

### Features

- Guard Ring Protection
- Low Power Loss For High Efficiency
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"

### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +125°C
- Maximum Thermal Resistance: 30°C/W Junction To Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| SR105           | SR105          | 50V                                    | 35V                 | 50V                         |
| SR106           | SR106          | 60V                                    | 42V                 | 60V                         |
| SR108           | SR108          | 80V                                    | 56V                 | 80V                         |
| SR1010          | SR1010         | 100V                                   | 70V                 | 100V                        |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

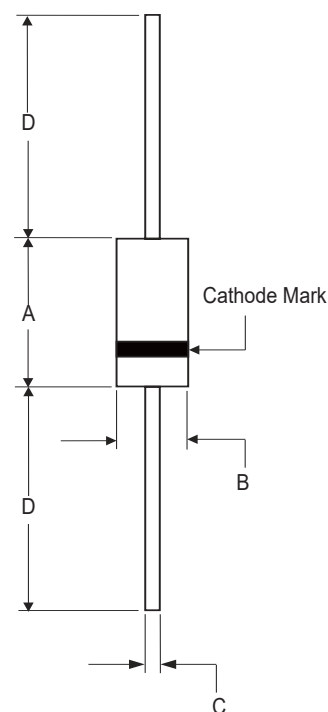
|   |             |                |   |
|---|-------------|----------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A           | $T_A = 75^\circ\text{C}$                            |
| Peak Forward Surge Current                              | $I_{FSM}$   | 30A            | 8.3ms, Half Sine                                    |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 0.70V<br>0.85V | $I_{FM}=1.0A$ ;<br>$T_J=25^\circ\text{C}^*$         |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 0.1mA<br>10mA  | $T_J=25^\circ\text{C}$ ;<br>$T_J=100^\circ\text{C}$ |

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Note : 1.High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

# 1.0 Amp Schottky Barrier Rectifier 50 to 100 Volts

## DO-41



| DIM | DIMENSIONS |       |       |      | NOTE   |
|-----|------------|-------|-------|------|--------|
|     | INCHES     |       | MM    |      |        |
|     | MIN        | MAX   | MIN   | MAX  |        |
| A   | 0.160      | 0.205 | 4.10  | 5.20 |        |
| B   | 0.080      | 0.107 | 2.00  | 2.70 | $\Phi$ |
| C   | 0.028      | 0.035 | 0.71  | 0.90 | $\Phi$ |
| D   | 1.000      | ----  | 25.40 | ---- |        |

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

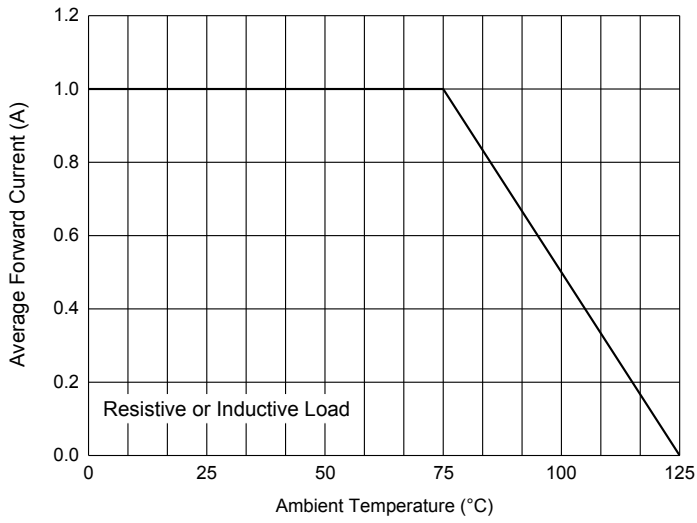


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

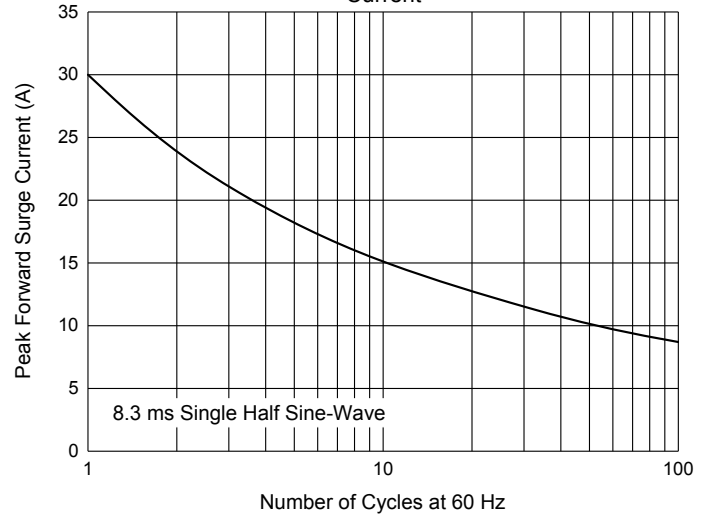


Fig. 3 - Typical Instantaneous Forward Characteristics

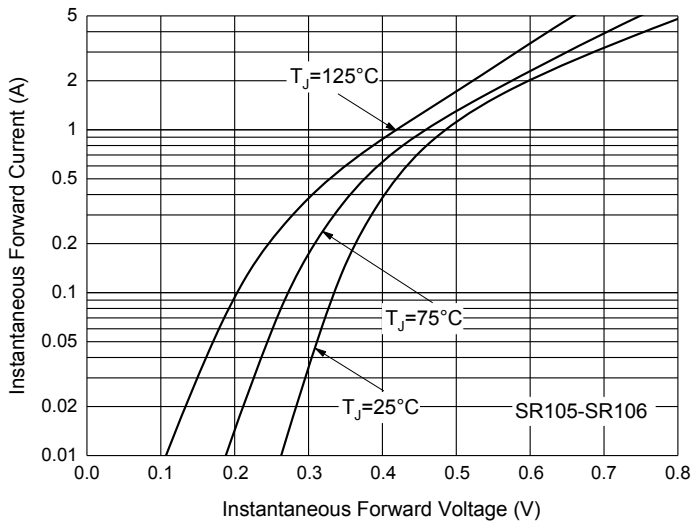


Fig. 4 - Typical Instantaneous Forward Characteristics

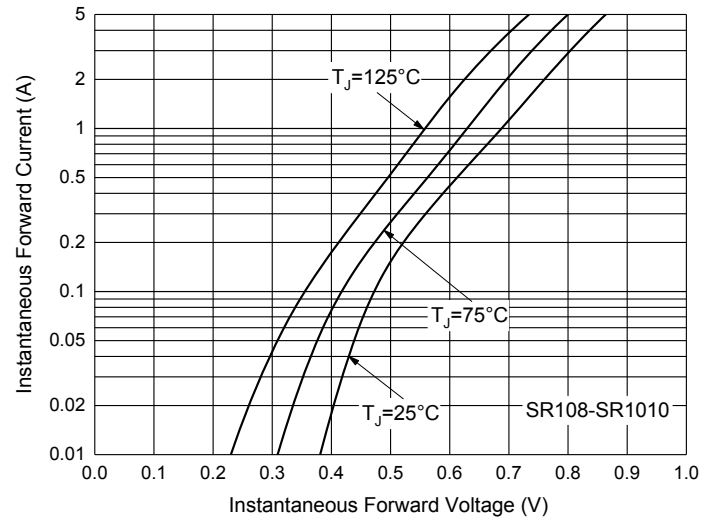


Fig. 5 - Typical Reverse Leakage Characteristics

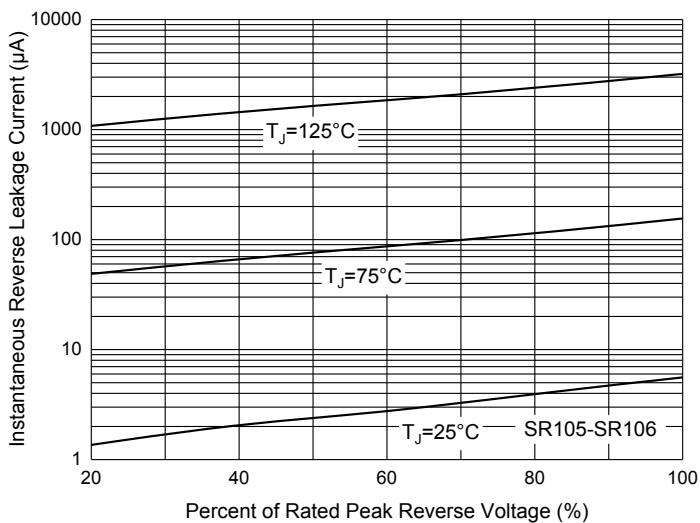
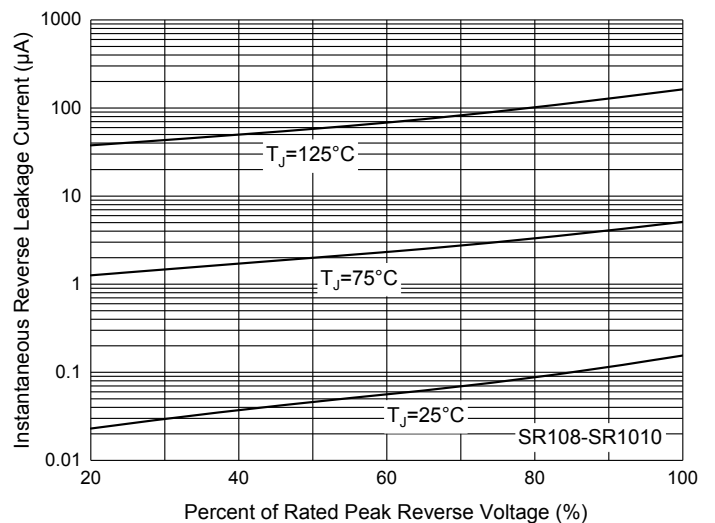


Fig. 6 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                     |
|----------------|-----------------------------|
| Part Number-TP | Tape&Reel:5Kpcs/Reel        |
| Part Number-AP | Ammo Packing:5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 50Kpcs/Carton         |

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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- Техническая поддержка проекта;
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