

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Guardring For Overvoltage Protection
- High Forward Surge Capability
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating

# 2.0 Amp Schottky Rectifier 20 to 100 Volts

# **Maximum Ratings**

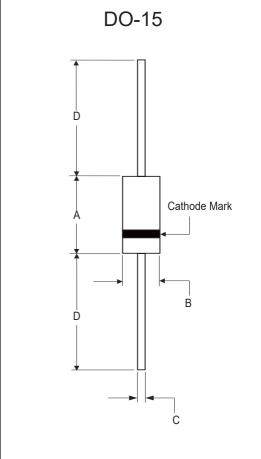
- Operating Junction Temperature Range: -55°C to +125°C(SB220L-SB240L)
- Operating Junction Temperature Range: -55°C to +150°C(SB250L-SB2010L)
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 45°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SB220L	SB220L	20V	14V	20V
SB230L	SB230L	30V	21V	30V
SB240L	SB240L	40V	28V	40V
SB250L	SB250L	50V	35V	50V
SB260L	SB260L	60V	42V	60V
SB280L	SB280L	80V	56V	80V
SB2010L	SB2010L	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Output Current	Io	2.0A	See Fig. 1
Maximum Surge Current	I <sub>FSM</sub>	35A	8.3ms,Half Sine
Max Peak Forward Voltage SB220L-SB240L SB250L-SB260L SB280L-SB2010L	V <sub>FM</sub>	0.45V 0.48V 0.75V	I <sub>FM</sub> =2.0A;
Max Peak Reverse Current	I <sub>RM</sub>	0.1mA 10mA	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C
Typical Junction Capacitance	CJ	180pF	V <sub>R</sub> =4.0V f=1.0MHz

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



DIMENSIONS						
DIM INCI		HES MM		M	NOTE	
Dilvi	MIN	MAX	MIN	MAX	INOTE	
Α	0.230	0.300	5.80	7.60		
В	0.104	0.140	2.60	3.60		
С	0.026	0.035	0.70	0.90		
D	1.000		25.40			



### **Curve Characteristics**

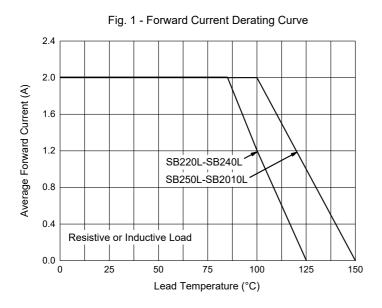


Fig. 3 - Typical Instantaneous Forward Characteristics

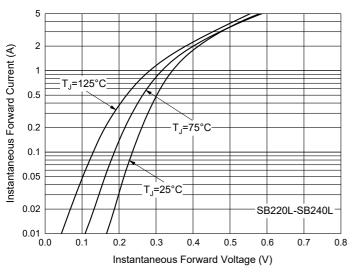


Fig. 5 - Typical Instantaneous Forward Characteristics

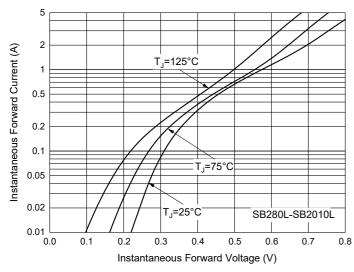


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

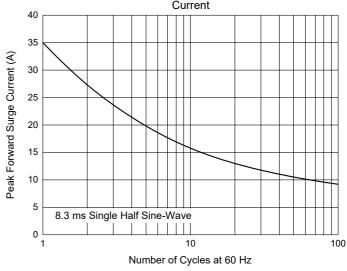


Fig. 4 - Typical Instantaneous Forward Characteristics

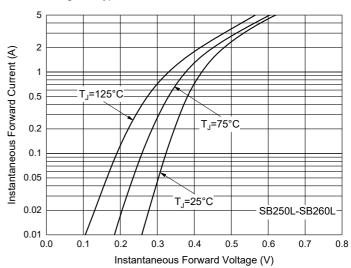
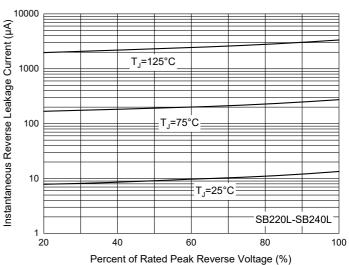


Fig. 6 - Typical Reverse Leakage Characteristics





# **Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

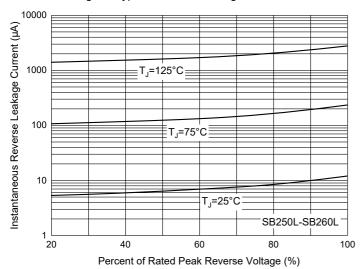
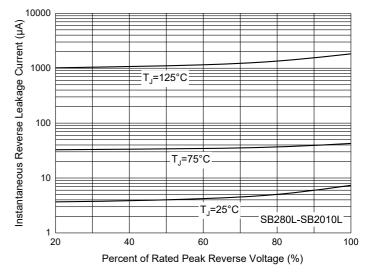


Fig. 8 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing		
(Part Number)-TP	Tape&Reel: 4Kpcs/Reel		
(Part Number)-AP	Ammo Packing: 3Kpcs/Ammo Box		
(Part Number)-BP	Bulk:500pcs/Box,25Kpcs/Carton		

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

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