



Micro Commercial Components

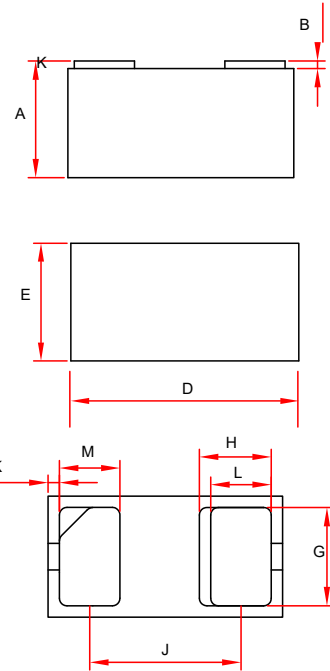


Micro Commercial Components
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RB520S-30EP

**100 mA
 Schottky Barrier Diode
 30 Volts**

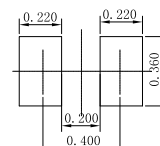
0201-B



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|------------|-------|------------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.011 | 0.013 | 0.275 | 0.345 | |
| B | 0.000 | 0.004 | 0.010 | 0.090 | |
| D | 0.022 | 0.026 | 0.570 | 0.670 | |
| E | 0.011 | 0.015 | 0.270 | 0.370 | |
| G | 0.009 | 0.012 | 0.225 | 0.295 | |
| H | 0.007 REF. | | 0.190 REF. | | |
| J | 0.014 | 0.017 | 0.365 | 0.435 | |
| K | 0.001 REF. | | 0.030 REF. | | |
| L | 0.005 | 0.008 | 0.125 | 0.195 | |
| M | 0.005 | 0.008 | 0.125 | 0.195 | |

SUGGESTED SOLDER PAD LAYOUT



Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Reliability
- Low Reverse Current and Low Forward Voltage.
- Small Surface Mount Type
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

| Symbol | Rating | Rating | Unit |
|--------------|--|-------------|---------------|
| V_R | Repetitive Peak Reverse Voltage | 30 | V |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 21 | V |
| I_O | Mean Rectifying Current | 100 | mA |
| I_{FSM} | Non-Repetitive Peak forward Surge Current @ $t=8.3ms$, half sine wave | 500 | mA |
| P_d | Power Dissipation | 100 | mW |
| R_{thJA} | Thermal Resistance from Junction to Ambient | 1000 | $^{\circ}C/W$ |
| T_J | Junction Temperature | 125 | $^{\circ}C$ |
| T_{STG} | Storage Temperature | -55 to +150 | $^{\circ}C$ |

Electrical Characteristics @ 25°C Unless Otherwise Specified

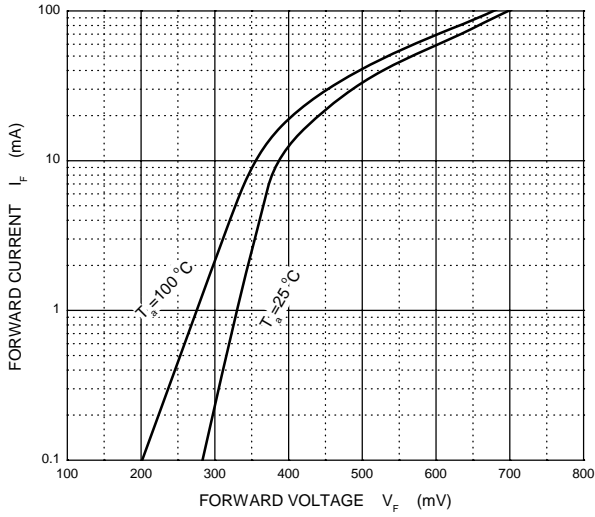
| Symbol | Parameter | Min | Typ | Max | Units |
|----------------------------|---|-----|-----|------|---------|
| OFF CHARACTERISTICS | | | | | |
| V_F | Forward Voltage ($I_F=10mA$) ($I_F=100mA$) | --- | --- | 0.45 | Vdc |
| | | --- | --- | 0.85 | Vdc |
| I_R | Reverse Current ($V_R=10Vdc$) ($V_R=30Vdc$) | --- | --- | 0.3 | μA |
| | | --- | --- | 20 | μA |
| $V_{(BR)}$ | Reverse Breakdown Voltage ($I_R=50\mu A$) | 30 | --- | --- | Vdc |

MARKING

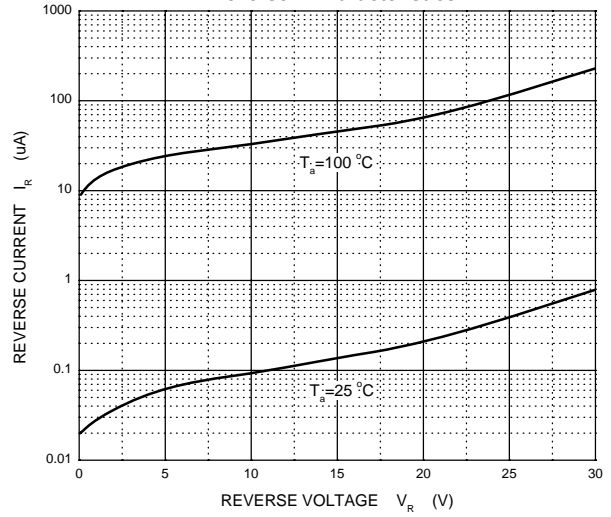


RB520S-30EP

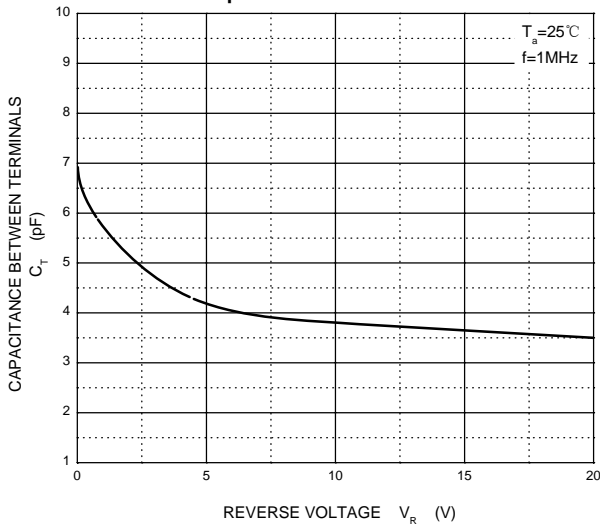
Forward Characteristics



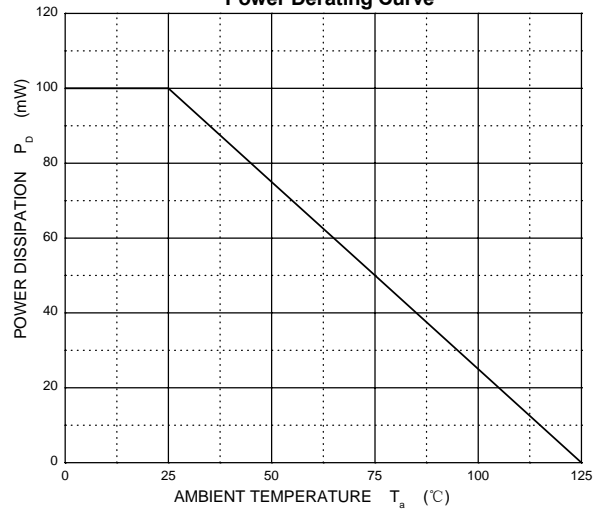
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





Ordering Information :

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 10Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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