



Micro Commercial Components



Micro Commercial Components  
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## SB1220 THRU SB12100

## 12 Amp Schottky Barrier Rectifier 20 to 100 Volts

### 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

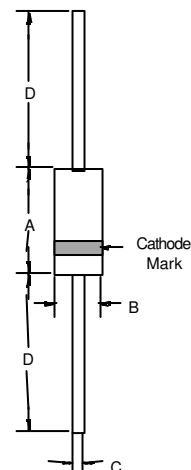
- Operating Temperature SB1220~SB1240: -65°C to +125°C  
SB1250~SB12100: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SB1220	20V	14V	20V
SB1230	30V	21V	30V
SB1240	40V	28V	40V
SB1250	50V	35V	50V
SB1260	60V	42V	60V
SB1280	80V	56V	80V
SB12100	100V	70V	100V

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

Average Forward Current	$I_{F(AV)}$	12.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SB1220~SB1240 SB1250~SB1260 SB1280~SB12100	$V_F$	.55V .70V .85V	$I_{FM} = 12.0A$ ; $T_A = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance SB1220~SB1240 SB1250~SB12100	$C_J$	500pF 380pF	Measured at 1.0MHz, $V_R=4.0V$
Typical Thermal Resistance	$R_{thJA}$	15°C/W	

### DO-201AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

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

FIG.1-TYPICAL FORWARD CHARACTERISTICS

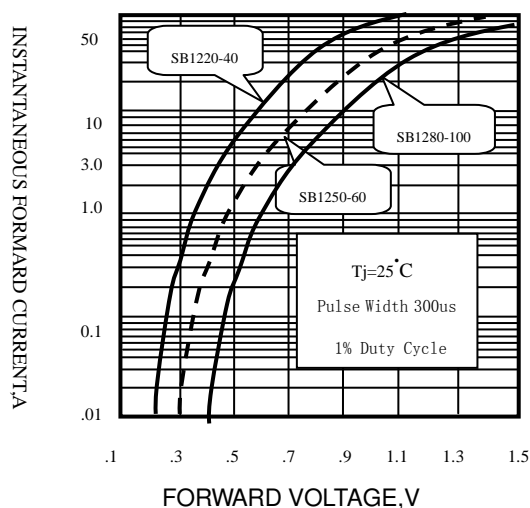


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

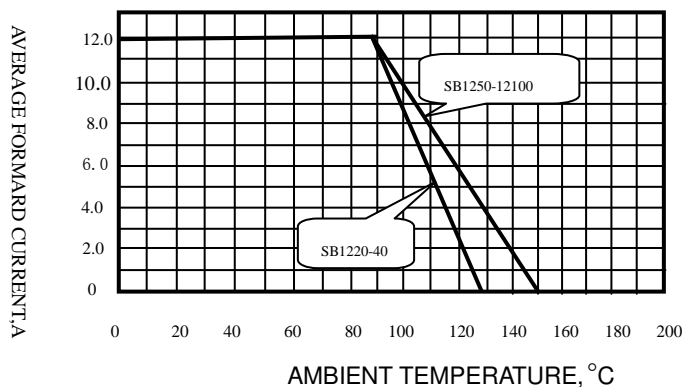


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

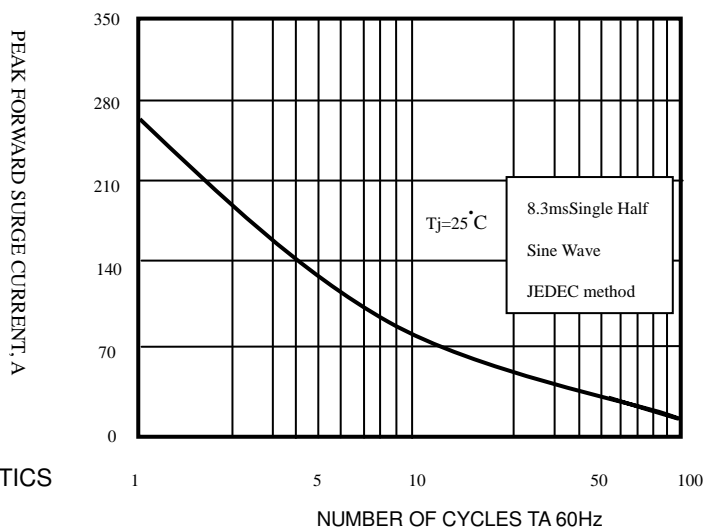


FIG.4-TYPICAL REVERSE CHARACTERISTICS

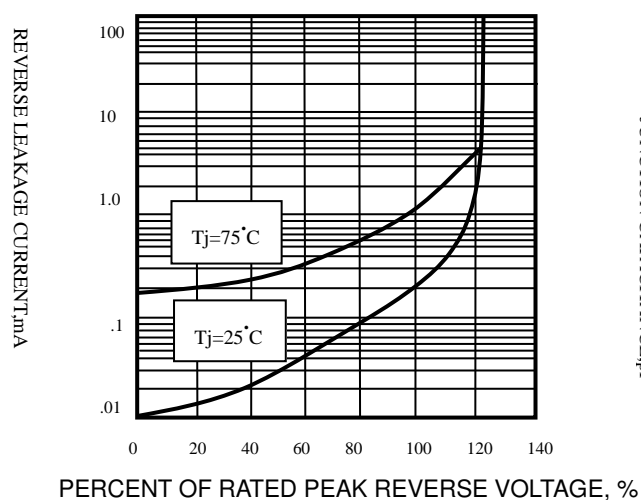
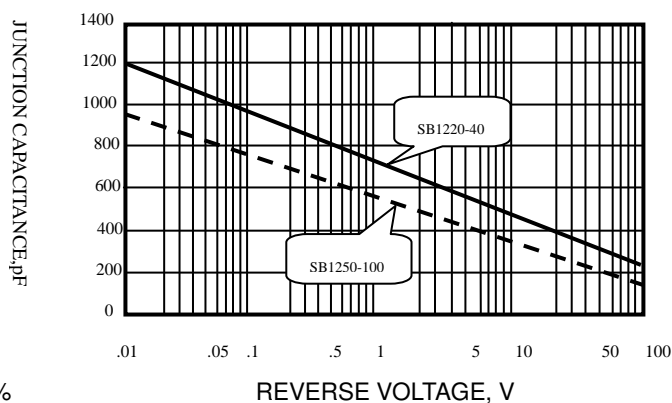


FIG.5-TYPICAL JUNCTION CAPACITANCE



## 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: 12Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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