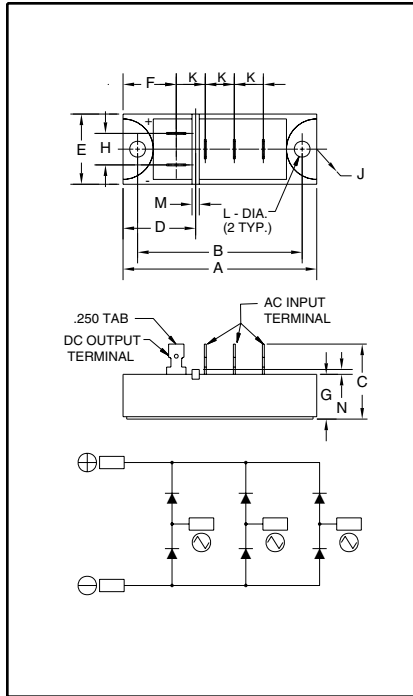


Three-Phase Diode Bridge Modules 20 Amperes/1200-1600 Volts



Outline Drawing

Dimension	Inches	Millimeters
A	3.150	80
B	2.677±0.012	68±0.3
C	1.220	31
D	1.181	30
E	1.142	29
F	0.866	22
G	0.728	18.5
H	0.512	13
J	0.492 R	R12.5
K	0.472	12
L	0.256±0.008 Dia.	Dia. 6.5±0.2
M	0.118	3
N	0.079	2



ME701202, ME701602
Three-Phase Diode Bridge Modules
20 Amperes/1200-1600 Volts

Description:

Powerex Three-Phase Diode Bridge Modules are designed for use in three phase bridge applications. The modules are isolated consisting of six rectifier diodes. These ME70 Modules have been tested and recognized by Underwriters Laboratories (QQX2 Power Switching Semiconductors).

Features:

- Isolated Mounting
- Planar Chips
- UL Recognized

Applications:

- Inverters
- DC Power Supplies
- AC Motor Control Front End

Ordering Information:

Select the complete eight digit module part number you desire from the table below.

Example: ME701602 is a 1600 Volt, 20 Ampere Three-Phase Diode Bridge Module.

Type	Voltage Volts (x100)	Current Rating Amperes (x10)
ME70	12	02
	16	



Powerex, Inc., 200 Hillis Street, Youngwood, Pennsylvania 15697-1800 (724) 925-7272

ME701202, ME701602
Three-Phase Diode Bridge Modules
20 Amperes/1200-1600 Volts

Absolute Maximum Ratings

Characteristics	Symbol	ME701202	ME701602	Units
Peak Reverse Blocking Voltage	V_{RRM}	1200	1600	Volts
Transient Peak Reverse Blocking Voltage (Non-Repetitive), $t < 5ms$	V_{RSM}	1350	1700	Volts
DC Reverse Blocking Voltage	$V_{R(DC)}$	960	1280	Volts
DC Output Current, $T_C = 100^\circ C$	I_O	20	20	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (60Hz)	I_{FSM}	200	200	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (50Hz)	I_{FSM}	180	180	Amperes
I^2t (for Fusing), 8.3 milliseconds	I^2t	167	167	A ² sec
Storage Temperature	T_{STG}	-40 to 125	-40 to 125	°C
Operating Temperature	T_j	-40 to 150	-40 to 150	°C
Maximum Mounting Torque M6 Mounting Screw	—	26	26	in.-lb.
Module Weight (Typical)	—	117	117	Grams
V Isolation	V_{RMS}	2500	2500	Volts



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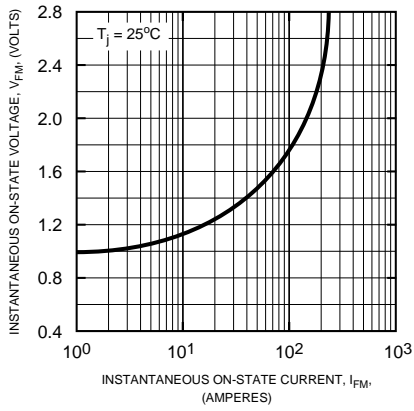
ME701202, ME701602
Three-Phase Diode Bridge Modules
20 Amperes/1200-1600 Volts

Electrical and Thermal Characteristics, $T_j = 25^\circ\text{C}$ unless otherwise specified

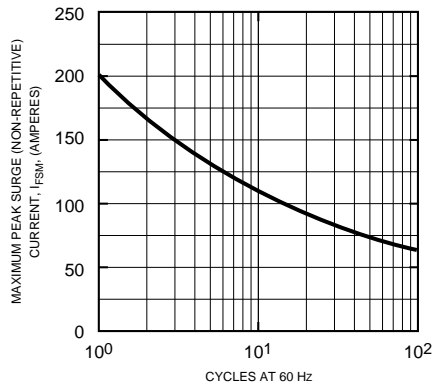
Characteristics	Symbol	Test Conditions	ME701202/ME701602	Units
Blocking State Maximums				
Reverse Leakage Current, Peak	I_{RRM}	$T_j = 150^\circ\text{C}$, $V_{RRM} = \text{Rated}$	2.0	mA
Conducting State Maximums				
Peak On-State Voltage	V_{FM}	$I_{FM} = 20\text{A}$	1.25	Volts
Thermal Maximums				
Thermal Resistance, Junction-to-Case	$R_{\theta(J-C)}$	Per Module	1.0	$^\circ\text{C/Watt}$
Thermal Resistance, Case-to-Sink (Lubricated)	$R_{\theta(C-S)}$	Per Module	0.1	$^\circ\text{C/Watt}$

ME701202, ME701602
Three-Phase Diode Bridge Modules
 20 Amperes/1200-1600 Volts

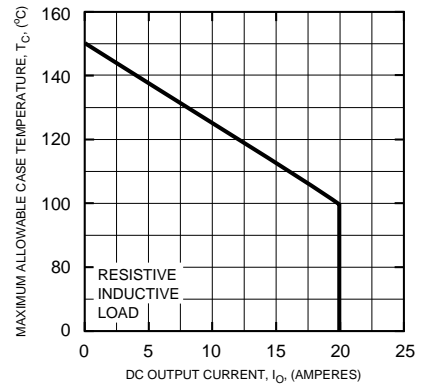
MAXIMUM ON-STATE CHARACTERISTICS



MAXIMUM ALLOWABLE PEAK SURGE (NON-REPETITIVE) CURRENT



MAXIMUM ALLOWABLE CASE TEMPERATURE



MAXIMUM ON-STATE POWER DISSIPATION

