

### Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop
- High Current Capability And High Surge Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Junction Temperature Range(SB1520-1540): -65°C to +125°C
- Operating Junction Temperature Range(SB1550-15100): -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical 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
SB1520	SB1520	20V	14V	20V
SB1530	SB1530	30V	21V	30V
SB1540	SB1540	40V	28V	40V
SB1550	SB1550	50V	35V	50V
SB1560	SB1560	60V	42V	60V
SB1580	SB1580	80V	56V	80V
SB15100	SB15100	100V	70V	100V

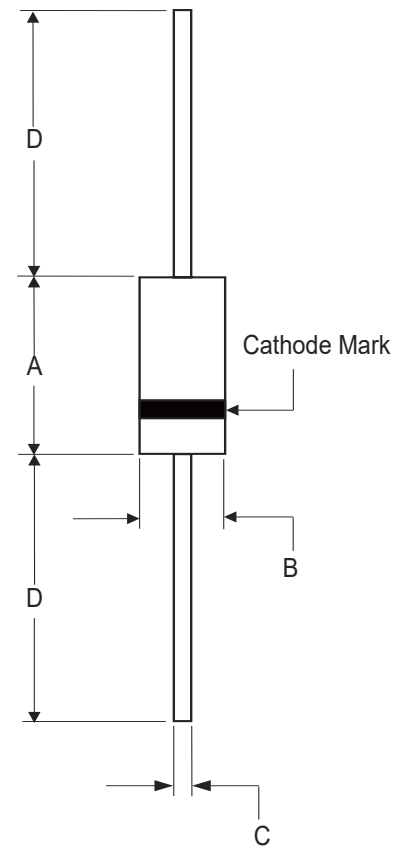
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	15.0A	$T_A=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage SB1520 ~ SB1540 SB1550 ~ SB1560 SB1580 ~ SB15100	$V_F$	0.60V 0.72V 0.85V	$I_{FM}=15.0A;$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1mA 20mA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance SB1520 ~ SB1540 SB1550 ~ SB15100	$C_J$	500pF 380pF	Measured at 1.0MHz, $V_R=4.0V$

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

## 15 Amp Schottky Barrier Rectifier 20 to 100 Volts

R-6



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.340	0.360	8.60	9.10	
B	0.340	0.360	8.60	9.10	
C	0.048	0.052	1.20	1.32	
D	1.000	-----	25.40	-----	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

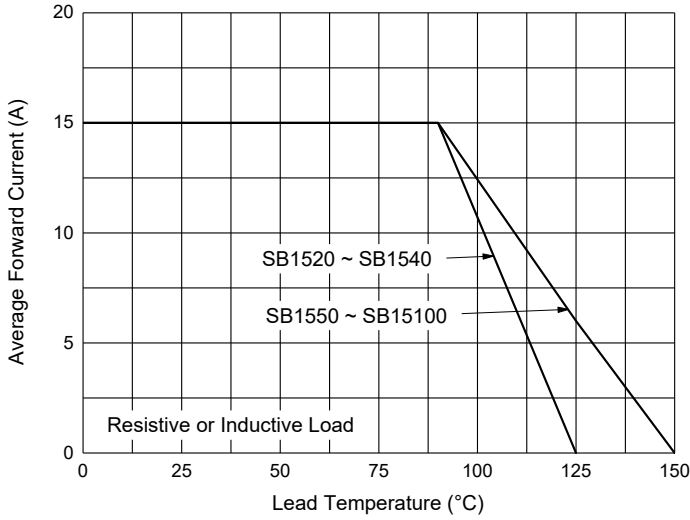


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

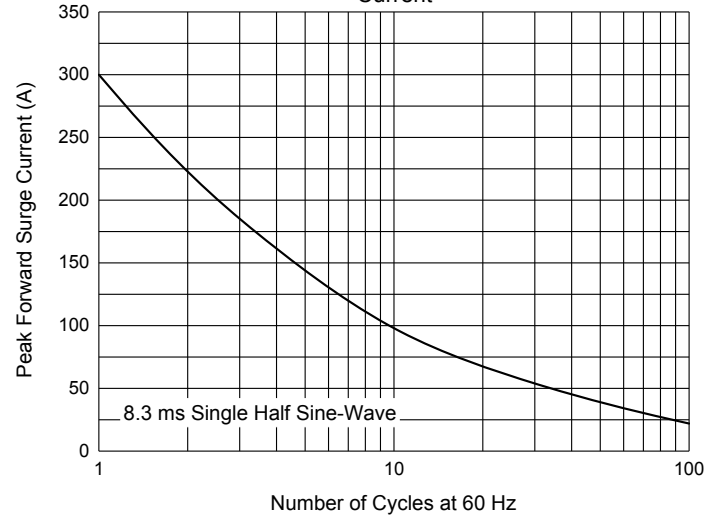


Fig. 3 - Typical Instantaneous Forward Characteristics

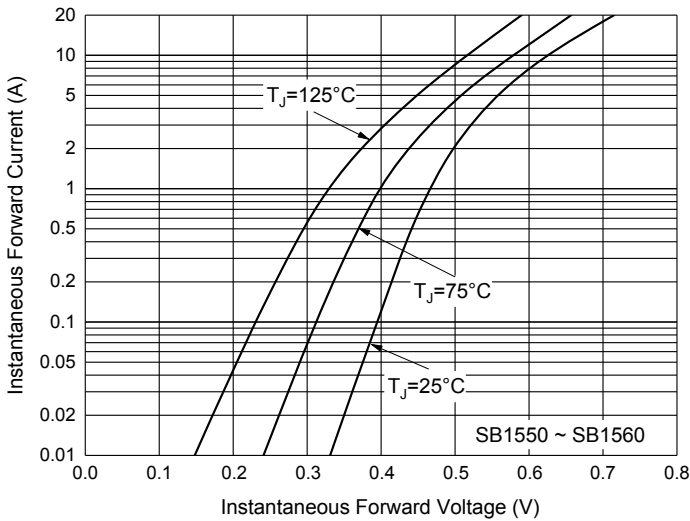


Fig. 4 - Typical Instantaneous Forward Characteristics

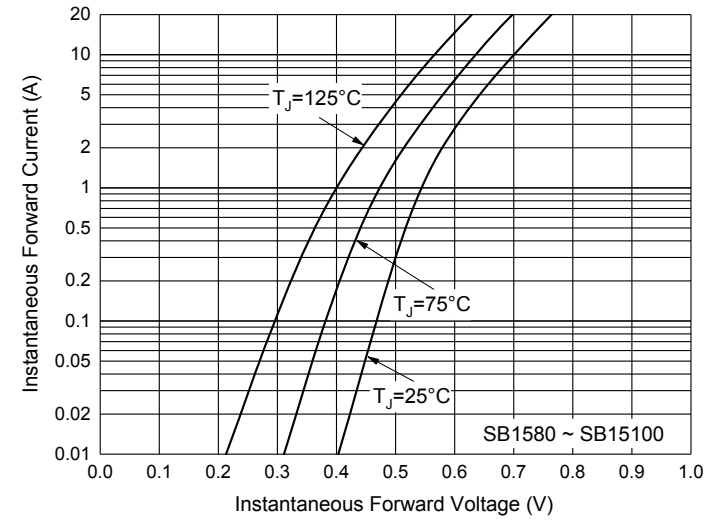


Fig. 5 - Typical Reverse Leakage Characteristics

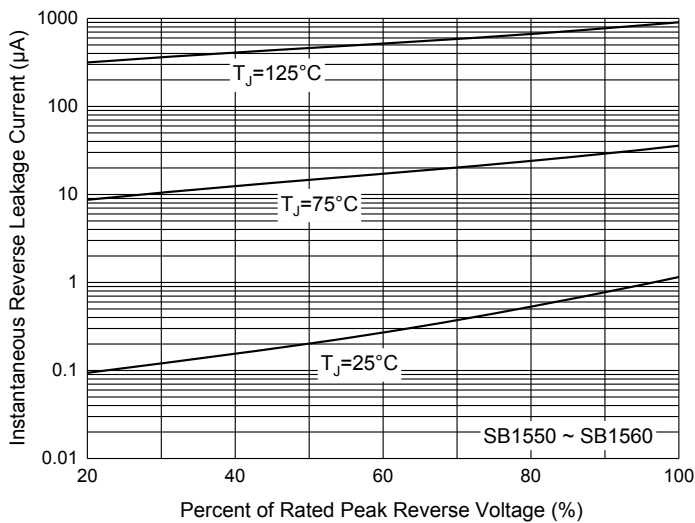
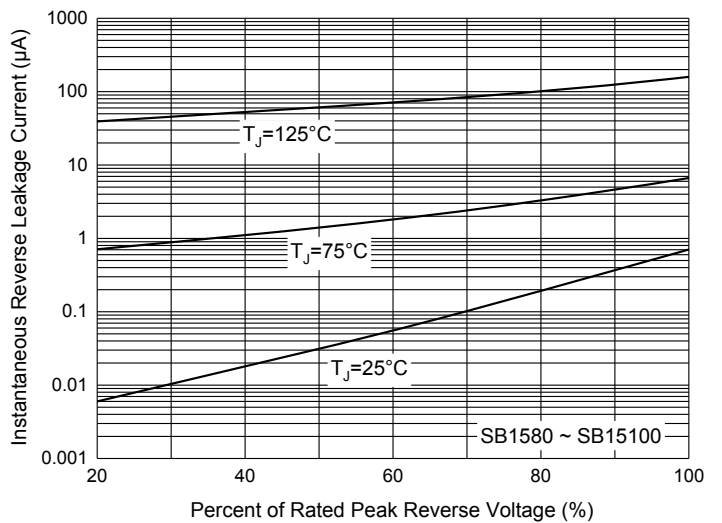


Fig. 6 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 500pcs/Reel
Part Number-AP	Ammo Packing: 450pcs/Ammo Box
Part Number-BP	Bulk: 200pcs/Box ;4.8Kpcs/Carton

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

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