



GOOD-ARK

SB220 THRU SB2B0

SCHOTTKY BARRIER RECTIFIER

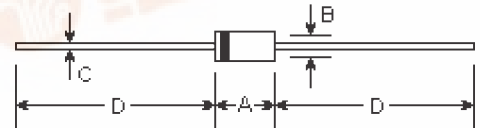
Reverse Voltage - 20 to 100 Volts

Forward Current - 2.0 Amperes

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame retardant epoxy molding compound
- 2.0 ampere operation at $T_J=75^{\circ}\text{C}$ with no thermal runaway
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications

DO-15



Mechanical Data

- **Case:** Molded plastic, DO-15
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.014 ounce, 0.39 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.228	0.299	5.8	7.6	
B	0.102	0.142	2.6	3.6	φ
C	0.028	0.034	0.71	0.86	φ
D	1.000	-	25.40	-	

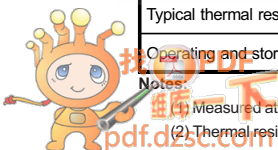
Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

	Symbols	SB220	SB230	SB240	SB250	SB260	SB270	SB280	SB290	SB2B0	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	70	80	90	100	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _J =75 °C	I _(AV)	2.0									Amps
Peak forward surge current, I _{FSM} (surge): 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I _{FSM}	50.0									Amps
Maximum forward voltage at 2.0A	V _F	0.55			0.70			0.85			Volts
Maximum full load reverse current, full cycle average at T _A =75 °C	I _{R(AV)}	30.0									mA
Maximum DC reverse current at rated DC blocking voltage T _J =25 °C T _A =100 °C	I _R	2.0 20.0									mA
Typical junction capacitance (Note 1)	C _J	170.0									pF
Typical thermal resistance (Note 2)	R _{θJA}	35.0									°C/W
Operating and storage temperature range	T _J , T _{STG}	-50 to +125									°C

Notes:
(1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC
(2) Thermal resistance junction to ambient



RATINGS AND CHARACTERISTIC CURVES

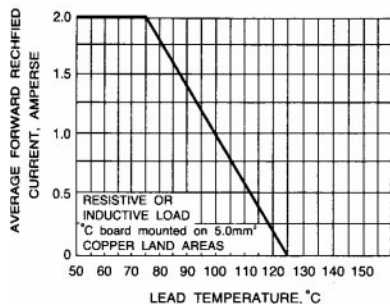


Fig. 1 - FORWARD CURRENT DERATING CURVE.

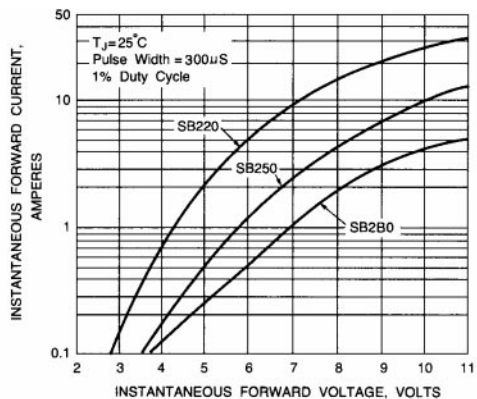


Fig. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

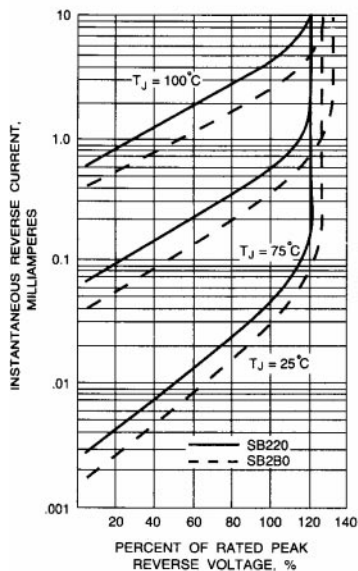


Fig. 3 - TYPICAL REVERSE CHARACTERISTICS

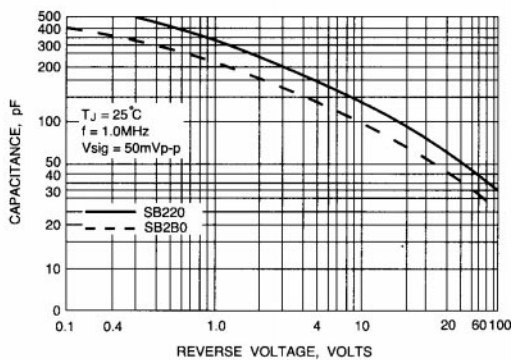


Fig. 4 - TYPICAL JUNCTION CAPACITANCE

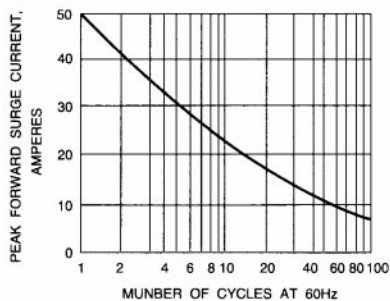


Fig. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT