

## 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 Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

## Maximum Ratings

- Operating Junction Temperature Range: -65°C to +125°C(SB1220-1240)
- Operating Junction Temperature Range: -65°C to +150°C(SB1250-12100)
- 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
SB1220	SB1220	20V	14V	20V
SB1230	SB1230	30V	21V	30V
SB1240	SB1240	40V	28V	40V
SB1250	SB1250	50V	35V	50V
SB1260	SB1260	60V	42V	60V
SB1280	SB1280	80V	56V	80V
SB12100	SB12100	100V	70V	100V

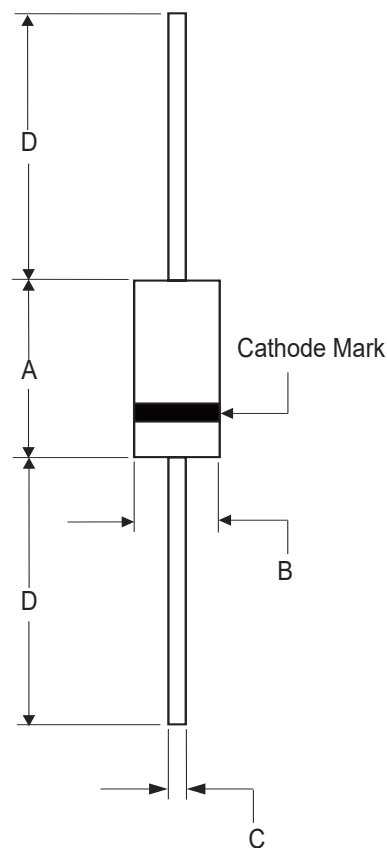
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	12A	$T_A=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage SB1220-SB1240 SB1250-SB1260 SB1280-SB12100	$V_F$	0.55V 0.70V 0.85V	$I_{FM}=12A;$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_J=25^\circ\text{C};$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance SB1220-SB1240 SB1250-SB12100	$C_J$	500pF 380pF	Measured at 1.0MHz, $V_R=4.0V$

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

# 12 Amp Schottky Barrier Rectifier 20 to 100 Volts

## DO-201AD



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.287	0.374	7.30	9.50	
B	0.189	0.208	4.80	5.30	
C	0.048	0.052	1.20	1.30	
D	1.000	-----	25.40	-----	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

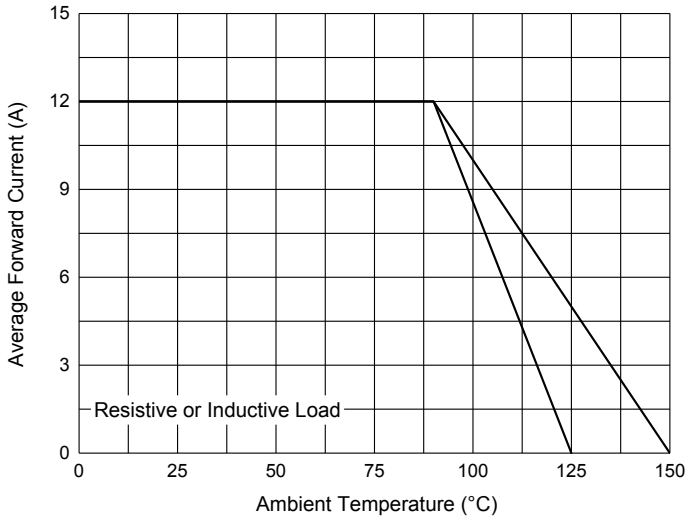


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

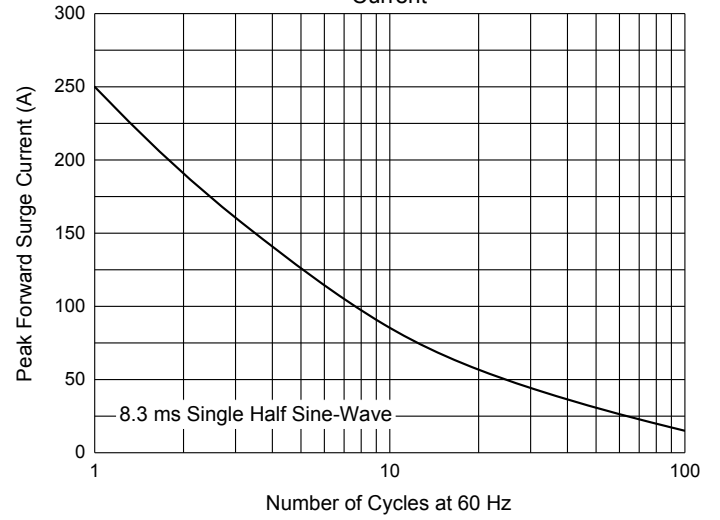


Fig. 3 - Typical Instantaneous Forward Characteristics

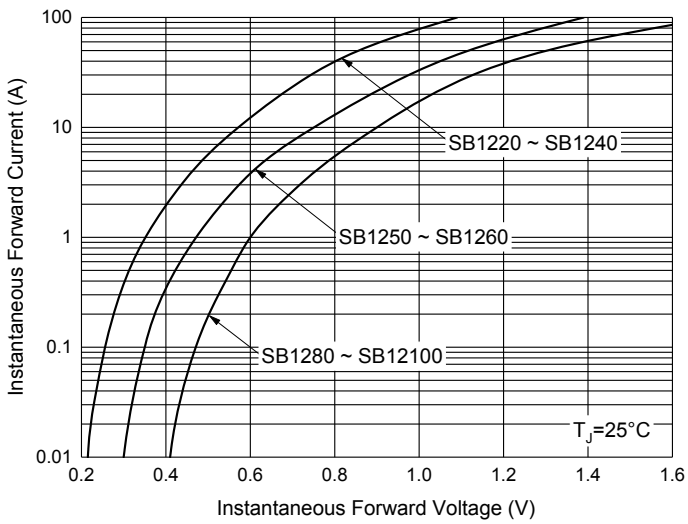
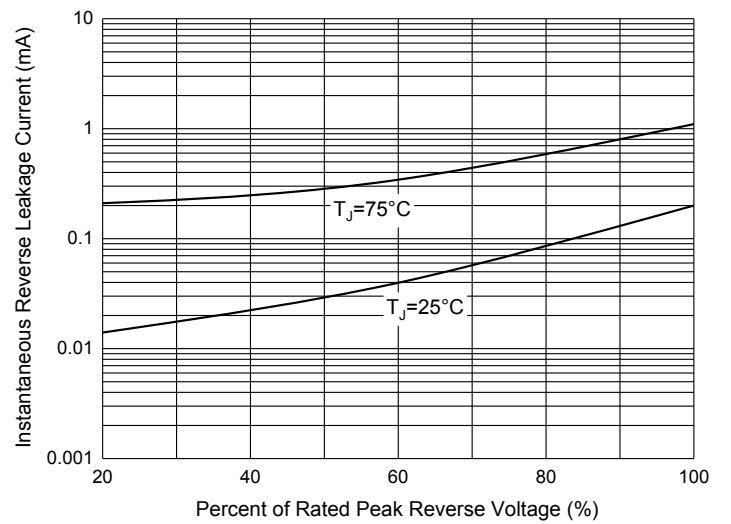


Fig. 4 - Typical Reverse Leakage Characteristics



## 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:500pcs/Box, 12Kpcs/Carton

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

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