Features

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

2 Amp Schottky Rectifier 20 to 60 Volts

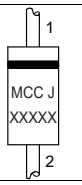
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value						Unit
		SB 220	SB 230	SB 240	SB 245	SB 250	SB 260	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	45	50	60	V
Working Peak Reverse Voltage	V_{RWM}							
DC Blocking Voltage	V_R							
RMS Reverse Voltage	V_{RMS}	14	21	28	31.5	35	42	V
Average Rectified Forward Current	$I_{F(AV)}$	2						A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	50						A
Current Squared Time @1ms≤t≤8.3ms	I^2t	10.375						A^2s

Marking code

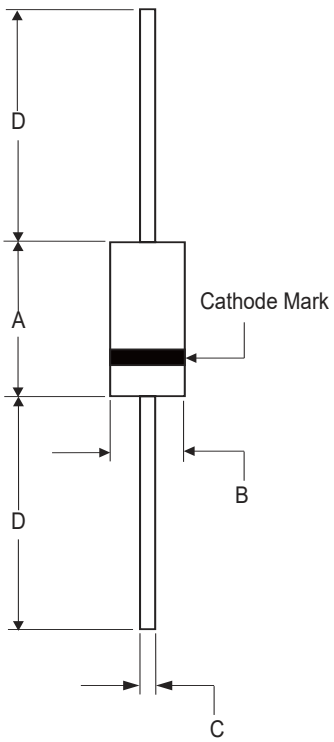
Part Number	Marking Code
SB220	SB220
SB230	SB230
SB240	SB240
SB245	SB245
SB250	SB250
SB260	SB260

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	 XXXXX: Marking Code	
2	Anode		

Note: 1. High temperature solder exemption applied, see EU directive annex 7a.

DO-15



DIMENSIONS					
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	-----	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range	SB220~SB245	-55		125	°C
T_J	Operating Junction Temperature Range	SB250~SB260	-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead			15		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient			45		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage SB220~SB245 SB250~SB260	V_F	I_F=2A;T_J=25°C			0.50 0.70	V
Reverse Current	I_R	at Rated V_R;T_J=25°C at Rated V_R;T_J=125°C			0.1 20	mA
Junction Capacitance SB220~SB245 SB250~SB260	C_J	V_R=4V;f=1MHz;T_J=25°C		125 90		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

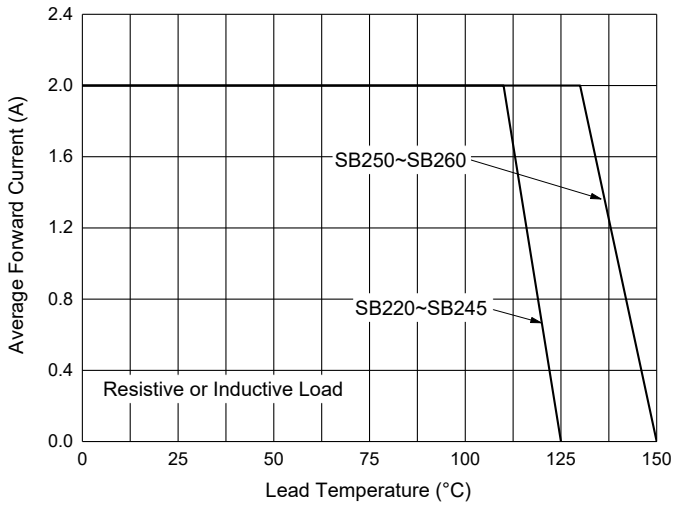


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

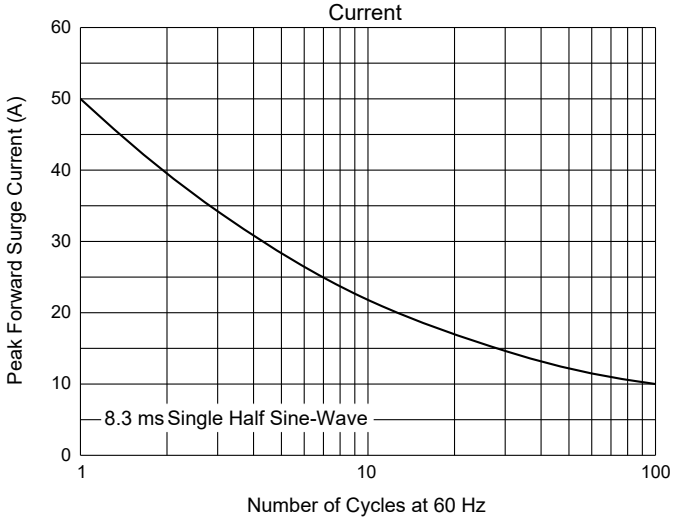


Fig. 3 - Typical Forward Characteristics

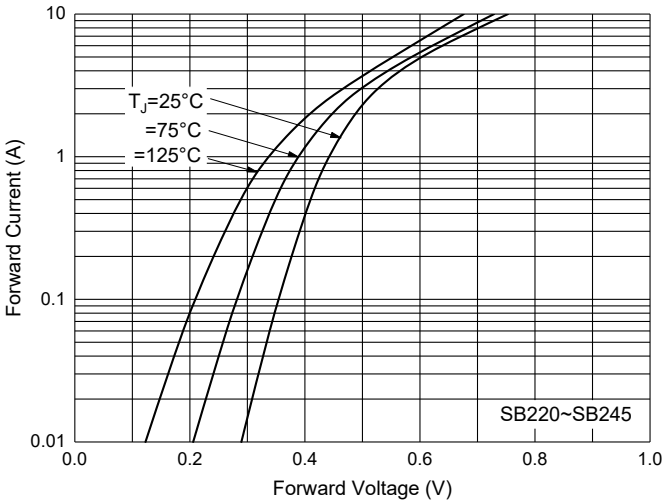


Fig. 4 - Typical Reverse Leakage Characteristics

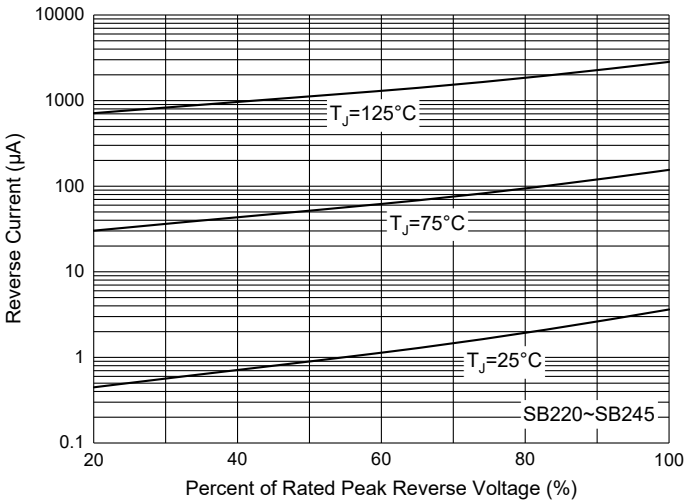


Fig. 5 - Typical Forward Characteristics

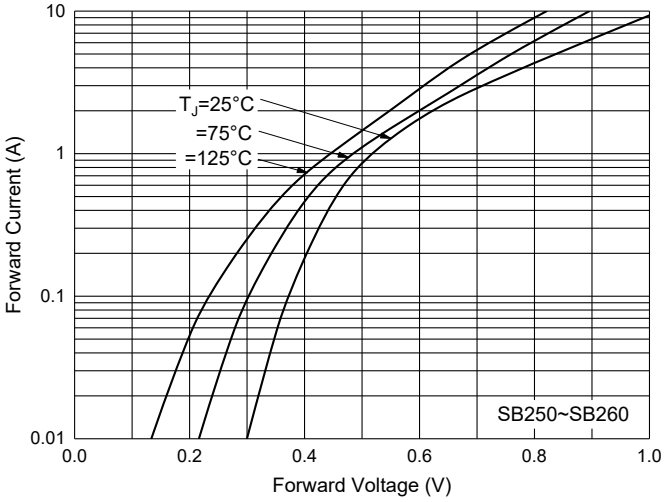
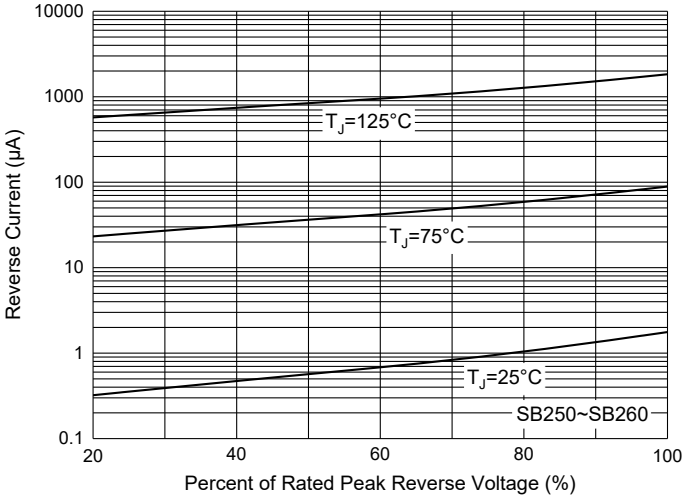
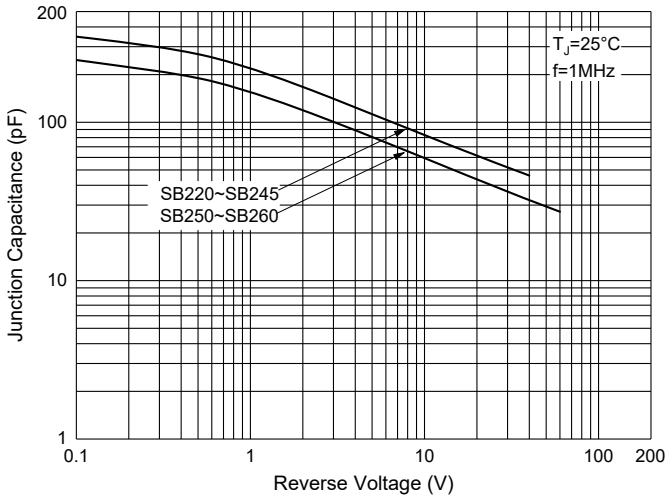


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Capacitance 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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