Axial	SOD-57	800	1.0	1.0	4	20	1.0
2.0	<a href="#">BY448</a>	Sinterglass - Axial	SOD-57	1500	1.6	3.0	2	10	0.4
2.0	<a href="#">BY458</a>	Sinterglass - Axial	SOD-57	1200	1.6	3.0	2	10	0.4
2.0	<a href="#">BY527</a>	Sinterglass - Axial	SOD-57	800	1.0	1.0	4	20	1.0
2.0	<a href="#">BYW52</a>	Sinterglass - Axial	SOD-57	200	1.0	1.0	4	20	1.0
2.0	<a href="#">BYW53</a>	Sinterglass - Axial	SOD-57	400	1.0	1.0	4	20	1.0
2.0	<a href="#">BYW54</a>	Sinterglass - Axial	SOD-57	600	1.0	1.0	4	20	1.0
2.0	<a href="#">BYW55</a>	Sinterglass - Axial	SOD-57	800	1.0	1.0	4	20	1.0
2.0	<a href="#">BYW56</a>	Sinterglass - Axial	SOD-57	1000	1.0	1.0	4	20	1.0
2.0	<a href="#">BYX82</a>	Sinterglass - Axial	SOD-57	200	1.0	1.0	4	–	–
2.0	<a href="#">BYX83</a>	Sinterglass - Axial	SOD-57	400	1.0	1.0	4	–	–
2.0	<a href="#">BYX84</a>	Sinterglass - Axial	SOD-57	600	1.0	1.0	4	–	–
2.0	<a href="#">BYX85</a>	Sinterglass - Axial	SOD-57	800	1.0	1.0	4	–	–
2.0	<a href="#">BYX86</a>	Sinterglass - Axial	SOD-57	1000	1.0	1.0	4	–	–
2.0	<a href="#">S330D</a>	Sinterglass - Axial	SOD-57	1000	1.65	10.0	4	20	1.0
3.0	<a href="#">BY228</a>	Sinterglass - Axial	SOD-64	1500	1.5	5.0	2	10	0.4
3.0	<a href="#">BY228-13</a>	Sinterglass - Axial	SOD-64	1000	1.5	5.0	2	10	0.4
3.0	<a href="#">BY228-15</a>	Sinterglass - Axial	SOD-64	1200	1.5	5.0	2	10	0.4
3.0	<a href="#">BYW82</a>	Sinterglass - Axial	SOD-64	200	1.0	3.0	4	20	1.0
3.0	<a href="#">BYW83</a>	Sinterglass - Axial	SOD-64	400	1.0	3.0	4	20	1.0
3.0	<a href="#">BYW84</a>	Sinterglass - Axial	SOD-64	600	1.0	3.0	4	20	1.0
3.0	<a href="#">BYW85</a>	Sinterglass - Axial	SOD-64	800	1.0	3.0	4	20	1.0
3.0	<a href="#">BYW86</a>	Sinterglass - Axial	SOD-64	1000	1.0	3.0	4	20	1.0

Note:

 $E_R$  = pulse energy in avalanche mode



# RECTIFIERS

## Standard and Fast Recovery Rectifiers

### ESD Capability Rectifiers (Standard)

$I_{F(AV)}$ (A)	Device <sup>(1)(3)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family	Type		(V)	(A)
0.7	<a href="#">SE07PB to SE07PJ</a>	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 to 600	1.05	0.7
0.7	<a href="#">MSE07PB thru MSE07PJ</a>	Plastic SMD <sup>(2)</sup>	MicroSMP	100 - 600	1.08	0.7
1.0	<a href="#">SE10PB to SE10PJ</a>	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 to 600	1.05	1.0
1.0	<a href="#">MSE1PB to MSE1PJ</a>	Plastic SMD <sup>(2)</sup>	MicroSMP	100 to 600	1.10	1.0
1.5	<a href="#">SE15PB to SE15PJ</a>	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 to 600	1.05	1.5
<b>2.0</b>	<a href="#">SE20PB thru SE20PJ</a>	<b>Plastic SMD<sup>(2)</sup></b>	<b>DO-220AA (SMP)</b>	<b>100 - 600</b>	<b>1.05</b>	<b>2.0</b>
2.0	<a href="#">SE20AFB thru SE20AFJ</a>	Plastic SMD <sup>(2)</sup>	DO-221AC (SlimSMA)	100 - 600	1.1	2.0
2.0	<a href="#">SE20PAB thru SE20PAJ</a>	Plastic SMD <sup>(2)</sup>	DO-221BC (SMPA)	100 - 600	1.10	2.0
3.0	<a href="#">SE30PAB thru SE30PAJ</a>	Plastic SMD <sup>(2)</sup>	DO-221BC (SMPA)	100 - 600	1.16	3.0
3.0	<a href="#">SE30AFB thru SE30AFJ</a>	Plastic SMD <sup>(2)</sup>	DO-221AC (SlimSMA)	100 - 600	1.1	3.0
4.0	<a href="#">SE40PB thru SE40PJ</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	100 - 600	1.1	4.0
5.0	<a href="#">SE50PAB thru SE50PAJ</a>	Plastic SMD <sup>(2)</sup>	DO-221BC (SMPA)	100 - 600	1.16	5.0
7.0	<a href="#">SE70PB thru SE70PJ</a>	Plastic SMD <sup>(2)</sup>	TO-277A (SMPC)	100 - 600	1.05	7.0
10	<a href="#">SE10DB thru SE10DJ</a>	Plastic SMD <sup>(2)</sup>	TO-263AC (SMPD)	100 - 600	1.15	10
12	<a href="#">SE12DB thru SE12DJ</a>	Plastic SMD <sup>(2)</sup>	TO-263AC (SMPD)	100 - 600	1.15	12
20	<a href="#">SE20DB thru SE20DJ</a>	Plastic SMD <sup>(2)</sup>	TO-263AC (SMPD)	100 - 600	1.20	20

Note:

1. Bold text indicates new product  
Reverse voltage, where: A = 50 V, B = 100 V, C = 150 V, D = 200 V,  
F = 300 V, G = 400 V, H = 500 V, J = 600 V
2. Oxide planar die





## RECTIFIERS

## Standard and Fast Recovery Rectifiers

**Fast Recovery Rectifiers** are used for applications requiring reverse recovery times in the range of 100 ns to 750 ns. Typical uses are low-frequency SMPS, motor controllers, and electronic ballasts. These products are offered in axial, surface-mount, and power packages.

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$		$T_{rr}$ (ns)
		Family	Type		(V)	(A)	
0.5	<a href="#">RGL34A to RGL34K</a>	SUPERRECTIFIER <sup>®</sup> SMD	DO-213AA (MiniMELF)	50 to 600	1.3	0.5	150 to 250
0.5	<a href="#">RGP02-12E to RGP02-20E</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	1200 to 2000	1.8	0.1	300
1.0	<a href="#">1N4933 to 1N4937</a>	Plastic Axial	DO-204AL (DO-41)	50 to 600	1.2	1.0	200
1.0	<a href="#">1N4933GP to 1N4937GP</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 600	1.2	1.0	200
1.0	<a href="#">1N4942GP to 1N4948GP</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	200 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">1N5615GP to 1N5623GP</a>	SUPERRECTIFIER Axial	DO-204AC (DO-15)	200 to 1000	1.2	1.0	150 to 500
1.0	<a href="#">BA157 to BA159</a>	Plastic Axial	DO-204AL (DO-41)	400 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">BA157GP to BA159GP</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	400 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">BYM11-50 to BYM11-1000</a>	SUPERRECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">GI810 to GI818</a>	SUPERRECTIFIER Axial	DO-204AC (DO-15)	50 to 1000	1.2	1.0	750
1.0	<a href="#">RGF1A to RGF1M</a>	SUPERRECTIFIER SMD	DO-214BA (GF1)	50 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">RGL41A to RGL41M</a>	SUPERRECTIFIER SMD	DO-213AB (MELF)	50 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">RGP10A to RGP10M</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">RGP10AE to RGP10ME</a>	SUPERRECTIFIER Axial	DO-204AL (DO-41)	50 to 1000	1.3	1.0	150 to 500
1.0	<a href="#">RMPG06A to RMPG06K</a>	Plastic Axial <sup>(2)</sup>	MPG06	50 to 800	1.3	1.0	150 to 250
1.0	<a href="#">RS1A to RS1K</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 to 800	1.3	1.0	150 to 500
1.0	<a href="#">RS1PB to RS1PJ</a>	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 to 600	1.3	1.0	150 to 250
1.0	<a href="#">SRP100A to SRP100K</a>	Plastic Axial	DO-204AL (DO-41)	50 to 800	1.3	1.0	100 to 200
1.4	<a href="#">RS07B</a>	SMF	DO-219AB	100	1.15	0.7	150
1.4	<a href="#">RS07D</a>	SMF	DO-219AB	200	1.15	0.7	150
1.4	<a href="#">RS07G</a>	SMF	DO-219AB	400	1.15	0.7	150
1.4	<a href="#">RS07J</a>	SMF	DO-219AB	600	1.15	0.7	250
1.4	<a href="#">RS07K</a>	SMF	DO-219AB	800	1.3	1.0	300
1.5	<a href="#">BYG21K and BYG21M</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	800 to 1000	1.5 / 1.6	1.0 / 1.5	120
1.5	<a href="#">BYG24D to BYG24J</a>	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	200 to 600	1.15 / 1.25	1.0 / 1.5	140
1.5	<a href="#">RGP15A to RGP15M</a>	SUPERRECTIFIER Axial	DO-204AC (DO-15)	50 to 1000	1.3	1.5	150 to 500
1.5	<a href="#">RS2A to RS2K</a>	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 to 800	1.3	1.5	150 to 500
2.5	<a href="#">RGP25A to RGP25M</a>	SUPERRECTIFIER Axial	DO-201AD	50 to 1000	1.3	2.5	150 to 500
3.0	<a href="#">RGP30A to RGP30M</a>	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	50 to 1000	1.3	3.0	150 to 500
3.0	<a href="#">RS3A to RS3K</a>	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 to 800	1.3	2.5	150 to 500
8.0	<a href="#">BY229-200 to BY229-800</a>	Plastic Power Pack <sup>(2)</sup>	TO-220AC	200 to 800	1.85	20.0	145
8.0	<a href="#">BY229X-200 to BY229X-800</a>	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	200 to 800	1.85	20.0	145
8.0	<a href="#">BY229B-200 to BY229B-800</a>	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200 to 800	1.85	20.0	145

Note:

1. Bold text indicates new product
2. Glass passivated die



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## Fast Soft Recovery Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(3)(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		Typ. t <sub>rr</sub> @ see setup		Typ. Q <sub>rr</sub> @ see setup
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt)	(μC)
8.0	<a href="#">VS-8EWF02SxPBF thru VS-8EWS06SxPBF</a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (DPAK)	200 - 600	1.2	8	140	8A, 25A/us	0.25
8.0	<a href="#">VS-8EWF02Sx-M3 to VS-8EWS06Sx-M3<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (DPAK)	200 - 600	1.2	8	140	8A, 25A/us	0.25
8.0	<a href="#">VS-8EWF10SxPBF and VS-8EWS12SxPBF</a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (DPAK)	1000 - 1200	1.3	8	270	8A, 25A/us	1
8.0	<a href="#">VS-8EWF10Sx-M3 and VS-8EWS12Sx-M3<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)</sup>	TO-252 (DPAK)	1000 - 1200	1.3	8	270	8A, 25A/us	1
10.0	<a href="#">VS-10ETF02PBF to VS-10ETF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	200 - 600	1.2	10	145	10A, 25A/us	0.32
10.0	<a href="#">VS-10ETF02-M3<sup>(5)</sup> to VS-10ETF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	200 - 600	1.2	10	145	10A, 25A/us	0.32
10.0	<a href="#">VS-10ETF10PBF and VS-10ETF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	1000 - 1200	1.33	10	310	10A, 25A/us	1.05
10.0	<a href="#">VS-10ETF10-M3<sup>(5)</sup> and VS-10ETF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	1000 - 1200	1.33	10	310	10A, 25A/us	1.05
10.0	<a href="#">VS-10ETF02FPPBF to VS-10ETF06FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	200 - 600	1.2	10	145	10A, 25A/us	0.32
10.0	<a href="#">VS-10ETF02FP-M3<sup>(5)</sup> to VS-10ETF06FP-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	200 - 600	1.2	10	145	10A, 25A/us	0.32
10.0	<a href="#">VS-10ETF10FPPBF and VS-10ETF12FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	1000 - 1200	1.33	10	310	10A, 25A/us	1.05
10.0	<a href="#">VS-10ETF10FPPBF<sup>(5)</sup> and VS-10ETF12FPPBF<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	1000 - 1200	1.33	10	310	10A, 25A/us	1.05
10.0	<a href="#">VS-10ETF02SxPBF<sup>(5)</sup> to VS-10ETF06SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	200 - 600	1.2	10	145	10A, 25A/us	0.32
10.0	<a href="#">VS-10ETF10SxPBF<sup>(5)</sup> and VS-10ETF12SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	1000 - 1200	1.33	10	310	10A, 25A/us	1.05
20.0	<a href="#">VS-20ETF02PBF to VS-20ETF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	200 - 600	1.3	20	160	20A, 100A/us	1.25
20.0	<a href="#">VS-20ETF02-M3<sup>(5)</sup> to VS-20ETF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	200 - 600	1.3	20	160	20A, 100A/us	1.25
20.0	<a href="#">VS-20ETF08PBF to VS-20ETF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	1.31	20	400	20A, 25A/us	1.7
20.0	<a href="#">VS-20ETF08-M3<sup>(5)</sup> to VS-20ETF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC	800 - 1200	1.31	20	400	20A, 25A/us	1.7
20.0	<a href="#">VS-20ETF02FPPBF to VS-20ETF06FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	200 - 600	1.3	20	160	20A, 100A/us	1.25

Note:

1. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
2. Single die device
3. x designates tube or tape&reel version on SMD products  
none = tube  
TR = tape and reel centered (for DPAK only)  
TRL = tape and reel left oriented  
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4. Bold text indicates new product
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## RECTIFIERS

## Standard and Fast Recovery Rectifiers

Fast Soft Recovery Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(3)(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		Typ. t <sub>rr</sub> @ see setup		Typ. Q <sub>rr</sub> @ see setup
		Family	Type		(V)	(A)	(ns)	setup (I <sub>F</sub> , di <sub>F</sub> /dt)	(μC)
20.0	<a href="#">VS-20ETF02FP-M3<sup>(5)</sup> to VS-20ETF06FP-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	200 - 600	1.3	20	160	20A, 100A/us	1.25
20.0	<a href="#">VS-20ETF10FPPBF and VS-20ETF12FPPBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	1000 - 1200	1.31	20	400	20A, 25A/us	1.7
20.0	<a href="#">VS-20ETF10FP-M3<sup>(5)</sup> and VS-20ETF12FP-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-220AC FULL-PAK	1000 - 1200	1.31	20	400	20A, 25A/us	1.7
20.0	<a href="#">VS-20ETF02SxPBF<sup>(5)</sup> to VS-20ETF06SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	200 - 600	1.3	20	160	20A, 100A/us	1.25
20.0	<a href="#">VS-20ETF08SxPBF<sup>(5)</sup> to 20ETF12SxPBF<sup>(5)</sup></a>	Power Plastic SMD <sup>(2)(6)</sup>	TO-263AB (D <sup>2</sup> PAK)	800 - 1200	1.31	20	400	20A, 25A/us	1.7
30.0	<a href="#">VS-30APF02PBF to VS-30APF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.41	30	160	20A, 100A/us	1.25
30.0	<a href="#">VS-30APF02-M3<sup>(5)</sup> to VS-30APF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.41	30	160	20A, 100A/us	1.25
30.0	<a href="#">VS-30EPF02PBF to VS-30EPF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.41	30	160	20A, 100A/us	1.25
30.0	<a href="#">VS-30EPF02-M3<sup>(5)</sup> to VS-30EPF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.41	30	160	20A, 100A/us	1.25
30.0	<a href="#">VS-30APF10PBF and VS-30APF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.41	30	450	30A, 25A/us	2.16
30.0	<a href="#">VS-30APF10-M3<sup>(5)</sup> and VS-30APF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.41	30	450	30A, 25A/us	2.16
30.0	<a href="#">VS-30EPF10PBF and VS-30EPF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.41	30	450	30A, 25A/us	2.16
30.0	<a href="#">VS-30EPF10-M3<sup>(5)</sup> and VS-30EPF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.41	30	450	30A, 25A/us	2.16
40.0	<a href="#">VS-40EPF02PBF to VS-40EPF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.25	40	180	40A, 25A/us	0.5
40.0	<a href="#">VS-40EPF02-M3<sup>(5)</sup> to VS-40EPF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.25	40	180	40A, 25A/us	0.5
40.0	<a href="#">VS-40EPF10PBF and VS-40EPF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.4	40	450	10A, 25A/us	1.8
40.0	<a href="#">VS-40EPF10-M3<sup>(5)</sup> and VS-40EPF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.4	40	450	10A, 25A/us	1.8
60.0	<a href="#">VS-60APF02PBF to VS-60CPF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.3	60	180	60A, 25A/us	0.5
60.0	<a href="#">VS-60APF02-M3<sup>(5)</sup> to VS-60CPF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.3	60	180	60A, 25A/us	0.5

Note:

1. Dual center-tapped device (V<sub>F</sub> limit at I<sub>F</sub> is per diode)
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## RECTIFIERS

## Standard and Fast Recovery Rectifiers

Fast Soft Recovery Rectifiers, continued

$I_{F(AV)}$ (A)	Device <sup>(3)(4)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ @ $I_F$		Typ. $t_{tr}$ @ see setup		Typ. $Q_{tr}$ @
		Family	Type		(V)	(A)	(ns)	setup ( $I_F, di_F/dt$ )	( $\mu C$ )
60.0	<a href="#">VS-60EPF02PBF to VS-60EPF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.3	60	180	60A, 25A/us	0.5
60.0	<a href="#">VS-60EPF02-M3<sup>(5)</sup> to VS-60EPF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	200 - 600	1.3	60	180	60A, 25A/us	0.5
60.0	<a href="#">VS-60APF10PBF and VS-60APF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.4	60	480	60A, 25A/us	2.7
60.0	<a href="#">VS-60APF10-M3<sup>(5)</sup> and VS-60APF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.4	60	480	60A, 25A/us	2.7
60.0	<a href="#">VS-60EPF10PBF and VS-60EPF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.4	60	480	60A, 25A/us	2.7
60.0	<a href="#">VS-60EPF10-M3<sup>(5)</sup> and VS-60EPF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC modified (2 pins)	1000 - 1200	1.4	60	480	60A, 25A/us	2.7
80.0	<a href="#">VS-80APF02PBF to VS-80EPF06PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.25	80	190	40A, 25A/us	0.5
80.0	<a href="#">VS-80APF02-M3<sup>(5)</sup> to VS-80EPF06-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	200 - 600	1.25	80	190	40A, 25A/us	0.5
80.0	<a href="#">VS-80APF10PBF and VS-80EPF12PBF</a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.35	80	480	80A, 25A/us	2.1
80.0	<a href="#">VS-80APF10-M3<sup>(5)</sup> and VS-80EPF12-M3<sup>(5)</sup></a>	Power Plastic Through-Hole <sup>(2)</sup>	TO-247AC	1000 - 1200	1.35	80	480	80A, 25A/us	2.1
85.0	<a href="#">VS-85EPF12</a>	Power Plastic Through-Hole <sup>(2)</sup>	POWERTAB™	1200	1.36	85	480	85A, 25A/us	2.1

Note:

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- Single die device
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TR = tape and reel centered (for DPAK only)  
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## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## Fast Avalanche Recovery Rectifiers

$I_{F(AV)}$ (A)	Device	Package		$V_{RRM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{tr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)	$T_J, T_{STG}$ Max. (°C)
		Family	Type							
1.0	<a href="#">AR1PD</a>	Plastic SMD	DO-220AA (SMP)	200	1.25	1.0	140	20	1.0	175
1.0	<a href="#">AR1PG</a>	Plastic SMD	DO-220AA (SMP)	400	1.25	1.0	140	20	1.0	175
1.0	<a href="#">AR1PJ</a>	Plastic SMD	DO-220AA (SMP)	600	1.25	1.0	140	20	1.0	175
1.0	<a href="#">AR1PK</a>	Plastic SMD	DO-220AA (SMP)	800	1.6	1.0	120	20	1.0	175
1.0	<a href="#">AR1PM</a>	Plastic SMD	DO-220AA (SMP)	1000	1.6	1.0	120	20	1.0	175
1.5	<a href="#">BYG21K</a>	Plastic SMD	DO-214AC (SMA)	800	1.6	1.5	120	20	1.0	150
1.5	<a href="#">BYG21M</a>	Plastic SMD	DO-214AC (SMA)	1000	1.6	1.5	120	20	1.0	150
1.5	<a href="#">BYG24D</a>	Plastic SMD	DO-214AC (SMA)	200	1.25	1.5	140	20	1.0	150
1.5	<a href="#">BYG24G</a>	Plastic SMD	DO-214AC (SMA)	400	1.25	1.5	140	20	1.0	150
1.5	<a href="#">BYG24J</a>	Plastic SMD	DO-214AC (SMA)	600	1.25	1.5	140	20	1.0	150
3.0	<a href="#">AR3PD</a>	Plastic SMD	TO-277A (SMPC)	200	1.6	3.0	140	20	2.5	175
3.0	<a href="#">AR3PG</a>	Plastic SMD	TO-277A (SMPC)	400	1.6	3.0	140	20	2.5	175
3.0	<a href="#">AR3PJ</a>	Plastic SMD	TO-277A (SMPC)	600	1.6	3.0	140	20	2.5	175
3.0	<a href="#">AR3PK</a>	Plastic SMD	TO-277A (SMPC)	800	1.9	3.0	120	20	2.5	175
3.0	<a href="#">AR3PM</a>	Plastic SMD	TO-277A (SMPC)	1000	1.9	3.0	120	20	2.5	175
4.0	<a href="#">AR4PD</a>	Plastic SMD	TO-277A (SMPC)	200	1.6	4.0	140	20	2.5	175
4.0	<a href="#">AR4PG</a>	Plastic SMD	TO-277A (SMPC)	400	1.6	4.0	140	20	2.5	175
4.0	<a href="#">AR4PJ</a>	Plastic SMD	TO-277A (SMPC)	600	1.6	4.0	140	20	2.5	175
4.0	<a href="#">AR4PK</a>	Plastic SMD	TO-277A (SMPC)	800	1.9	4.0	120	20	2.5	175
4.0	<a href="#">AR4PM</a>	Plastic SMD	TO-277A (SMPC)	1000	1.9	4.0	120	20	2.5	175

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## RECTIFIERS

## Standard and Fast Recovery Rectifiers

## Fast Avalanche Rated Sinterglass Diodes

$I_{F(AV)}$ (A)	Part Number	Package		$V_R$ $V_{RRM}$ $V_{RWM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{tr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)
		Family	Type						
0.25	<a href="#">BY203-12S</a>	Sinterglass - Axial	SOD-57	1200	2.4	0.2	300	10	0.4
0.25	<a href="#">BY203-16S</a>	Sinterglass - Axial	SOD-57	1600	2.4	0.2	300	10	0.4
0.25	<a href="#">BY203-20S</a>	Sinterglass - Axial	SOD-57	2000	2.4	0.2	300	10	0.4
0.8	<a href="#">BY268</a>	Sinterglass - Axial	SOD-57	1400	1.25	0.4	400	10	0.4
0.8	<a href="#">BY269</a>	Sinterglass - Axial	SOD-57	1600	1.25	0.4	400	10	0.4
1.25	<a href="#">BYT54A</a>	Sinterglass - Axial	SOD-57	50	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54B</a>	Sinterglass - Axial	SOD-57	100	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54D</a>	Sinterglass - Axial	SOD-57	200	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54G</a>	Sinterglass - Axial	SOD-57	400	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54J</a>	Sinterglass - Axial	SOD-57	600	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54K</a>	Sinterglass - Axial	SOD-57	800	1.5	1.0	100	10	0.4
1.25	<a href="#">BYT54M</a>	Sinterglass - Axial	SOD-57	1000	1.5	1.0	100	10	0.4
1.4	<a href="#">BYT52A</a>	Sinterglass - Axial	SOD-57	50	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52B</a>	Sinterglass - Axial	SOD-57	100	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52D</a>	Sinterglass - Axial	SOD-57	200	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52G</a>	Sinterglass - Axial	SOD-57	400	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52J</a>	Sinterglass - Axial	SOD-57	600	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52K</a>	Sinterglass - Axial	SOD-57	800	1.3	1.0	200	10	0.4
1.4	<a href="#">BYT52M</a>	Sinterglass - Axial	SOD-57	1000	1.3	1.0	200	10	0.4
1.5	<a href="#">BYV12</a>	Sinterglass - Axial	SOD-57	100	1.5	1.0	300	10	0.4
1.5	<a href="#">BYV13</a>	Sinterglass - Axial	SOD-57	400	1.5	1.0	300	10	0.4
1.5	<a href="#">BYV14</a>	Sinterglass - Axial	SOD-57	600	1.5	1.0	300	10	0.4
1.5	<a href="#">BYV15</a>	Sinterglass - Axial	SOD-57	800	1.5	1.0	300	10	0.4
1.5	<a href="#">BYV16</a>	Sinterglass - Axial	SOD-57	1000	1.5	1.0	300	10	0.4
2.0	<a href="#">BYV37</a>	Sinterglass - Axial	SOD-57	800	1.1	1.0	300	10	0.4
2.0	<a href="#">BYV38</a>	Sinterglass - Axial	SOD-57	1000	1.1	1.0	300	10	0.4
2.0	<a href="#">BYW32</a>	Sinterglass - Axial	SOD-57	200	1.1	1.0	200	10	0.4
2.0	<a href="#">BYW33</a>	Sinterglass - Axial	SOD-57	300	1.1	1.0	200	10	0.4
2.0	<a href="#">BYW34</a>	Sinterglass - Axial	SOD-57	400	1.1	1.0	200	10	0.4
2.0	<a href="#">BYW35</a>	Sinterglass - Axial	SOD-57	500	1.1	1.0	200	10	0.4
2.0	<a href="#">BYW36</a>	Sinterglass - Axial	SOD-57	600	1.1	1.0	200	10	0.4
2.9	<a href="#">BYM36D</a>	Sinterglass - Axial	SOD-64	800	1.78	3	150	20	1
2.9	<a href="#">BYM36E</a>	Sinterglass - Axial	SOD-64	1000	1.78	3	150	20	1
3	<a href="#">1N5417</a>	Sinterglass - Axial	SOD-64	200	1.1	3	100	20	1
3	<a href="#">1N5418</a>	Sinterglass - Axial	SOD-64	400	1.1	3	100	20	1
3	<a href="#">BYM36A</a>	Sinterglass - Axial	SOD-64	200	1.6	3	100	20	1
3	<a href="#">BYM36B</a>	Sinterglass - Axial	SOD-64	400	1.6	3	100	20	1

Note:

 $E_R$  = pulse energy in avalanche mode



## RECTIFIERS

## Standard and Fast Recovery Rectifiers

Fast Avalanche Rated Sinterglass Diodes, continued

$I_{F(AV)}$ (A)	Part Number	Package		$V_R$ $V_{RRM}$ $V_{RWM}$ (V)	$V_F$ 25 °C (V)	At $I_F$ (A)	$t_{tr}$ Max. (ns)	$E_R$ (mJ)	At $I_R$ (A)
		Family	Type						
3	<a href="#">BYM36C</a>	Sinterglass - Axial	SOD-64	600	1.6	3	100	20	1
3	<a href="#">BYT56A</a>	Sinterglass - Axial	SOD-64	50	1.4	3	100	10	0.4
3	<a href="#">BYT56B</a>	Sinterglass - Axial	SOD-64	100	1.4	3	100	10	0.4
3	<a href="#">BYT56D</a>	Sinterglass - Axial	SOD-64	200	1.4	3	100	10	0.4
3	<a href="#">BYT56G</a>	Sinterglass - Axial	SOD-64	400	1.4	3	100	10	0.4
3	<a href="#">BYT56J</a>	Sinterglass - Axial	SOD-64	600	1.4	3	100	10	0.4
3	<a href="#">BYT56K</a>	Sinterglass - Axial	SOD-64	800	1.4	3	100	10	0.4
3	<a href="#">BYT56M</a>	Sinterglass - Axial	SOD-64	1000	1.4	3	100	10	0.4
3	<a href="#">BYT77</a>	Sinterglass - Axial	SOD-64	800	1.2	3	250	10	0.4
3	<a href="#">BYT78</a>	Sinterglass - Axial	SOD-64	1000	1.2	3	250	10	0.4
3	<a href="#">BYW172D</a>	Sinterglass - Axial	SOD-64	200	1.1	3	100	20	1
3	<a href="#">BYW172F</a>	Sinterglass - Axial	SOD-64	300	1.1	3	100	20	1
3	<a href="#">BYW172G</a>	Sinterglass - Axial	SOD-64	400	1.1	3	100	20	1
3	<a href="#">BYW72</a>	Sinterglass - Axial	SOD-64	200	1.1	3	200	10	0.4
3	<a href="#">BYW73</a>	Sinterglass - Axial	SOD-64	300	1.1	3	200	10	0.4
3	<a href="#">BYW74</a>	Sinterglass - Axial	SOD-64	400	1.1	3	200	10	0.4
3	<a href="#">BYW75</a>	Sinterglass - Axial	SOD-64	500	1.1	3	200	10	0.4
3	<a href="#">BYW76</a>	Sinterglass - Axial	SOD-64	600	1.1	3	200	10	0.4

Note:

 $E_R$  = pulse energy in avalanche mode



# RECTIFIERS

## Bridge Rectifiers

**Bridge Rectifiers** are essential for any electronic equipment which requires full wave rectification of an AC power source. The bridge rectifier is comprised of four separate rectifier components configured into a “bridge” arrangement in a single package. Vishay manufactures a complete line of bridge rectifiers including fast recovery, surface-mount, and single in-line types.

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family	Type		(V)	(A)
1.2	1KAB10E thru 1KAB100E	Single Phase Rectifier Bridge	KAB	50 - 1000	1.1	1.2
1.9	2KBB05 thru 2KBB100	Single In Line Phase Rectifier Bridge	KBB	50 - 1000	1.1	1.9
2	2KBP005 thru 2KBP10	Single In Line Phase Rectifier Bridge	KBP	50 - 1000	1.0	1.0
3	KBPC1005 thru KBPC110	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.1	1.5
6	KBPC6005 thru KBPC610	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.2	3.0
8	KBPC8005 thru KBPC810	Single Phase Rectifier Bridge	KBPC	50 - 1000	1.0	3.0
25	GBPC2502A thru GBPC2512A	GBPC with fast-on lugs	GBPC25A	200 - 1200	1.1	25
25	GBPC2502W thru GBPC2512W	GBPC with wire leads	GBPC25W	200 - 1200	1.1	25
25	P131 thru P135	Single phase fully-controlled bridge	PACE PAK (D-19)	400 - 1200	1.35	79
25	26MB05A thru 26MB160A	Single Phase Rectifier Bridge	MB (D-34)	50 - 1600	1.25	40
25	P121 thru P125	Single phase semi-controlled bridge doubler	PACE PAK (D-19)	400 - 1200	1.35	79
25	P101 thru P105 <sup>(3)(4)</sup>	Single phase semi-controlled bridge common cathode	PACE PAK (D-19)	400 - 1200	1.35	79
25	26MT10 thru 26MT160	Three Phase Bridge	MT (D-63)	100 - 1600	1.26	40
35	GBPC3502A thru GBPC3512A	GBPC with fast-on lugs	GBPC35A	200 - 1200	1.1	35
35	GBPC3502W thru GBPC3512W	GBPC with wire leads	GBPC35W	200 - 1200	1.1	35
35	36MB05A thru 36MB160A	Single Phase Rectifier Bridge	MB (D-34)	50 - 1600	1.3	55
35	36MT10 thru 36MT160	Three Phase Bridge	MT (D-63)	100 - 1600	1.19	40
40	P431 thru P435	Single phase fully-controlled bridge	PACE PAK (D-19)	400 - 1200	1.4	126
40	P421 thru P425	Single phase semi-controlled bridge doubler	PACE PAK (D-19)	400 - 1200	1.4	126
40	P401 thru P405 <sup>(3)(4)</sup>	Single phase semi-controlled bridge common cathode	PACE PAK (D-19)	400 - 1200	1.4	126
40	40MT160KPBF	Three Phase Bridge	MTK (Screwable)	1600	2.0	100
45	40MT160PBPF and 40MT160PAPBF	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.45	40
50	54MT80KPBF thru 54MT160KPBF	Three Phase AC Switch	MTK (Screwable)	800 - 1600	2.68	150
55	53MT80KPBF thru 53MT160KPBF	Full-controlled three phase bridge	MTK (Screwable)	800 - 1600	2.68	150
55	51MT80KPBF thru 51MT160KPBF	Negative half-controlled three phase bridge	MTK (Screwable)	800 - 1600	2.68	150
55	52MT80KPBF thru 52MT160KPBF	Positive half-controlled three phase bridge	MTK (Screwable)	800 - 1600	2.68	150
60	60MT80KPBF thru 60MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.75	100
70	70MT80KPBF thru 70MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.6	100
75	70MT160PBPF and 70MT160PAPBF	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.45	70
75	100MT160PBPF and 100MT160PAPBF	Three Phase Bridge	MTP..PA and MTP..PB	1600	1.51	100
90	93MT80KPBF thru 93MT160KPBF	Full-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.65	150
90	113MT80KPBF thru 113MT160KPBF	Full-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.57	150

Note:

1. Bold Text = New Products , Blue Text = Under development
2.  $V_F$  limits are per diode
3. Voltage Suppressor Available (identified by suffix “K”)

4. With both voltage suppression and freewheeling diode available (identified by suffix “KW”)





# RECTIFIERS

## Bridge Rectifiers

Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$	
		Family	Type		(V)	(A)
90	91MT80KPBF thru 91MT160KPBF	Negative half-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.65	150
90	111MT80KPBF thru 111MT160KPBF	Negative half-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.57	150
90	92MT80KPBF thru 92MT160KPBF	Positive half-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.65	150
90	112MT80KPBF thru 112MT160KPBF	Positive half-controlled three phase bridge	MTK (Screwable)	800 - 1600	1.57	150
90	94MT80KPBF thru 94MT160KPBF	Three Phase AC Switch	MTK (Screwable)	800 - 1600	1.55	150
90	90MT80KPBF thru 90MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.6	150
100	104MT80KPBF thru 104MT160KPBF	Three Phase AC Switch	MTK (Screwable)	800 - 1600	1.53	150
110	110MT80KPBF thru 110MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.4	150
130	130MT80KPBF thru 130MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.63	200
160	160MT80KPBF thru 160MT160KPBF	Three Phase Bridge	MTK (Screwable)	800 - 1600	1.49	200
200	200MT40KPBF	Three Phase Bridge	MTK (Screwable)	400	1.4	200

Note:

1. Bold Text = New Products , Blue Text = Under development
2.  $V_F$  limits are per diode
3. Voltage Suppressor Available (identified by suffix "K")

4. With both voltage suppression and freewheeling diode available (identified by suffix "KW")



# RECTIFIERS

## Bridge Rectifiers

Bridge Rectifiers, continued

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> at I <sub>F</sub> <sup>(5)</sup>	
		Family	Type		(V)	(A)
0.5	<a href="#">MB2M, MB4M, and MB6M</a>	Mini-bridge <sup>(2)</sup>	MBM	200 - 600	1.0	0.4
0.5	<a href="#">B2M, B4M, and B6M</a>	Mini-bridge <sup>(2)</sup>	MBM	200 - 600	1.0	0.5
0.5	<a href="#">MB2S, MB4S, and MB6S</a>	Mini-bridge (SMD) <sup>(2)</sup>	MBS (TO-269AA)	200 - 600	1.0	0.4
0.5	<a href="#">B2S, B4S and B6S</a>	Mini-bridge (SMD) <sup>(2)</sup>	MBS (TO-269AA)	200 - 600	1.0	0.5
0.5	<a href="#">RMB2S and RMB4S</a>	Recovery mini-bridge (SMD) <sup>(2)</sup>	MBS (TO-269AA)	200 - 400	1.25	0.4
0.9	<a href="#">BxxC800DM</a>	Dual in-line <sup>(2)</sup>	DFM	65 - 600	1.0	0.9
0.9	<a href="#">B40C800G to B380C800G</a>	WOG <sup>(2)</sup>	WG	65 - 600	1.0	0.9
1.0	<a href="#">B40C1000G to B380C1000G</a>	WOG <sup>(2)</sup>	WG	65 - 600	1.0	1.0
1.0	<a href="#">DF005M to DF10M</a>	Dual in-line <sup>(2)</sup>	DFM	50 - 1000	1.1	1.0
1.0	<a href="#">DF005MA to DF10MA</a>	Dual in-line <sup>(2)</sup>	DFM	50 - 1000	1.1	1.0
1.0	<a href="#">DF005S to DF10S</a>	Dual in-line (SMD) <sup>(2)</sup>	DFS	50 - 1000	1.1	1.0
1.0	<a href="#">DF005SA to DF10SA</a>	Dual in-line (SMD) <sup>(2)</sup>	DFS	50 - 1000	1.1	1.0
1.0	<a href="#">EDF1AM to EDF1DM</a>	Ultrafast dual in-line <sup>(2)(3)</sup>	DFM	50 - 200	1.05	1.0
1.0	<a href="#">EDF1AS to EDF1DS</a>	Ultrafast dual in-line (SMD) <sup>(2)(3)</sup>	DFS	50 - 200	1.05	1.0
1.0	<a href="#">MBL104S thru MBL110S</a>	Mini-bridge (SMD) <sup>(2)</sup>	MBLS	400 - 1000	0.95	0.4
1.5	<a href="#">3N246 to 3N252</a>	Single in-line <sup>(2)</sup>	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
1.5	<a href="#">B40C1500G to B380C1500G</a>	WOG <sup>(2)</sup>	WG	65 - 600	1.0	1.5
1.5	<a href="#">DF1500S to DF1510S</a>	Dual in-line (SMD) <sup>(2)</sup>	DFS	50 - 1000	1.1	1.5
1.5	<a href="#">DFL1500S to DFL1510S</a>	Low-profile DIL (SMD) <sup>(2)</sup>	L-DFS	50 - 1400	1.1	1.5
1.5	<a href="#">G2SB20, G2SB60, and G2SB80</a>	Single in-line <sup>(2)(4)</sup>	GBL	200 - 800	1.0	0.75
1.5	<a href="#">G2SBA20, G2SBA60, and G2SBA80</a>	Single in-line <sup>(2)(4)</sup>	GBL	200 - 800	1.0	0.75
1.5	<a href="#">KBP005M to KBP10M</a>	Single in-line <sup>(2)</sup>	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
1.5	<a href="#">W005G to W10G</a>	WOG <sup>(2)</sup>	WG	50 - 1000	1.0	1.0
2.0	<a href="#">2KBP005M to 2KBP10M</a>	Single in-line <sup>(2)</sup>	KBPM	50 - 1000	1.1	3.14
2.0	<a href="#">2W005G to 2W10G</a>	WOG <sup>(2)</sup>	WG	50 - 1000	1.1	2.0
2.0	<a href="#">3N253 to 3N259</a>	Single in-line <sup>(2)</sup>	KBPM	50 - 1000	1.1	3.14
3.0	<a href="#">GBPC1005 to GBPC110</a>	GBPC with wire leads <sup>(2)</sup>	GBPC1	50 - 1000	1.0	1.5
3.0	<a href="#">3KBP005M to 3KBP08M</a>	Single in-line <sup>(2)</sup>	KBPM	50 - 800	1.05	3.0
4.0	<a href="#">G3SBA20S, G3SBA60, and G3SBA80</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GBU	200 - 800	1.0	2.0
4.0	<a href="#">GBL005 to GBL10</a>	Single in-line <sup>(2)</sup>	GBL	50 - 1000	1.0	4.0
4.0	<a href="#">GBLA005 to GBLA10</a>	Single in-line <sup>(2)</sup>	GBL	50 - 1000	1.0	4.0
4.0	<a href="#">GBU4A to GBU4M</a>	Single in-line with mounting hole <sup>(2)</sup>	GBU	50 - 1000	1.0	4.0
4.0	<a href="#">KBL005 to KBL10</a>	Single in-line	KBL	50 - 1000	1.1	4.0
4.0	<a href="#">KBU4A to KBU4M</a>	Single in-line with mounting hole	KBU	50 - 1000	1.0	4.0
6.0	<a href="#">GBPC6005 to GBPC610</a>	GBPC with wire leads <sup>(2)</sup>	GBPC6	50 - 1000	1.0	3.0
6.0	<a href="#">GBU6A to GBU6M</a>	Single in-line with mounting hole <sup>(2)</sup>	GBU	50 - 1000	1.0	6.0
6.0	<a href="#">G5SBA20, G5SBA60, and G5SBA80</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GBU	200 - 800	1.05	3.0
6.0	<a href="#">GSIB620 to GSIB680</a>	Single in-line with mounting hole <sup>(2)</sup>	GSIB-5S	200 - 800	0.95	3.0
<b>6.0</b>	<b><a href="#">GSIB620N, GSIB640N, GSIB660N, GSIB680N</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>GSIB-5S</b>	<b>200 - 800</b>	<b>0.95</b>	<b>3.0</b>
6.0	<a href="#">GSIB6A20 to GSIB6A80</a>	Single in-line with mounting hole <sup>(2)</sup>	GSIB-5S	200 - 800	1.0	3.0
<b>6.0</b>	<b><a href="#">GSIB6A20N, GSIB6A40N, GSIB6A60N, GSIB6A80N</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>GSIB-5S</b>	<b>200 - 800</b>	<b>1.0</b>	<b>3.0</b>
6.0	<a href="#">KBU6A to KBU6M</a>	Single in-line with mounting hole	KBU	50 - 1000	1.0	6.0
6.0	<a href="#">VSIB620 thru VSIB680</a>	Single in-line with mounting hole <sup>(2)</sup>	GSIB-5S	200 - 800	0.95	3.0
6.0	<a href="#">VSIB6A20 thru VSIB6A80</a>	Single in-line with mounting hole <sup>(2)</sup>	GSIB-5S	200 - 800	1.0	3.0

Note:

1. Bold text indicates new product
2. Glass passivated die
3. t<sub>rr</sub> = 50ns max. for EDF1 types

4. Japanese electrical specifications

5. V<sub>F</sub> limits are per diode



# RECTIFIERS

## Bridge Rectifiers

Bridge Rectifiers, continued

$I_{F(AV)}$ (A)	Device <sup>(1)</sup>	Package		$V_{(BR)}$ Range (V)	Max $V_F$ at $I_F$ <sup>(5)</sup>	
		Family	Type		(V)	(A)
8.0	<a href="#">GBU8A to GBU8M</a>	Single in-line with mounting hole <sup>(2)</sup>	GBU	50 - 1000	1.0	8.0
8.0	<a href="#">KBU8A to KBU8M</a>	Single in-line with mounting hole	KBU	50 - 1000	1.0	8.0
10	<a href="#">BU1006 to BU1010</a>	Single in-line with mounting hole <sup>(2)</sup>	BU	600 - 1000	1.05	5
<b>10</b>	<b><a href="#">BU1006A to BU1010A</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>BU</b>	<b>600 - 1000</b>	<b>1.1</b>	<b>5</b>
10	VSIB10A20 thru VSIB10A80	Single in-line with mounting hole <sup>(2)</sup>	GSIB-5S	200 - 800	1	5
<b>12</b>	<b><a href="#">BU1206 to BU1210</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>BU</b>	<b>600 - 1000</b>	<b>1.05</b>	<b>6</b>
12	<a href="#">GBPC12005 to GBPC1210</a>	GBPC with fast-on lugs <sup>(2)</sup>	GBPC12-35	50 - 1000	1.1	6.0
12	<a href="#">GBPC12005W to GBPC1210W</a>	GBPC with wire leads <sup>(2)</sup>	GBPC12-35W	50 - 1000	1.1	6.0
<b>15</b>	<b><a href="#">BU1506 to BU1510</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>BU</b>	<b>600 - 1000</b>	<b>1.05</b>	<b>7.5</b>
15	<a href="#">GBPC15005 to GBPC1510</a>	GBPC with fast-on lugs <sup>(2)</sup>	GBPC12-35	50 - 1000	1.1	7.5
15	<a href="#">GBPC15005W to GBPC1510W</a>	GBPC with wire leads <sup>(2)</sup>	GBPC12-35W	50 - 1000	1.1	7.5
15	<a href="#">GSIB1520 to GSIB1580</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	0.95	7.5
15	<a href="#">GSIB1520N, GSIB1540N, GSIB1560N, GSIB1580N</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	0.95	7.5
15	<a href="#">GSIB15A20 to GSIB15A80</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.05	7.5
15	<a href="#">GSIB15A20N, GSIB15A40N, GSIB15A60N, GSIB15A80N</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.05	7.5
15	VSIB1520 thru VSIB1580	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	0.95	7.5
15	VSIB15A20 thru VSIB15A80	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.0	7.5
20	<a href="#">BU2006 to BU2010</a>	Single in-line with mounting hole <sup>(2)</sup>	BU	600 - 1000	1.05	10
20	<a href="#">GSIB2020 to GSIB2080</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.1	10
20	<a href="#">GSIB2020N, GSIB2040N, GSIB2060N, GSIB2080N</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.1	10
20	VSIB2020 thru VSIB2080	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1	10
25	<a href="#">BU2506 to BU2510</a>	Single in-line with mounting hole <sup>(2)</sup>	BU	600 - 1000	1.05	12.5
25	<a href="#">GBPC25005 to GBPC2510</a>	GBPC with fast-on lugs <sup>(2)</sup>	GBPC12-35	50 - 1000	1.1	12.5
25	<a href="#">GBPC25005W to GBPC2510W</a>	GBPC with wire leads <sup>(2)</sup>	GBPC12-35W	50 - 1000	1.1	12.5
25	<a href="#">GSIB2520 to GSIB2580</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.05	12.5
25	<a href="#">GSIB2520N, GSIB2540N, GSIB2560N, GSIB2580N</a>	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1.05	12.5
25	VSIB2520 thru VSIB2580	Single in-line with mounting hole <sup>(2)(4)</sup>	GSIB-5S	200 - 800	1	12.5
<b>30</b>	<b><a href="#">PB3006 to PB3010</a></b>	<b>Single in-line with mounting hole<sup>(2)</sup></b>	<b>PB</b>	<b>600 - 1000</b>	<b>1.10</b>	<b>15</b>
35	<a href="#">GBPC35005 to GBPC3510</a>	GBPC with fast-on lugs <sup>(2)</sup>	GBPC12-35	50 - 1000	1.1	17.5
35	<a href="#">GBPC35005W to GBPC3510W</a>	GBPC with wire leads <sup>(2)</sup>	GBPC12-35W	50 - 1000	1.1	17.5
35	<a href="#">PB3506 to PB3510</a>	Single in-line with mounting hole <sup>(2)</sup>	PB	600 - 1000	1.10	17.5
40	<a href="#">PB4006 to PB4010</a>	Single in-line with mounting hole <sup>(2)</sup>	PB	600 - 1000	1.10	20
45	<a href="#">PB5006 to PB5010</a>	Single in-line with mounting hole <sup>(2)</sup>	PB	600 - 1000	1.10	22.5

Note:

1. Bold text indicates new product
2. Glass passivated die
3.  $t_{rr}$  = 50ns max. for EDF1 types

4. Japanese electrical specifications
5.  $V_F$  limits are per diode



# RECTIFIERS

## Featured Product Information

Rectifiers - Worldwide Leader in Power Rectifiers

### Rectifier Packages





# RECTIFIERS

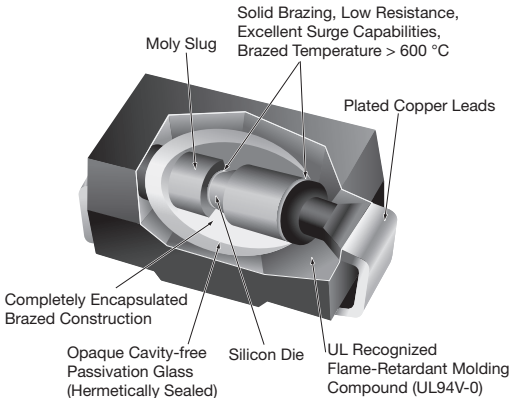
## Featured Product Information

Rectifiers - Worldwide Leader in Power Rectifiers

### Sample Package Construction

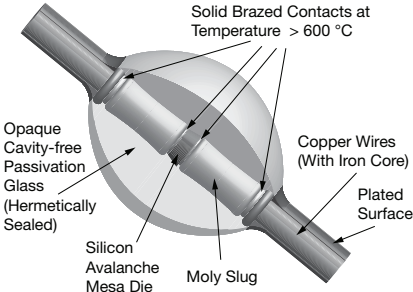
#### SUPERECTIFIER®

The SUPERECTIFIER is exactly that: a super rectifier. This highly-reliable and cost-effective rectifier is the result of a combination of patented technologies. No other 0.25 A to 3.0 A rectifiers of any kind — plastic, glass, or metal — can match the SUPERECTIFIER combination of features that result from Vishay’s unique glass-plastic construction. SUPERECTIFIER products are offered in standard, fast, and ultrafast types for both axial and surface mounting.



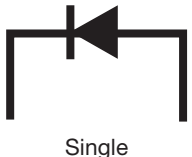
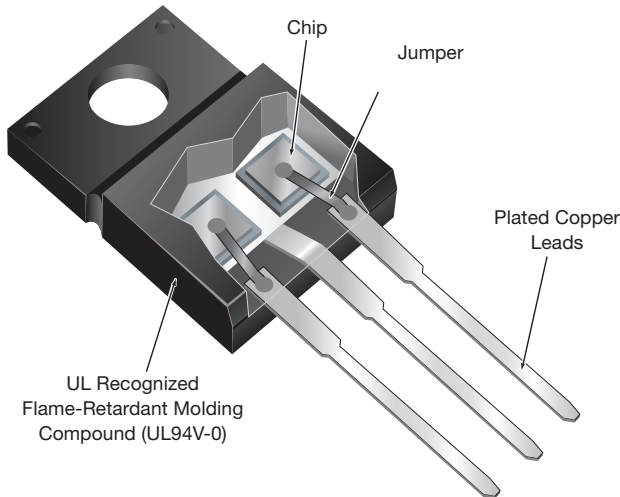
#### SINTERGLASS RECTIFIER

The glass passivated rectifier is a hermetically sealed, diffused junction rectifier with unsurpassed operating and surge capabilities at high temperatures. An extremely pure, specially developed glass applied in direct contact with the silicon junction, creates an ideal cavity-free passivating medium. Glass rectifiers are offered in standard, fast, and ultrafast types.



#### ITO-220AB

Vishay offers the TO-220 power package with either the heat sink exposed or with an isolated body, as shown below.





## WORLDWIDE SALES CONTACTS

**THE AMERICAS****UNITED STATES**

VISHAY AMERICAS  
 ONE GREENWICH PLACE  
 SHELTON, CT 06484  
 UNITED STATES  
 PH: +1-402-563-6866  
 FAX: +1-402-563-6296

**ASIA****SINGAPORE**

VISHAY INTERTECHNOLOGY ASIA PTE LTD.  
 37A TAMPINES STREET 92 #07-00  
 SINGAPORE 528886  
 PH: +65-6788-6668  
 FAX: +65-6788-0988

**P.R. CHINA**

VISHAY CHINA CO., LTD.  
 15D, SUN TONG INFOPORT PLAZA  
 55 HUAI HAI WEST ROAD  
 SHANGHAI 200030  
 P.R. CHINA  
 PH: +86-21-5258 5000  
 FAX: +86-21-5258 7979

**JAPAN**

VISHAY JAPAN CO., LTD.  
 SHIBUYA PRESTIGE BLDG. 4F  
 3-12-22, SHIBUYA  
 SHIBUYA-KU  
 TOKYO 150-0002  
 JAPAN  
 PH: +81-3-5466-7150  
 FAX: +81-3-5466-7160

**EUROPE****GERMANY**

VISHAY ELECTRONIC GMBH  
 DR.-FELIX-ZANDMAN-PLATZ 1  
 95100 SELB  
 GERMANY  
 PH: +49-9287-71-0  
 FAX: +49-9287-70435

**FRANCE**

VISHAY S.A.  
 199, BD DE LA MADELEINE  
 06003 NICE, CEDEX 1  
 FRANCE  
 PH: +33-4-9337-2727  
 FAX: +33-4-9337-2726

**UNITED KINGDOM**

VISHAY LTD.  
 SUITE 6C, TOWER HOUSE  
 ST. CATHERINE'S COURT  
 SUNDERLAND ENTERPRISE PARK  
 SUNDERLAND SR5 3XJ  
 UNITED KINGDOM  
 PH: +44-191-516-8584  
 FAX: +44-191-549-9556