

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)



Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value				Unit
		SB 280	SB 2010	SB 2150	SB 2200	
Peak Repetitive Reverse Voltage	V_{RRM}					V
Working Peak Reverse Voltage	V_{RWM}	80	100	150	200	
DC Blocking Voltage	V_R					
RMS Reverse Voltage	V_{RMS}	56	70	105	140	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 ² s

Marking code

Part Number	Marking Code
SB280	SB280
SB2010	SB2010
SB2150	SB2150
SB2200	SB2200

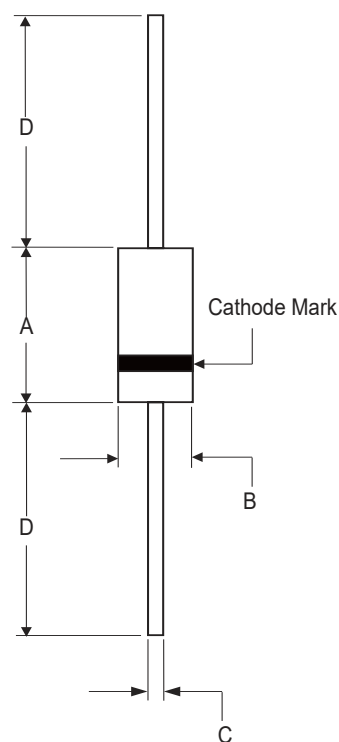
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	 <p>MCC J XXXXX XXXXX: Marking Code</p>	
2	Anode		

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

& Amp
'GW ch_mIF YWJZYf
80 to 200 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	-----	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-L)}$	Thermal Resistance from Junction to Lead			15		°C/W
$R_{th(J-A)}$	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	V_F	$I_F=2A; T_J=25^\circ C$			0.85	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=125^\circ C$			0.01 5	mA
Junction Capacitance SB280~SB2010 SB2150~SB2200	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		60 50		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

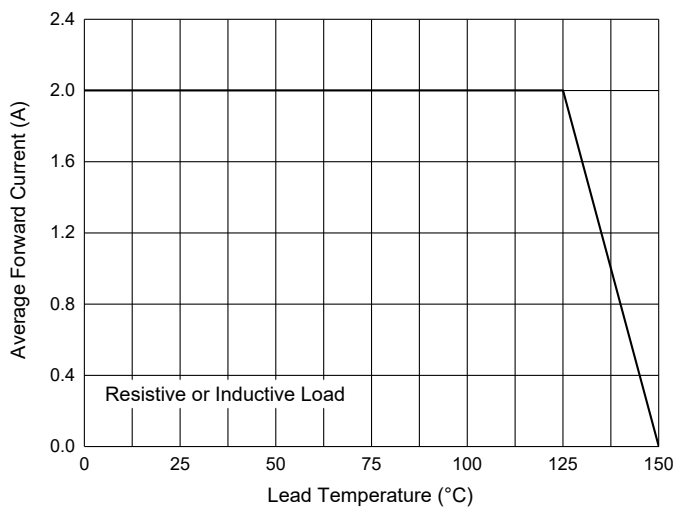


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

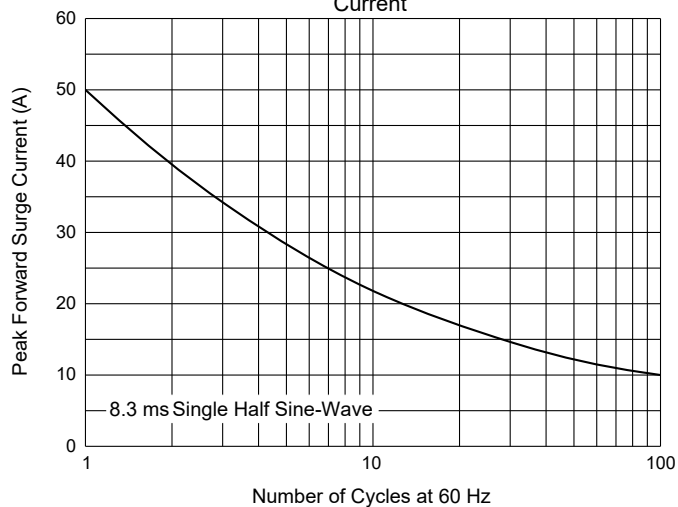


Fig. 3 - Typical Forward Characteristics

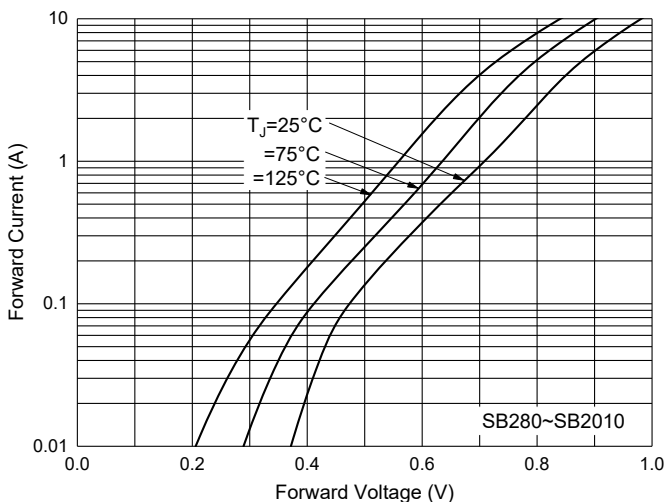


Fig. 4 - Typical Reverse Leakage Characteristics

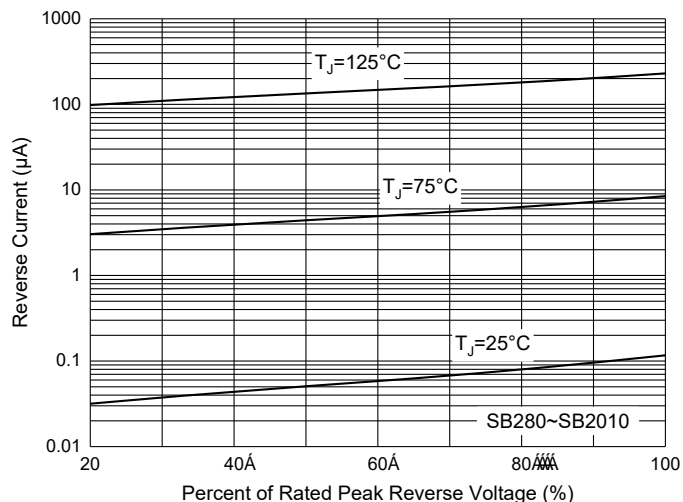


Fig. 5 - Typical Forward Characteristics

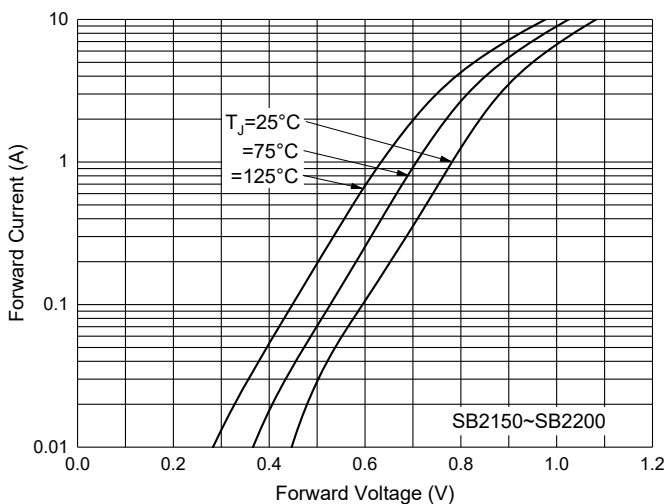
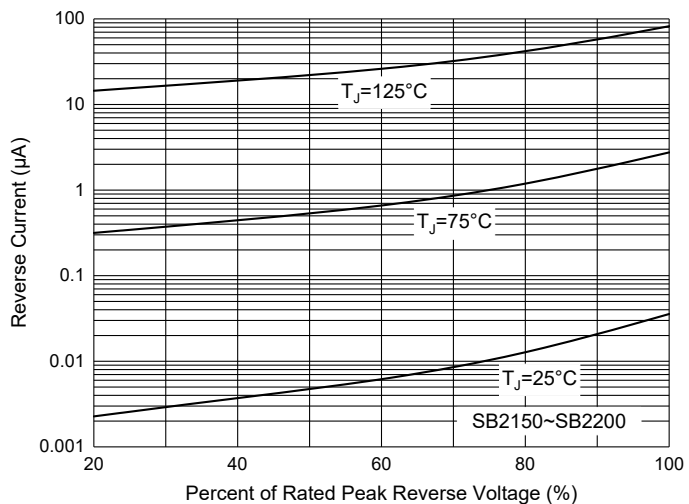
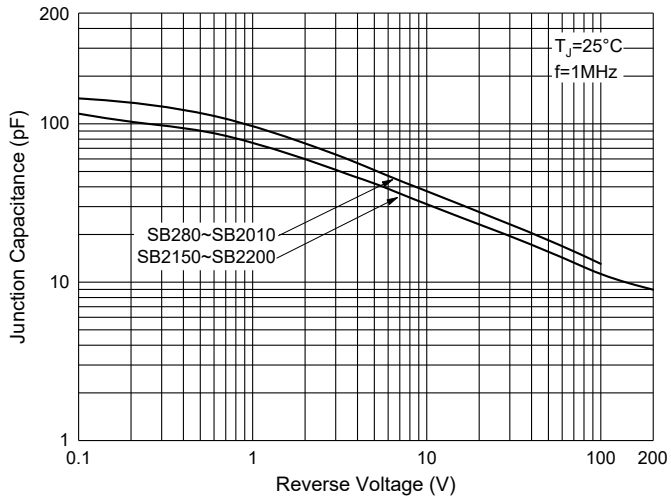


Fig. 6 - Typical Reverse Leakage Characteristics



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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