

#### **Features**

- 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
- · High Surge Forward Current Capability
- Halogen Free. "Green" Device (Note 2)

# **Maximum Ratings**

- Operating Junction Temperature Range:-55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 16°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SL54B	SL54	40V	28V	40V
SL56B	SL56	60V	42V	60V
SL510B	SL510	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

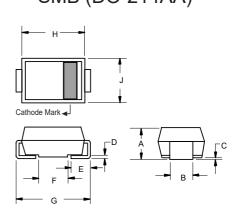
Average Forward Current	I <sub>F(AV)</sub>	5.0A	T <sub>L</sub> =95°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SL54B SL56B SL510B	V <sub>F</sub>	0.45V 0.5V 0.65V	I <sub>FM</sub> =5.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25°C T <sub>J</sub> =100°C

### Note:

- 1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
- 2. Halogen free "Green"products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

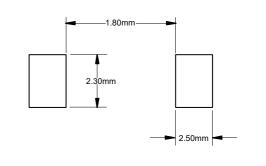
# 5 Amp Low VF Schottky Rectifier 40 to 100 Volts

# SMB (DO-214AA)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.079	0.103	2.00	2.62	
В	0.075	0.087	1.91	2.21	
С	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
Е	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
Н	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

#### Suggested Solder Pad Layout





### **Curve Characteristics**

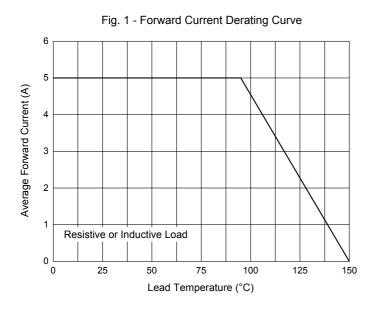


Fig. 3 - Typical Instantaneous Forward Characteristics

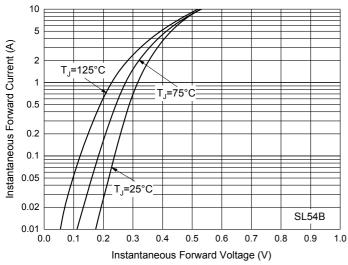


Fig. 5 - Typical Instantaneous Forward Characteristics

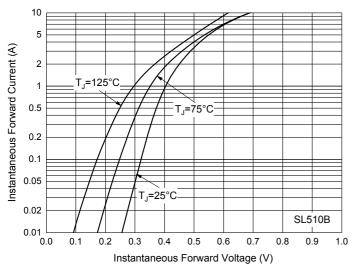


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

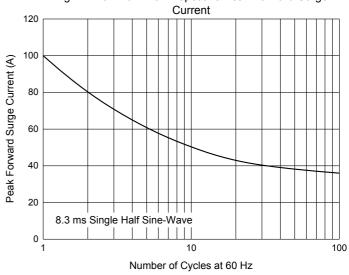


Fig. 4 - Typical Instantaneous Forward Characteristics

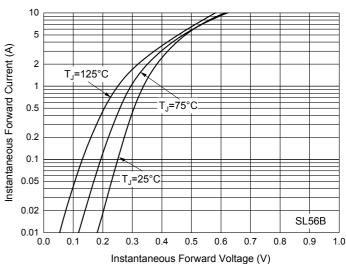
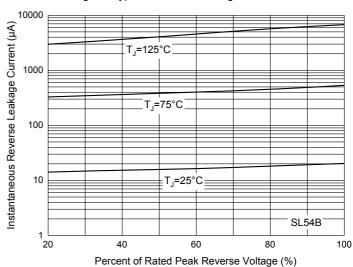


Fig. 6 - Typical Reverse Leakage Characteristics





# **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

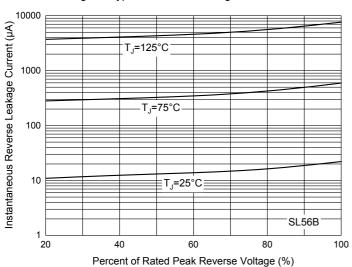
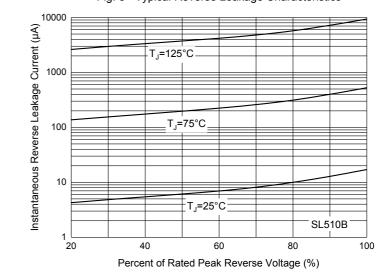


Fig. 8 - Typical Reverse Leakage Characteristics





# **Ordering Information**

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

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