

## Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- High Current Capability
- Low Forward Voltage
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- 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: 28°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| SMD110PLHE3     | D10            | 100V                                   | 70V                 | 100V                        |

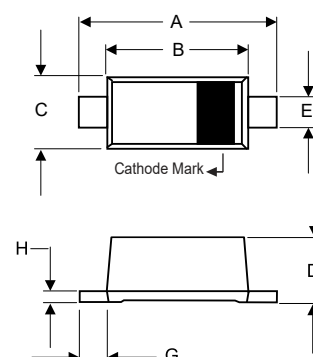
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |             |              |                                                    |
|---------------------------------------------------------|-------------|--------------|----------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A         | $T_L=100^\circ\text{C}$                            |
| Peak Forward Surge Current                              | $I_{FSM}$   | 30A          | 8.3ms, Half Sine                                   |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 0.85V        | $I_{FM}=1.0A$ ;<br>$T_J=25^\circ\text{C}$ (Note:3) |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 5uA<br>160uA | $T_J=25^\circ\text{C}$<br>$T_J=125^\circ\text{C}$  |
| Typical Junction Capacitance                            | $C_J$       | 30pF         | Measured at 1.0MHz, $V_R=4.0V$                     |

- Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
 2. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.  
 3. Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

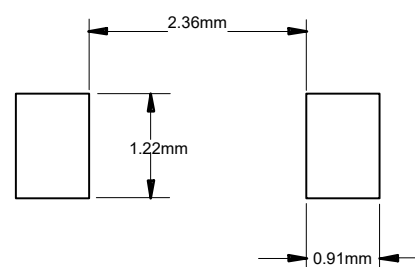
# 1 Amp Schottky Rectifier 100 Volts

## SOD-123FL



| DIMENSIONS |        |       |      |      |      |
|------------|--------|-------|------|------|------|
| DIM        | INCHES |       | MM   |      | NOTE |
|            | MIN    | MAX   | MIN  | MAX  |      |
| A          | 0.130  | 0.152 | 3.30 | 3.85 |      |
| B          | 0.100  | 0.122 | 2.55 | 3.10 |      |
| C          | 0.055  | 0.075 | 1.40 | 1.90 |      |
| D          | 0.035  | 0.053 | 0.90 | 1.35 |      |
| E          | 0.020  | 0.041 | 0.50 | 1.05 |      |
| G          | 0.010  | ----  | 0.25 | ---- |      |
| H          | ----   | 0.010 | ---- | 0.25 |      |

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

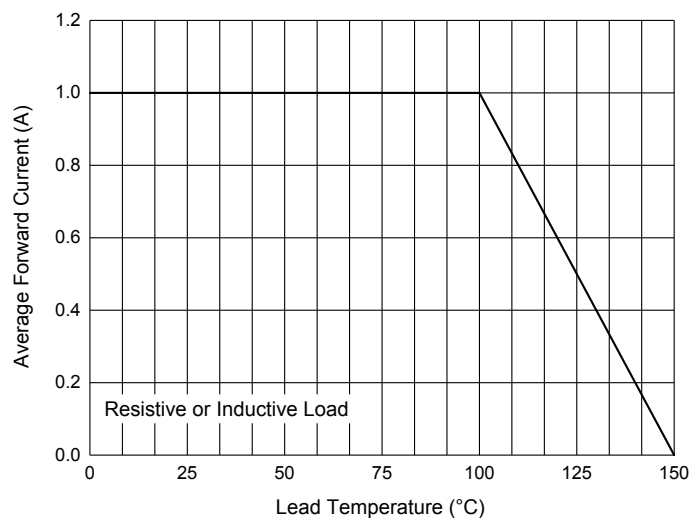


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

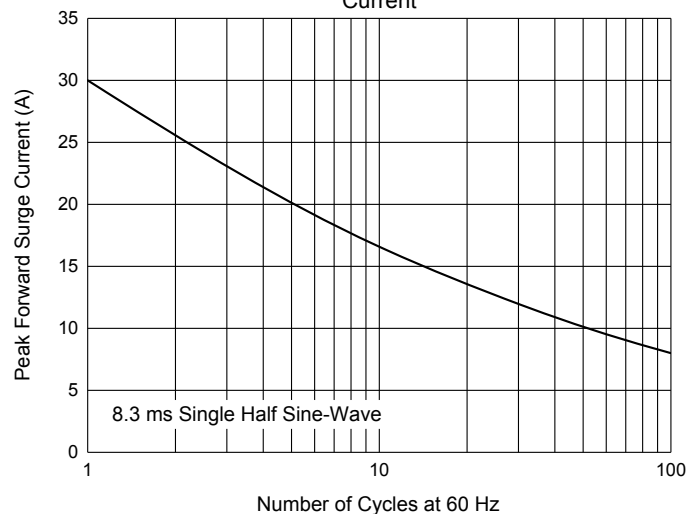


Fig. 3 - Typical Instantaneous Forward Characteristics

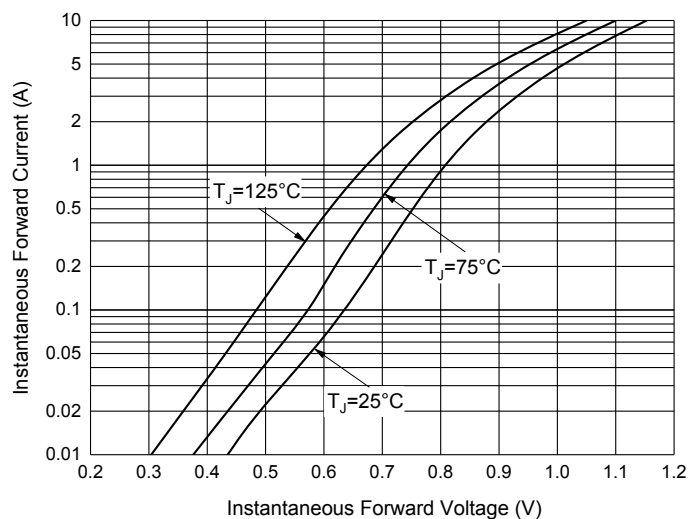
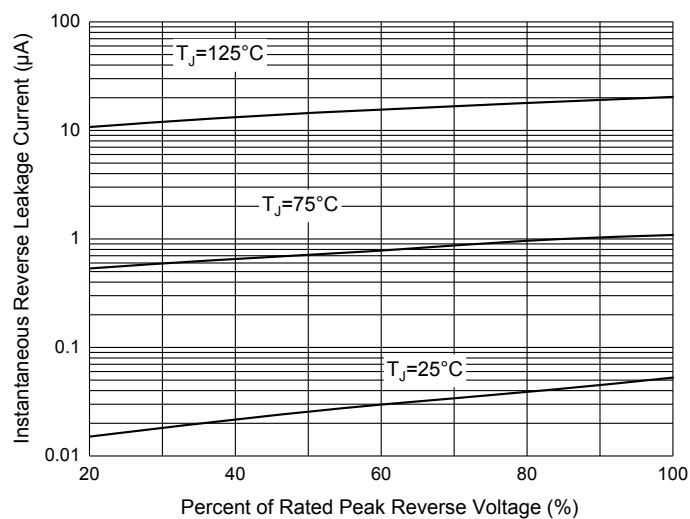


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                 |
|----------------|-------------------------|
| Part Number-TP | Tape&Reel: 2.5Kpcs/Reel |

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