

Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Low Forward Voltage Drop
- For General Purpose Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 250°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SD101AWHE3 | S1 | 60V | 42V | 60V |
| SD101BWHE3 | S2 | 50V | 35V | 50V |
| SD101CWHE3 | S3 | 40V | 28V | 40V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

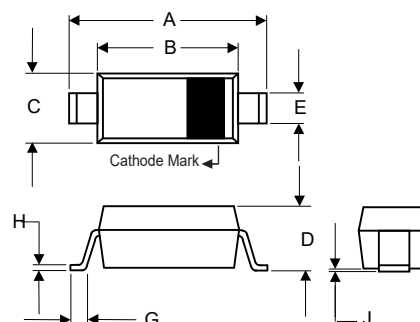
| | | | |
|------------------------------|-------------|--|--|
| Average Forward Current | $I_{F(AV)}$ | 15mA | |
| Peak Forward Surge Current | I_{FSM} | 2.0A | t=8.3ms |
| Power Dissipation(Note 2) | P_d | 400mW | |
| Maximum Forward Voltage Drop | V_F | 0.41V 0.40V 0.39V 1.00V 0.95V 0.90V | $I_{FM}=1mA;$ $I_{FM}=15mA;$ |
| Maximum Leakage Current | I_R | 200nA | VR = 50V VR = 40V VR = 30V |
| Reverse Recovery Time | t_{rr} | 1ns | $I_F=I_R=5mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$ |
| Junction Capacitance | C_J | 2.0pF 2.1pF 2.2pF | Measured at f=1.0MHz, VR=0.0V |

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

Note: 2. Valid provided that electrodes are kept at ambient Temperature

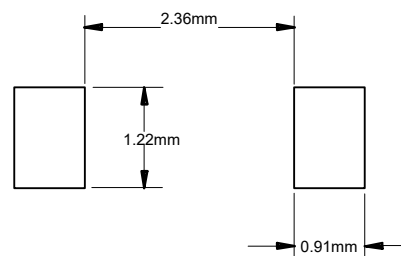
400mW Small Signal Schottky Diode 40 to 60 Volts

SOD-123



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | 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 - Typical Instantaneous Forward Characteristics

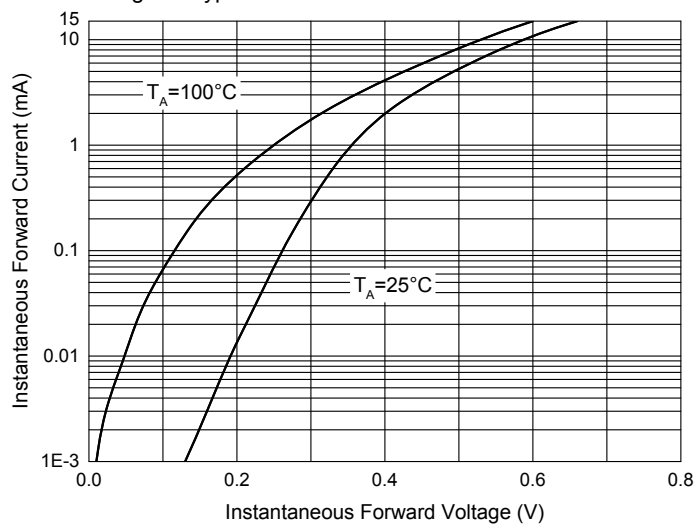


Fig. 2 - Typical Reverse Leakage Characteristics

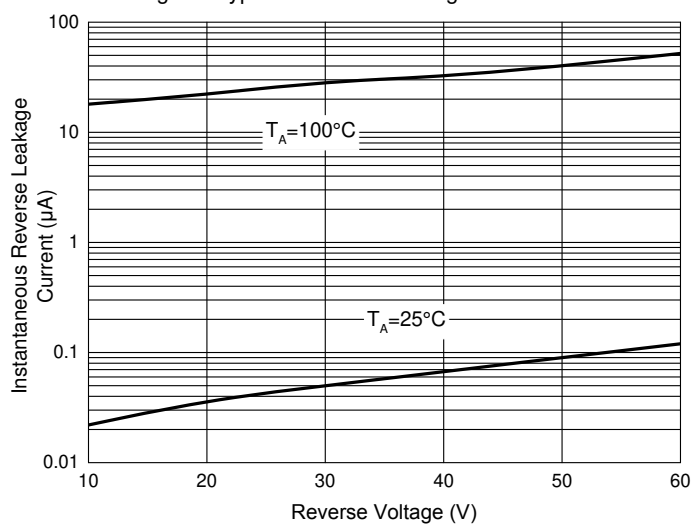
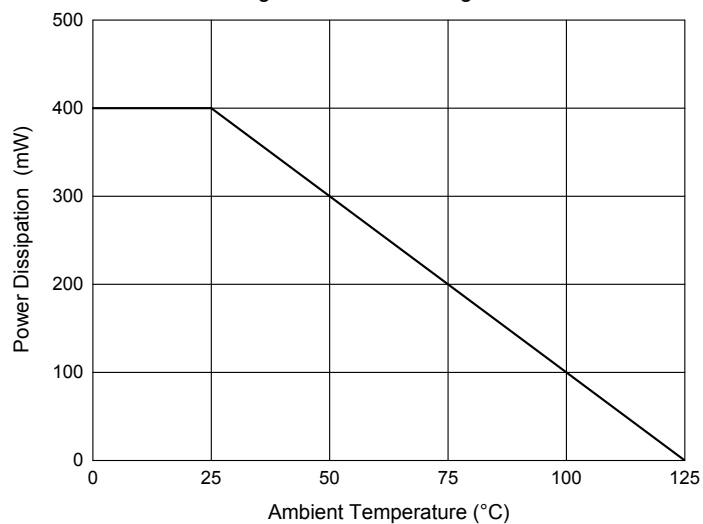


Fig. 3 - Power Derating Curve



Ordering Information

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

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