

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Small Surface Mounting Type
- Low Reverse Current And Low Forward Voltage
- High Reliability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: 125°C
- Storage Temperature Range: -40°C to +125°C
- Thermal Resistance: 500°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | RMS Reverse Voltage $V_R(RMS)$ | Maximum DC Blocking Voltage |
|-----------------|----------------|--|--------------------------------|-----------------------------|
| RB500V-40 | 2 | 45V | 32V | 45V |

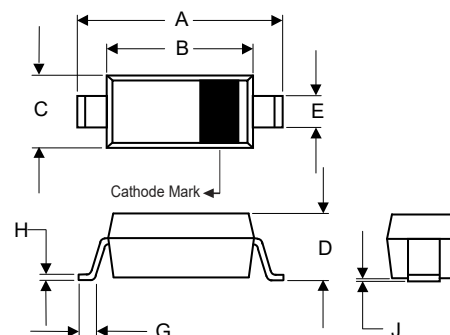
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|----------------------------|-----------|----------------|----------------------|
| Mean Rectifying Current | I_O | 100mA | |
| Peak Forward Surge Current | I_{FSM} | 1A | |
| Forward Voltage | V_F | 0.45V(Max) | $I_F=10mA$; |
| Reverse Current | I_R | 1 μ A(Max) | $V_R=10V$ |
| Capacitance Terminal | C_T | 6.0pF(Typ) | $V_R=10V$, $f=1MHz$ |

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

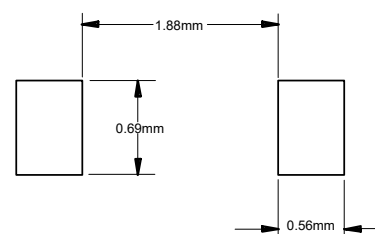
0.1 Amp Schottky Barrier Rectifier 45 Volts

SOD-323



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.090 | 0.107 | 2.30 | 2.70 | |
| B | 0.063 | 0.071 | 1.60 | 1.80 | |
| C | 0.045 | 0.053 | 1.15 | 1.35 | |
| D | 0.031 | 0.045 | 0.80 | 1.15 | |
| E | 0.010 | 0.016 | 0.25 | 0.40 | |
| G | 0.004 | 0.018 | 0.10 | 0.45 | |
| H | 0.004 | 0.010 | 0.10 | 0.25 | |
| J | ----- | 0.006 | ----- | 0.15 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Characteristics

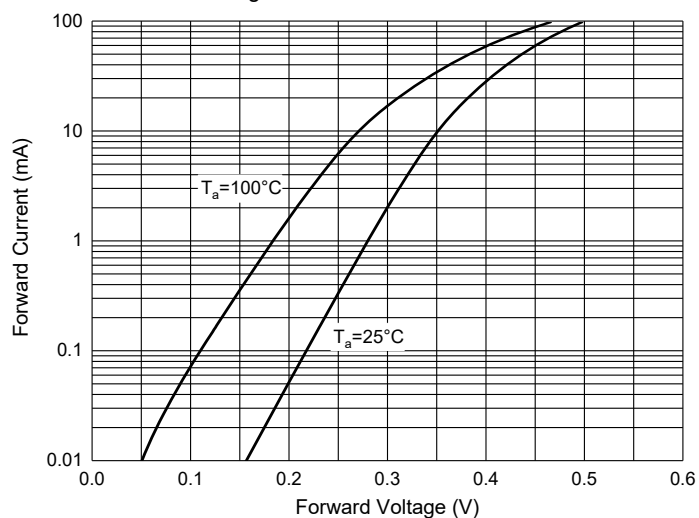


Fig. 2 - Reverse Characteristics

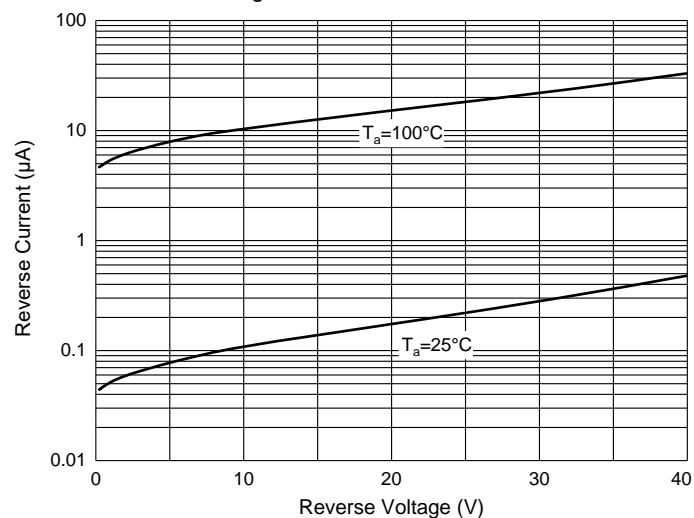


Fig. 3 - Capacitance between terminals characteristics

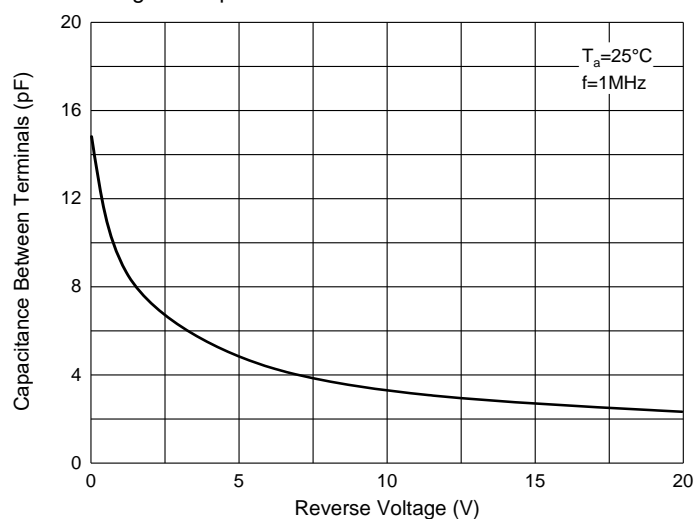
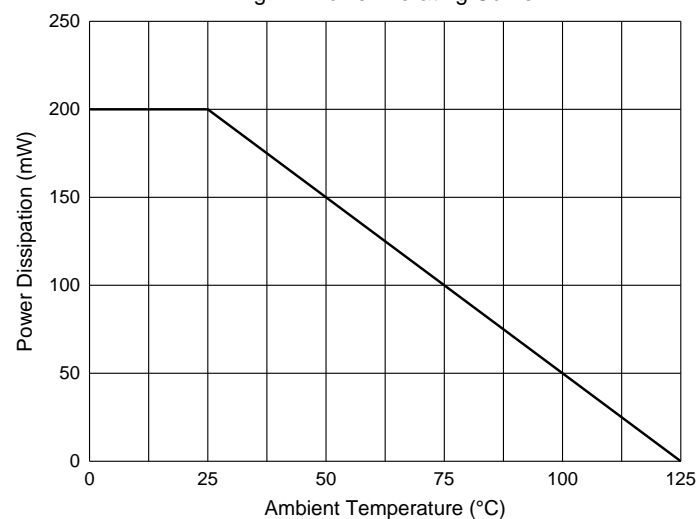


Fig. 4 - Power Derating Curve



Ordering Information

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

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