

**VOLTAGE RANGE: 150 - 200V**

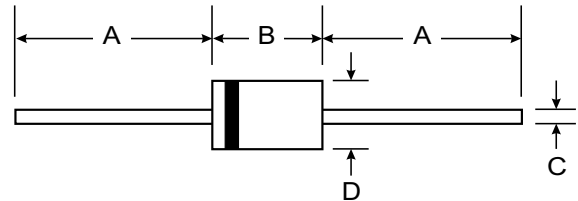
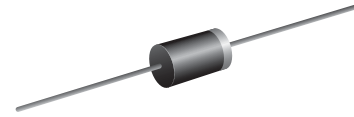
**CURRENT: 2.0 A**

### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

### Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SB2150	SB2200	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	100	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length(see fig.1)	I <sub>(AV)</sub>	2.0		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60.0		Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	0.85	0.95	Volts
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	I <sub>R</sub>	0.2		mA
		2.0		
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	80		pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	50.0		°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +150		°C
Storage temperature range	T <sub>STG</sub>	-65 to +150		°C

**Note:**1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



RATING AND CHARACTERISTIC CURVES (SB2150 THRU SB2200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

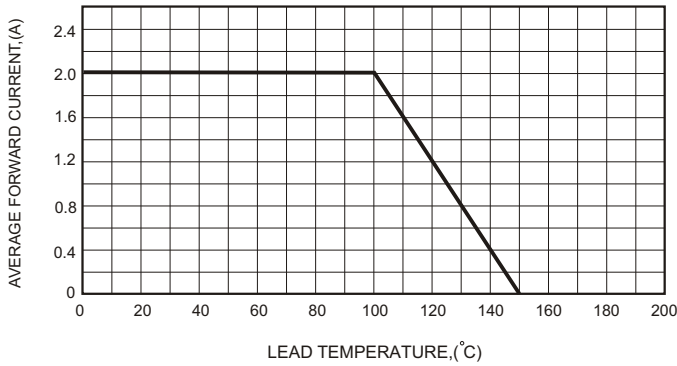


FIG.2-TYPICAL FORWARD CHARACTERISTICS

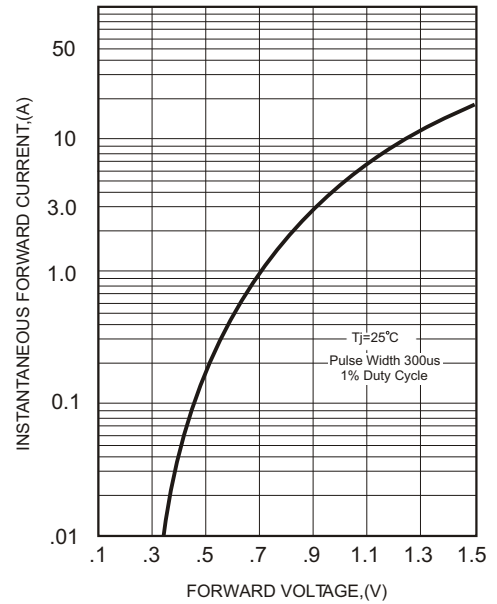


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

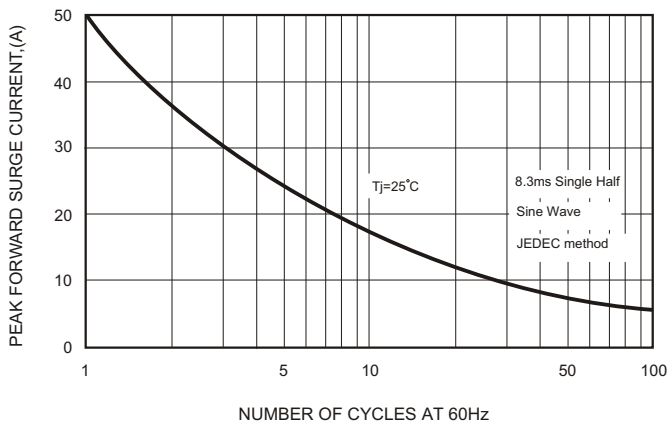


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

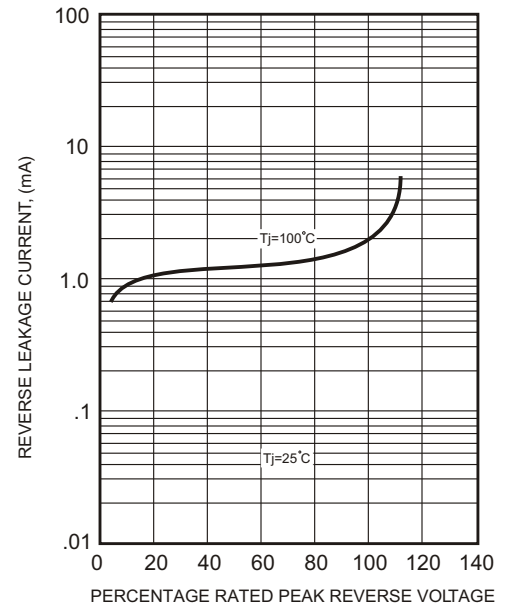


FIG.4-TYPICAL JUNCTION CAPACITANCE

