# SB340-E THRU SB360-E

#### SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 40 to 60V

CURRENT: 3.0A

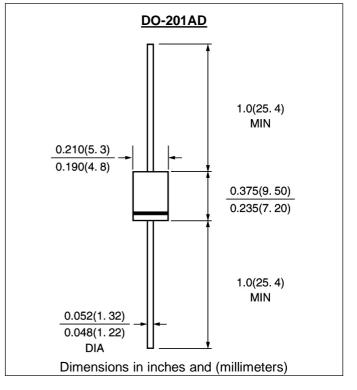


### FEATURE

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 Halogen Free Epoxy Polarity: color band denotes cathode Mounting position: any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

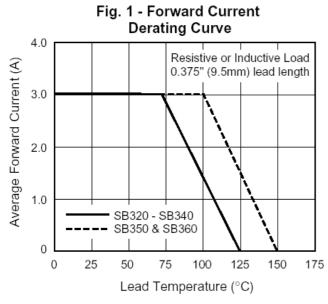
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

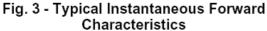
	SYMBOL	SB340-E	SB360-E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	40	60	V
Maximum RMS Voltage	Vrms	28	42	V
Maximum DC blocking Voltage	Vdc	40	60	V
Maximum Average Forward Rectified Current 3/8" lead length	lf(av)	3.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	lfsm	100		A
Maximum Forward Voltage at 3.0A DC	Vf	0.50	0.74	V
Maximum DC Reverse Current Ta =25℃	lr —	0.5		
at rated DC blocking voltage Ta = $100$ °C		20.0	10.0	— mA
Typical Junction Capacitance (Note 1)	Cj	220.0		pF
Typical Thermal Resistance (Note 2)	Rth(ja)	30.0		°C /V
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +125	-65 to +150	υ

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 SB340-E THRU SB360-E





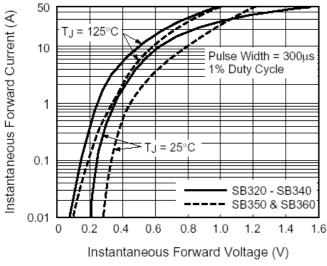
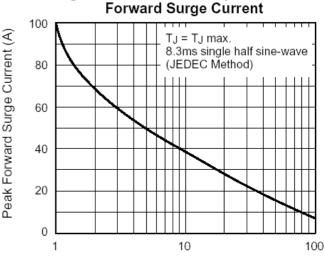


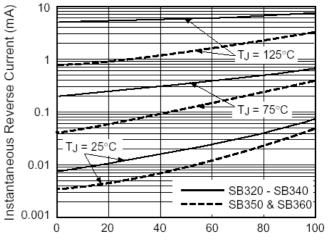
Fig. 5 - Typical Junction Capacitance 1,000 TJ = 25°C f = 1.0 MHz Junction Capacitance (pF) Vsig = 50mVp-p 100 ПП SB320 - SB340 SB350 & SB360 10 10 100 0.1 1

Reverse Voltage (V)



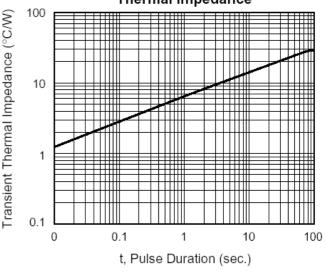
Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

Fig. 6 - Typical Transient Thermal Impedance



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# Fig. 2 - Maximum Non-repetitive Peak