

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Low Forward Voltage Drop And Low Switching Noise
- High Surge Current Capability And High Current Capability
- 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: 18°C/W Junction to Ambient

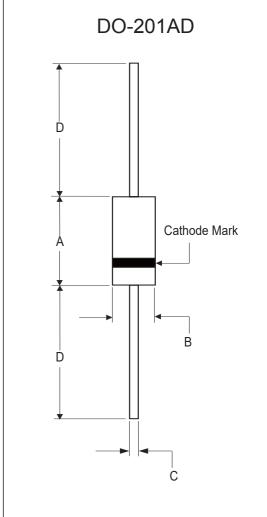
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SR502	SR502	20V	14V	20V
SR503	SR503	30V	21V	30V
SR504	SR504	40V	28V	40V
SR505	SR505	50V	35V	50V
SR506	SR506	60V	42V	60V
SR508	SR508	80V	56V	80V
SR5010	SR5010	100V	70V	100V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	5.0A	T <sub>A</sub> =85°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SR502-SR504 SR505-SR506 SR508-SR5010	V <sub>F</sub>	0.55V 0.70V 0.85V	I <sub>FM</sub> =5.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA	Т <sub>J</sub> =25°С;
Typical Junction Capacitance	CJ	200pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

# 5 Amp Schottky Barrier Rectifier 50 to 100 Volts



	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.287	0.374	7.30	9.50		
В	0.189	0.208	4.80	5.30		
С	0.048	0.052	1.20	1.30		
D	1.000		25.40			



### **Curve Characteristics**

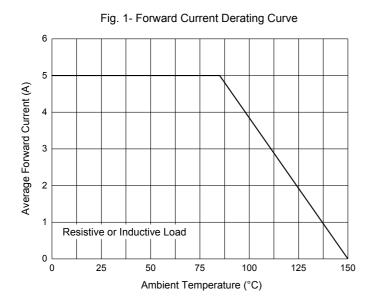


Fig. 3 - Typical Instantaneous Forward Characteristics

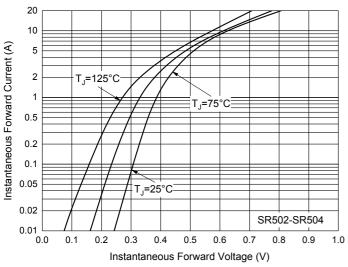


Fig. 5 - Typical Instantaneous Forward Characteristics

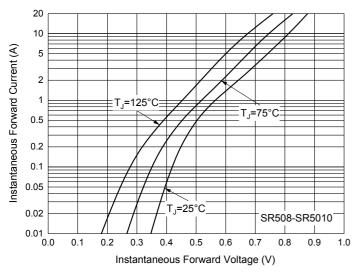


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

175
150
150
100
90
100
25
8.3 ms Single Half Sine-Wave
0
1 10 100

Fig. 4 - Typical Instantaneous Forward Characteristics

Number of Cycles at 60 Hz

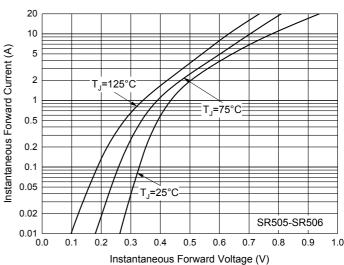
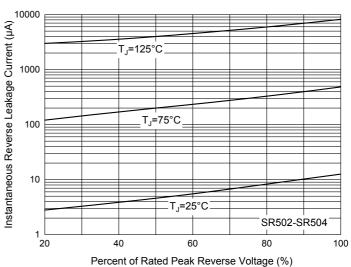


Fig. 6 - Typical Reverse Leakage Characteristics





## **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

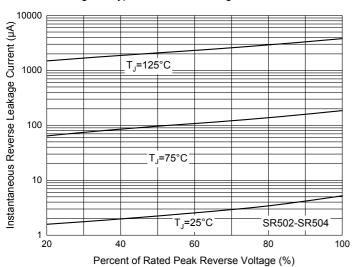
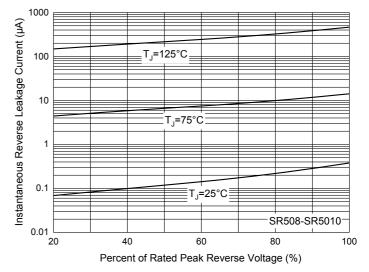


Fig. 8 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel		
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box		
Part Number-BP	Bulk: 12Kpcs/Carton		

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

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