

### **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"

# 1.0 Amp Schottky Barrier Rectifier 50 to 100 Volts

# **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

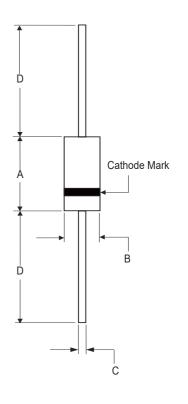
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 75°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SR105-SR106 SR108-SR1010	V <sub>F</sub>	0.70V 0.85V	I <sub>FM</sub> =1.0A; T <sub>J</sub> =25°C*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C

<sup>\*</sup>Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

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

# DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	INOTE
Α	0.160	0.205	4.10	5.20	
В	0.080	0.107	2.00	2.70	Ф
С	0.028	0.035	0.71	0.90	Ф
D	1.000		25.40		



## **Curve Characteristics**

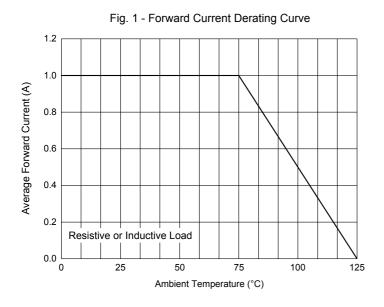


Fig. 3 - Typical Instantaneous Forward Characteristics

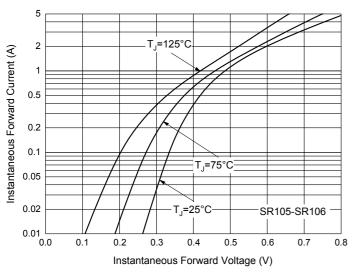


Fig. 5 - Typical Reverse Leakage Characteristics

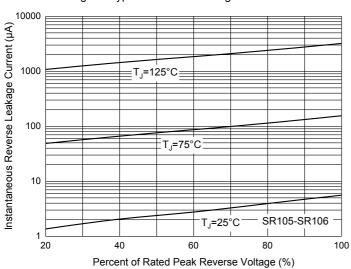


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

35

20

20

20

10

8.3 ms Single Half Sine-Wave
0
1
10
Number of Cycles at 60 Hz

Fig. 4 - Typical Instantaneous Forward Characteristics

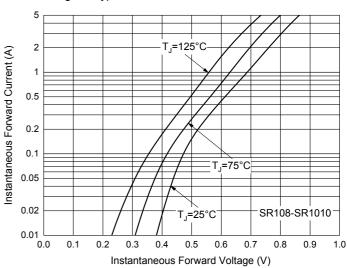
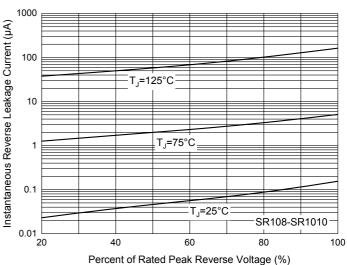


Fig. 6 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel	
(Part Number)-AP	Ammo Packing: 5Kpcs/Ammo Box	
(Part Number)-BP	Bulk:1Kpcs/Box,50Kpcs/Carton	

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

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Micro Commercial Components (MCC): SR1010-TP SR105-TP SR105-AP SR105-BP