



SB220S~SB2100S

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volt **CURRENT** 2 Ampere

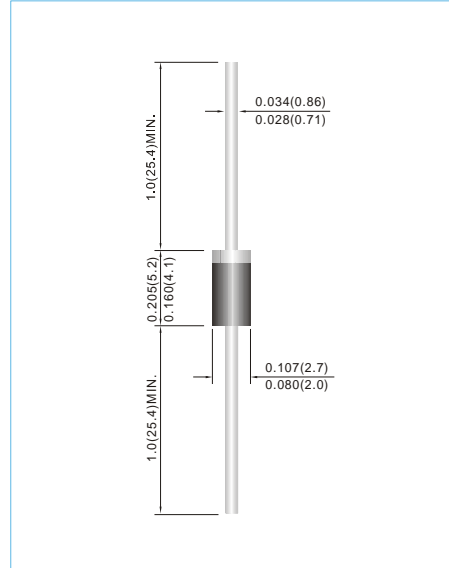
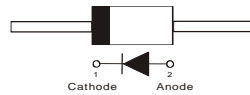
DO-41 Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: DO-41 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces, 0.3grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	SB220S	SB230S	SB240S	SB250S	SB260S	SB280S	SB2100S	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	2							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated	I_{FSM}	50							A	
Maximum Forward Voltage at 2A	V_F	0.5			0.7		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^{\circ}C$				0.5				mA
		$T_J=100^{\circ}C$				20				
Maximum Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$ $R_{\theta JC}$	(Notes 2)				80				°C / W
		(Notes 1)				48				
		(Notes 1)				20				
Operating Junction Temperature Range	T_J	-50 to +125					-50 to +150			°C
Storage Temperature Range	T_{STG}	-50 to +150								°C

NOTES:1. The testing condition of the thermal resistance (junction to case and junction to lead) is based on 9.5 mm lead length between two 10cm x 10cm

2. Mounted on a single-sided copper, mini pad.



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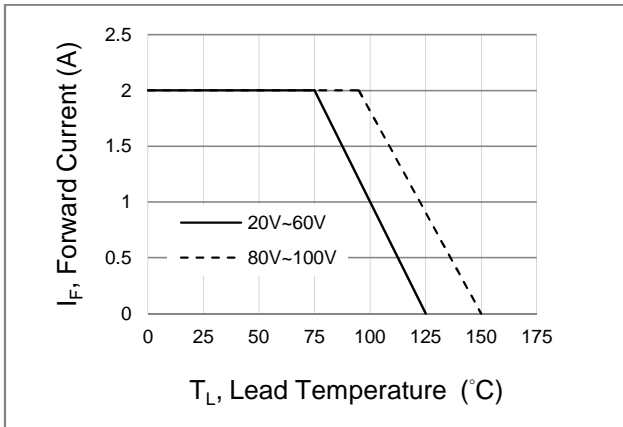


Fig.1 Forward Current Derating Curve

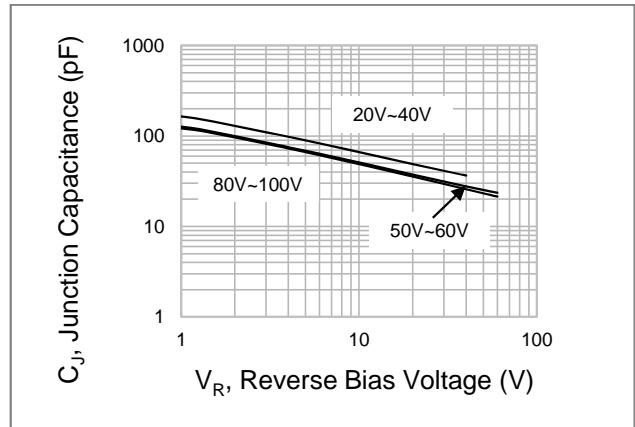


Fig.2 Typical Junction Capacitance

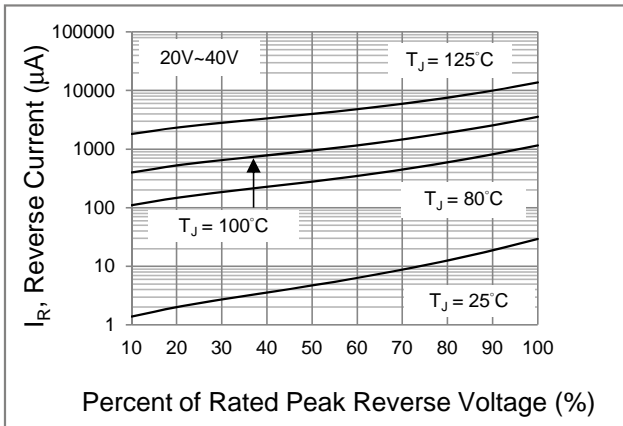


Fig.3 Typical Reverse Characteristics

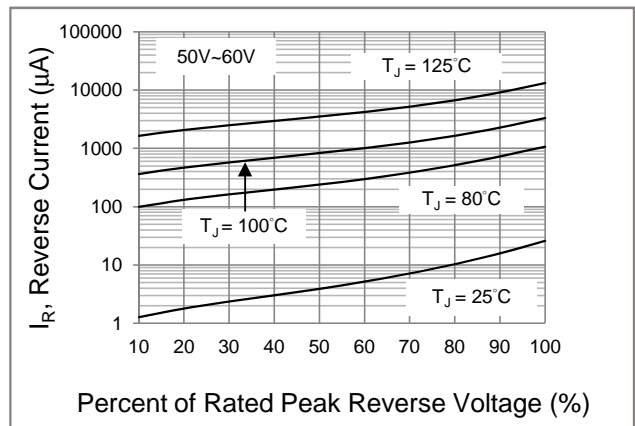


Fig.4 Typical Reverse Characteristics

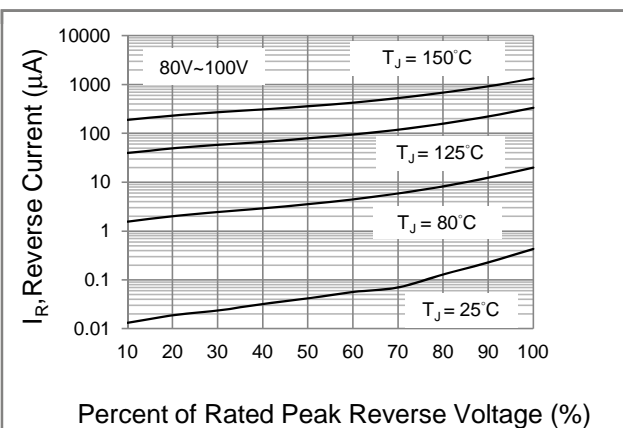


Fig.5 Typical Reverse Characteristics

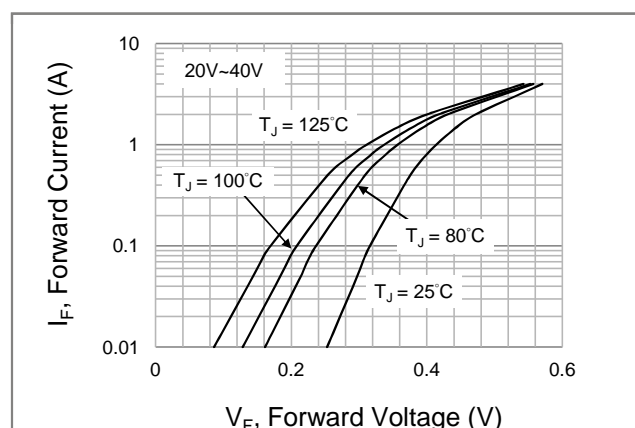


Fig.6 Typical Forward Characteristics



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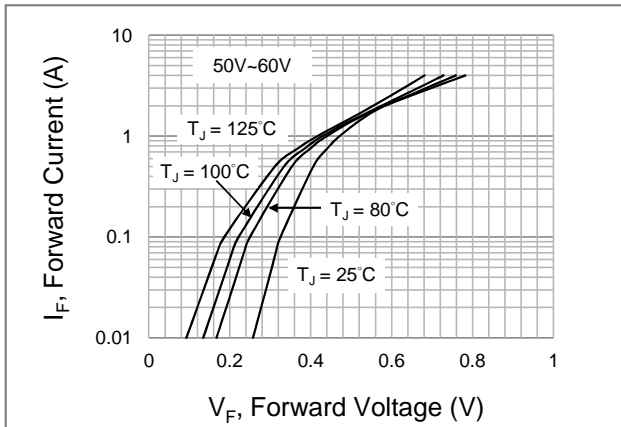


Fig.7 Typical Forward Characteristics

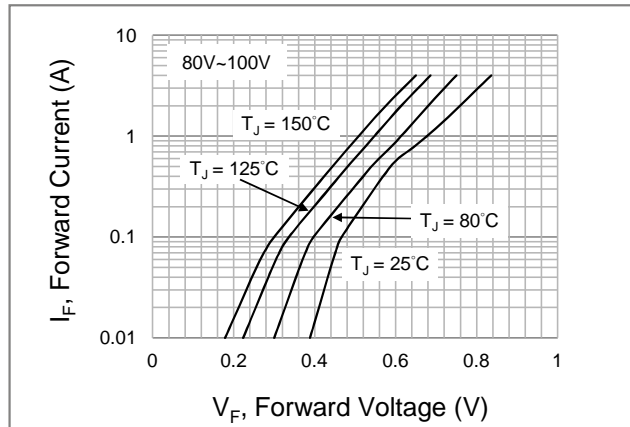


Fig.8 Typical Forward Characteristics

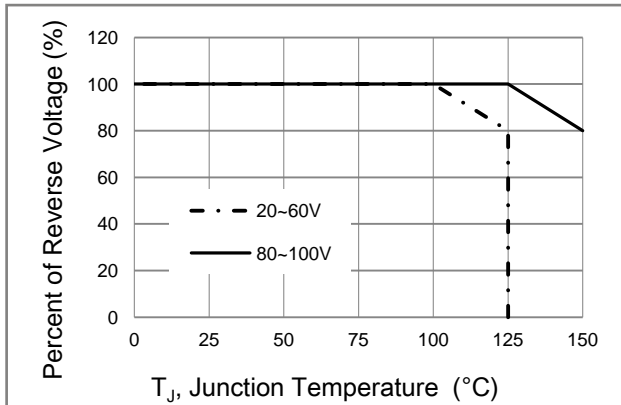


Fig.- Operating Temperature Derating Curve



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Part No_packing code_Version

SB220S_AY_00001

SB220S_AY_10001

SB220S_B0_00001

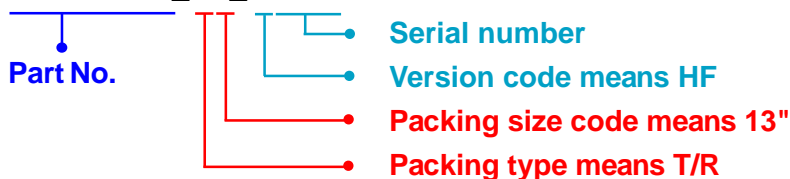
SB220S_B0_10001

SB220S_R2_00001

SB220S_R2_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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