



SB270 thru SB2B0

Schottky Barrier Rectifiers
Reverse Voltage 70 to 100 Volts Forward Current 2.0 Amperes

Features

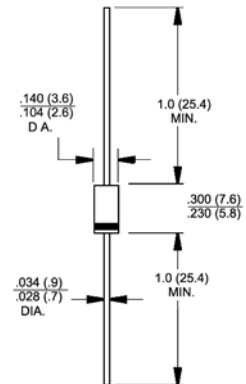
- ◆ Metal-Semiconductor junction with guard ring
- ◆ Epitaxial construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ The plastic material carries UL recognition 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



DO-204AC (DO-15)

Mechanical Data

- ◆ Case : JEDEC DO-204AC(DO-15) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.014 ounce, 0.39 gram
- ◆ Mounting position : Any



Dimensions in inches and (millimeters)

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	Symbols	SB270	SB280	SB290	SB2B0	Units
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	70	80	90	100	Volts
Maximum average forward rectified current @ $T_L=100^\circ\text{C}$	I_{AV}	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60.0				Amps
Maximum forward voltage at 2.0A DC @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	V_F	0.79 0.69				Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	I_R	0.5 10				mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	20				$^\circ\text{C/W}$
Typical junction capacitance (Note 2)	C_J	50				pF
Operating junction temperature range	T_J	-55 to +125				$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150				$^\circ\text{C}$

- Notes:**
1. Thermal Resistance Junction to Ambient.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES

