

SB3100

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V

CURRENT: 3.0A

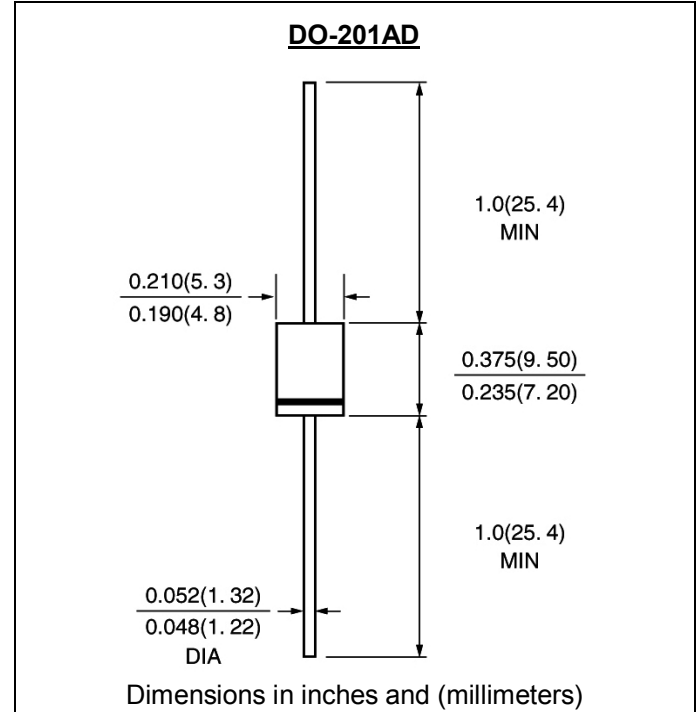


FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB3100	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	100	V
Maximum RMS Voltage	Vrms	70	V
Maximum DC blocking Voltage	Vdc	100	V
Maximum Average Forward Rectified Current 3/8" lead length	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	80.0	A
Maximum Forward Voltage at 3.0A DC	Vf	0.79	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	0.1 2.0	mA mA
Typical Junction Capacitance (Note 1)	Cj	90	pF
Typical Thermal Resistance (Note 2)	Rth(ja)	50	°C /W
Storage and Operating Junction Temperature	Tj, Tstg	-65 to +150	°C

Note:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES SB3100

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

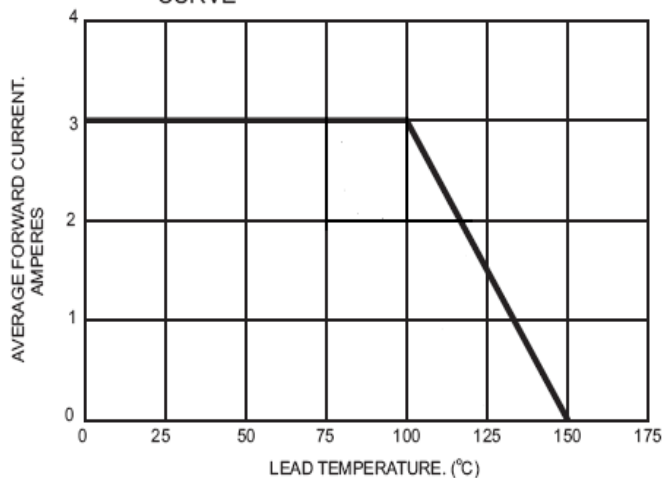


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

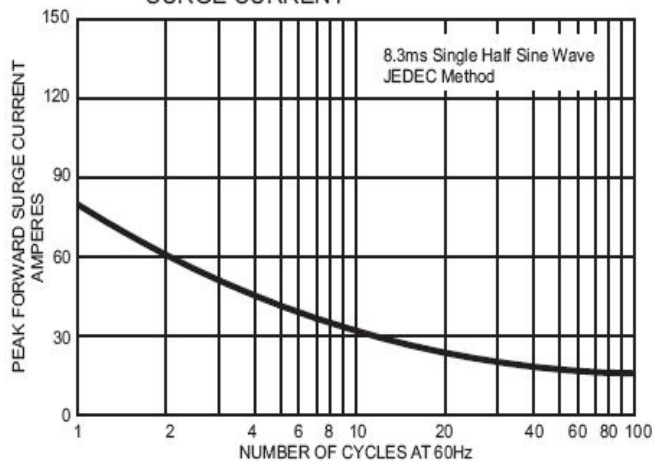


FIG.3- TYPICAL FORWARD CHARACTERISTICS

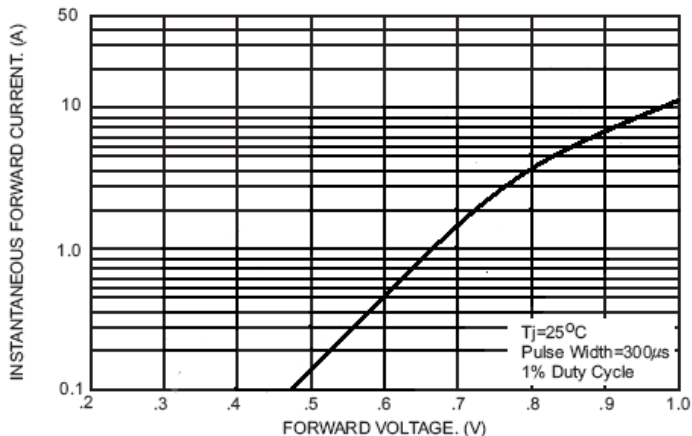


FIG.4- TYPICAL REVERSE CHARACTERISTICS

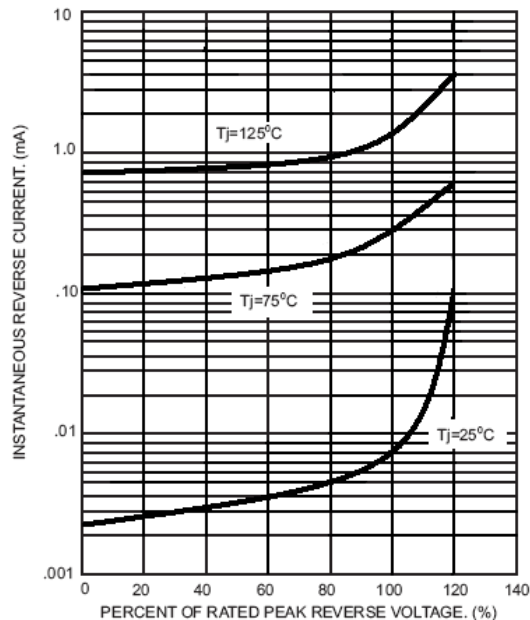


FIG.5- TYPICAL JUNCTION CAPACITANCE

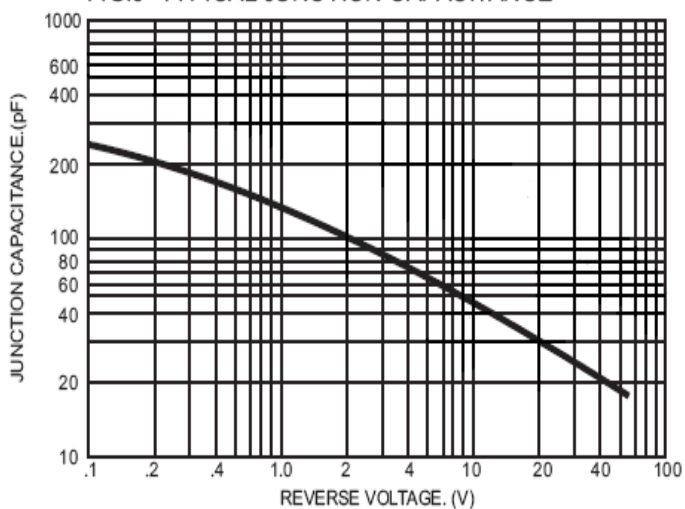


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

