

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Schottky Barrier Rectifier
- Guard Ring Protection
- High Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- For Use In Low Voltage, High Frequency Inverters, Free Wheeling, And Polarity Protection Applications
- Halogen Free Available Upon Request By Adding Suffix "-HF"

Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Maximum Thermal Resistance: 15°C/W Junction To Lead
- Maximum Thermal Resistance: 15°C/W Junction To Ambient*

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SB220	SB220	20V	14V	20V
SB230	SB230	30V	21V	30V
SB240	SB240	40V	28V	40V
SB245	SB245	45V	31.5V	45V
SB250	SB250	50V	35V	50V
SB260	SB260	60V	42V	60V

Electrical Characteristics @ 25°C Unless Otherwise Specified

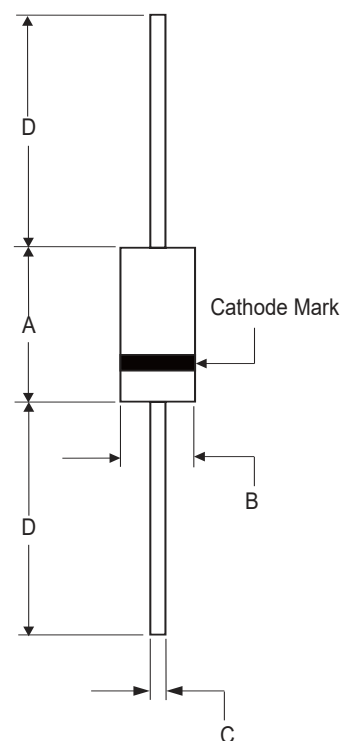
Average Rectified Output Current*	I_O	2.0A	$T_L=100^\circ\text{C}$
Maximum Surge Current	I_{FSM}	50A	8.3ms, Half Sine
Max Peak Forward Voltage SB220-SB245 SB250-SB260	V_{FM}	0.5V 0.7V	$I_{FM}=2.0\text{A};$
Max Peak Reverse Current	I_{RM}	0.1mA 10mA	$T_J=25^\circ\text{C};$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance SB220-SB245 SB250-SB260	C_J	170pF 140pF	$V_R=4.0\text{V}$ $f=1.0\text{MHz}$

*Valid provided that leads are kept at ambient temperature at a distance of 915mm from the case

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

2.0 Amp Schottky Rectifier 20 to 60 Volts

DO-15



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.026	0.035	0.70	0.90	
D	1.000	-----	25.40	-----	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

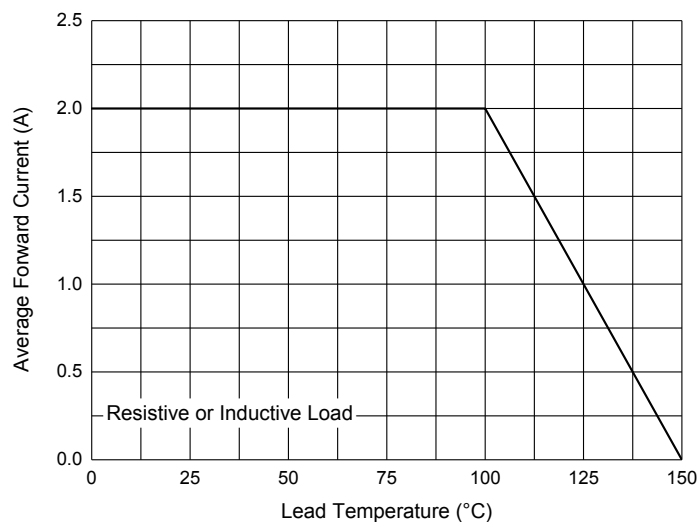


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

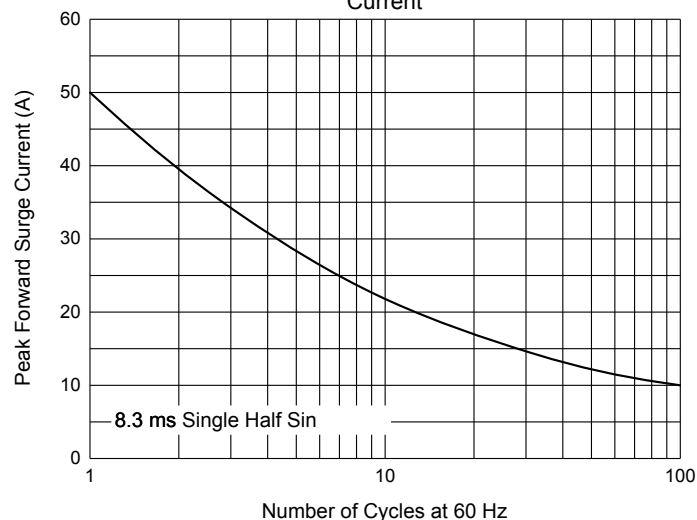


Fig. 3 - Typical Instantaneous Forward Characteristics

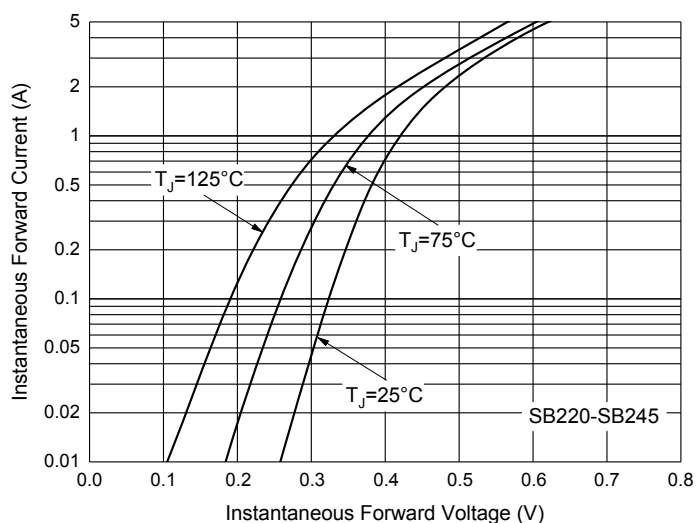


Fig. 4 - Typical Instantaneous Forward Characteristics

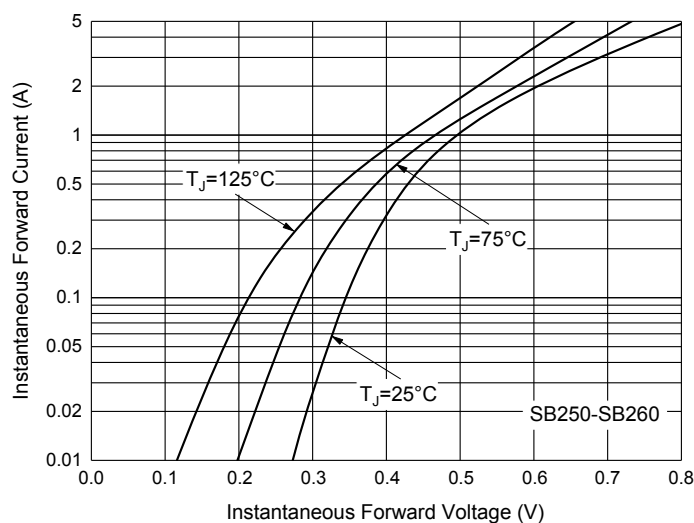


Fig. 5 - Typical Reverse Leakage Characteristics

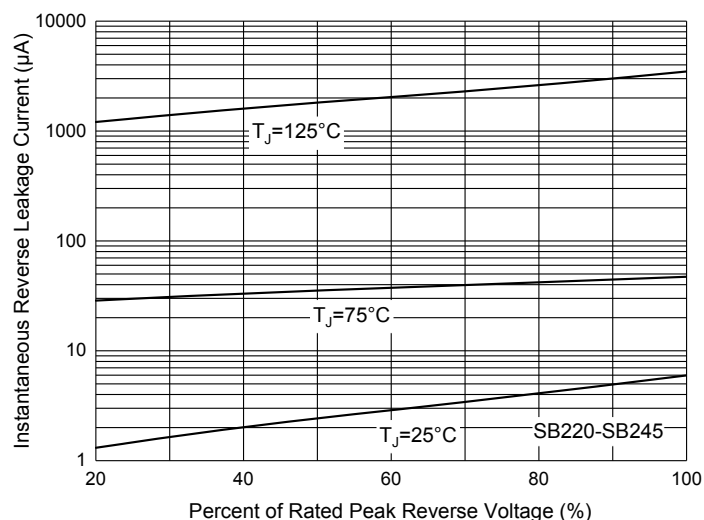
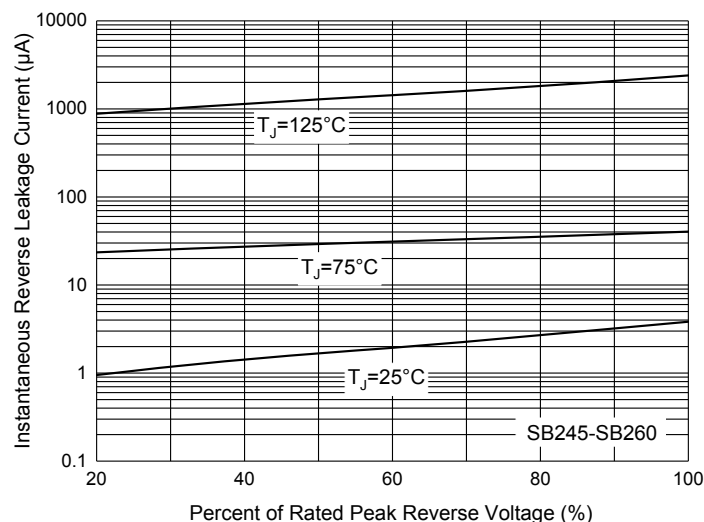


Fig. 6 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 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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