

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- For Surface Mount Application
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 244°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| B0540W | R41 | 40V | 28V | 40V |

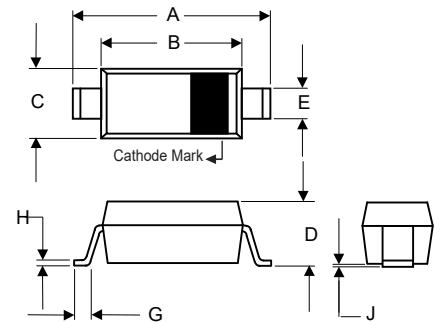
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|-------|------------------------------------|
| Average Forward Current | $I_{F(AV)}$ | 0.5A | |
| Peak Forward Surge Current | I_{FSM} | 5.5A | 8.3ms half sine |
| Maximum Instantaneous Forward Voltage | V_F | 0.55V | $I_{FM}=0.5A;$ $T_J=25^\circ C$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 80µA | $T_J=25^\circ C$ |
| Typical Junction Capacitance | C_J | 30pF | Measured at 1.0MHz, $V_R = 4.0 V$ |
| Power Dissipation | P_D | 410mW | |

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

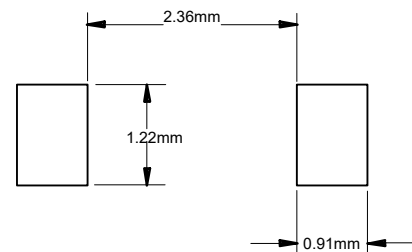
**0.5 Amp
Schottky Rectifier
40 Volts**

SOD-123



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.140 | 0.152 | 3.55 | 3.85 | |
| B | 0.100 | 0.112 | 2.55 | 2.85 | |
| C | 0.055 | 0.071 | 1.40 | 1.80 | |
| D | ---- | 0.053 | ---- | 1.35 | |
| E | 0.018 | 0.026 | 0.45 | 0.65 | |
| G | 0.006 | ---- | 0.15 | ---- | |
| H | ---- | 0.010 | ---- | 0.25 | |
| J | ---- | 0.006 | ---- | 0.15 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Characteristics

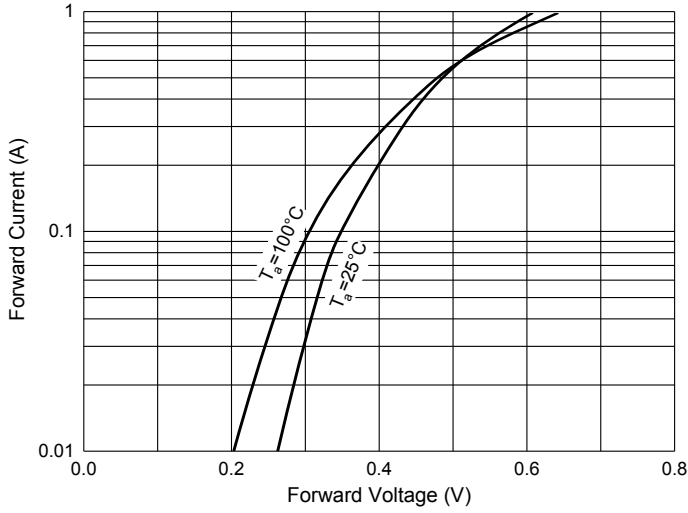


Fig. 2 - Reverse Characteristics

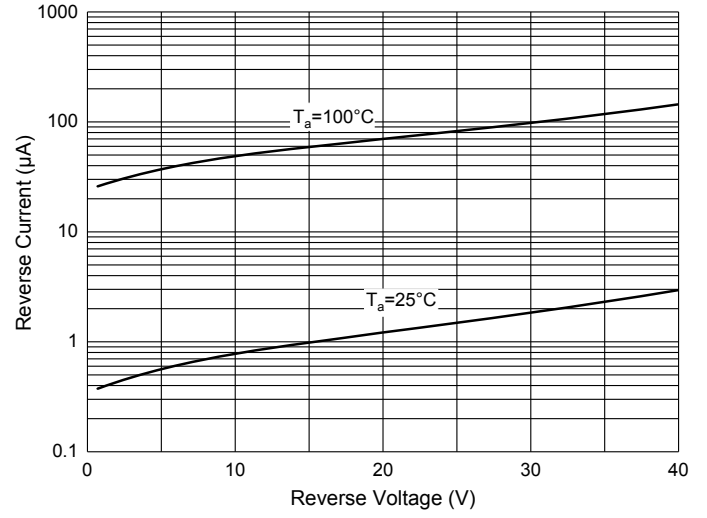


Fig. 3 - Capacitance Characteristics

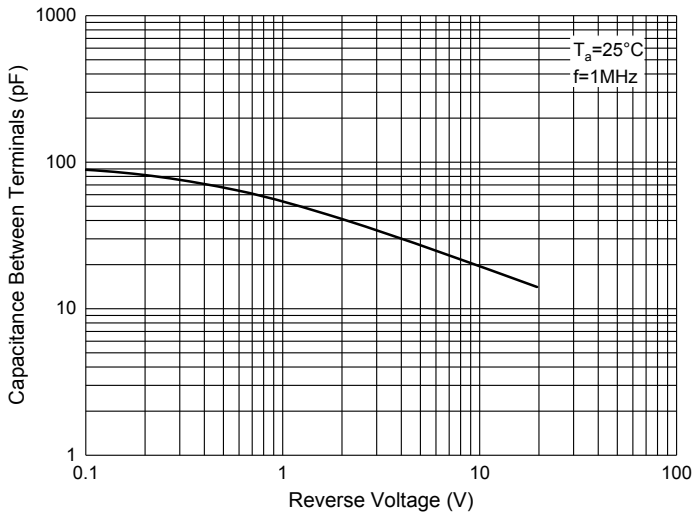
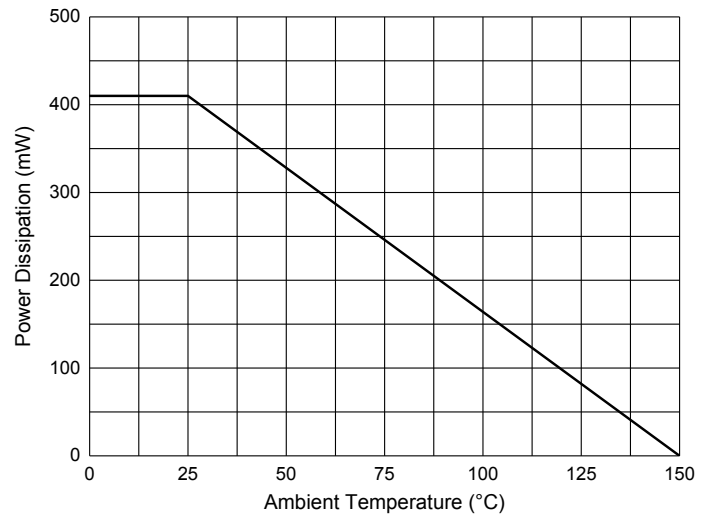


Fig. 4 - Power Derating Curve



Ordering Information

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

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