



SB220 thru SB2200

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 20 to 200Volts
FORWARD CURRENT - 2.0 Amperes

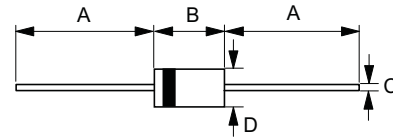
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case : JEDEC DO-15 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.373 grams
- Mounting position : Any

DO-15



DO-15		
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.70 \varnothing	0.90 \varnothing
D	2.60 \varnothing	3.60 \varnothing

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SB 220	SB 230	SB 240	SB 250	SB 260	SB 280	SB 2100	SB 2150	SB 2200	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	2.0									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50.0									A	
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	0.50		0.70		0.85		0.87		0.90	V	
Maximum DC Reverse Current @ TA=25°C	I_R	0.5					0.2					mA
at Rated DC Blocking Voltage @ TA=100°C		10.0					5.0					
Typical Junction Capacitance	C_J	150		110		80		70			pF	
Typical Thermal Resistance	$R_{\theta JA}$	60									°C/W	
Operating Temperature Range	T_J	-55 to +125					-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150					-55 to +150					°C

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

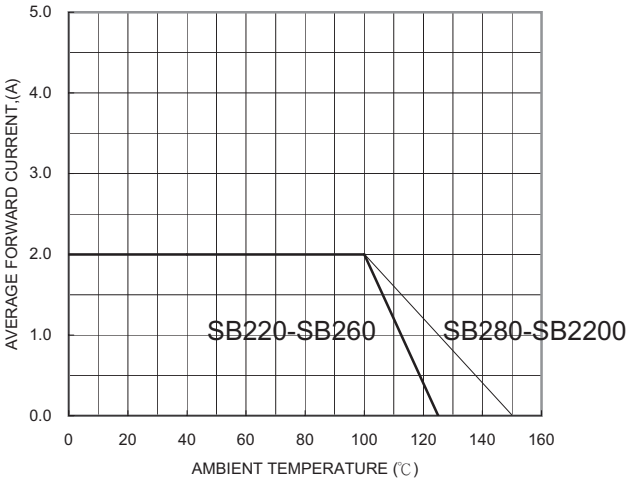


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

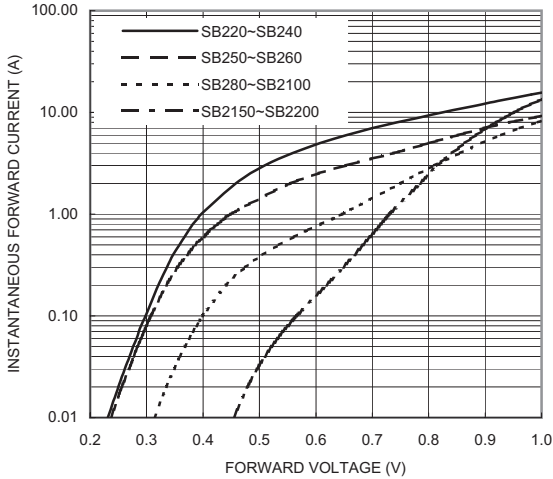


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

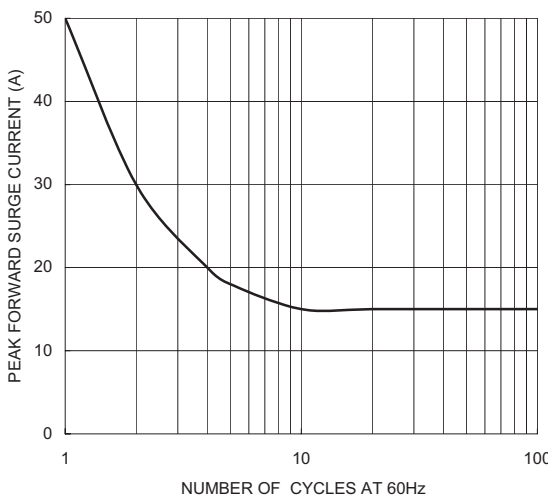


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

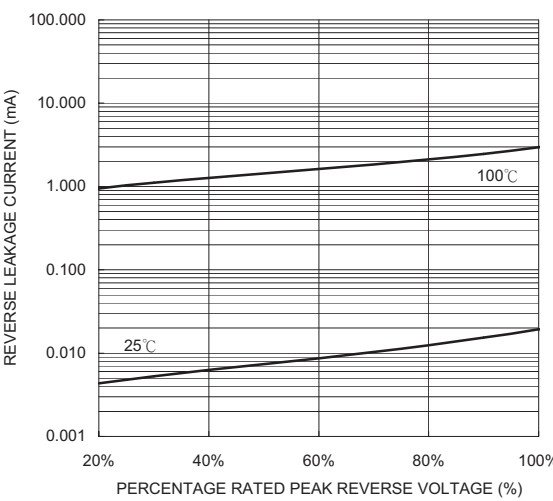


FIG. 5-TYPICAL JUNCTION CAPACITANCE

