

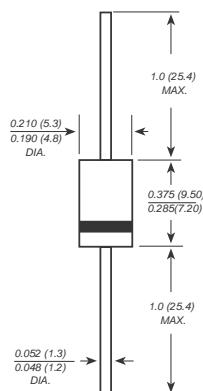


SB3150 THRU SB3200

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 to 200 Volts Forward Current - 3.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.10 grams

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 by 20%.

	SYMBOLS	SB3150	SB3200	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	150	200	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1)	I _(AV)	3.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80.0		Amps
Maximum instantaneous forward voltage at 3.0A	V _F	0.85	0.95	Volts
Maximum DC reverse current TA=25 C at rated DC blocking voltage TA=100 C	I _R	0.2	20	mA
Typical junction capacitance (NOTE 1)	C _J	200		pF
Typical thermal resistance (NOTE 2)	R _{JA}	40.0		C/W
Operating junction temperature range	T _J	-65 to +150		C
Storage temperature range	T _{STG}	-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

RATINGS AND CHARACTERISTIC CURVES SB3150 THRU SB3200

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

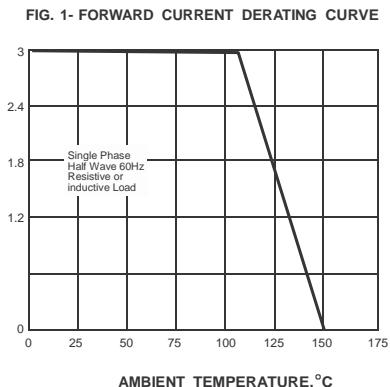


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

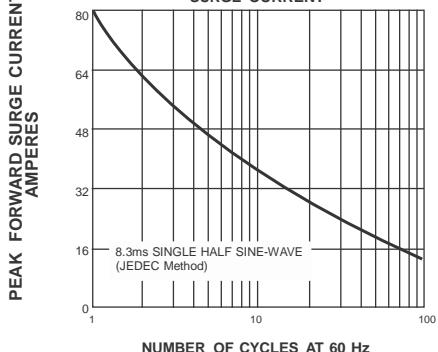


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

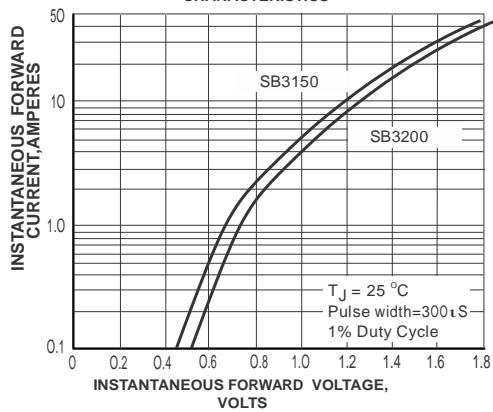


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

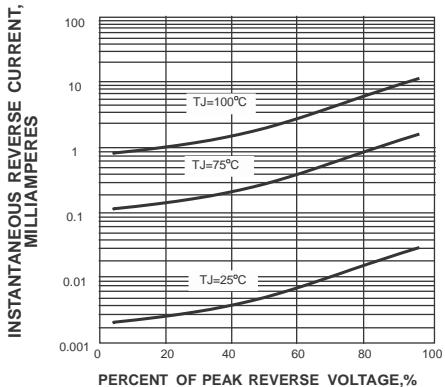


FIG. 5-TYPICAL JUNCTION CAPACITANCE

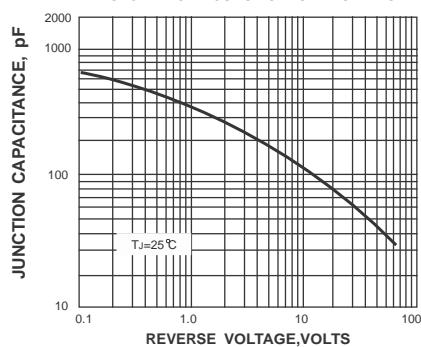


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

