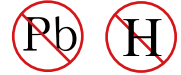




SCHOTTKY BARRIER RECTIFIERS



VOLTAGE 20 to 200 Volts CURRENT - 5.0 Ampere

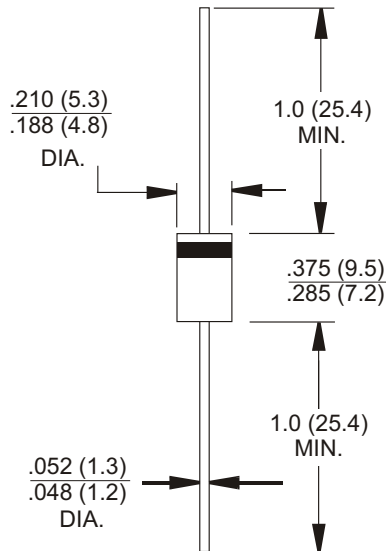
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- 5 ampere operation at TA=60°C with no thermal runaway.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage,high frequency inverters ,free wheeling , and polarity protection applications .
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: DO-201AD Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202,Method 208
- Polarity: Color band denotes cathode
- Mounting Position: Any

DO-201AD Unit:inch(mm)



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	SYMBOL	SB520	SB530	SB540	SB550	SB560	SB580	SB5100	SB5150	SB5200	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS Voltage	V _{RMS}	14	21	32	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum Average Forward Rectified Current 0.375" Lead Length	I _{F(AV)}	5									A	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150						120			A	
I ² t Rating for Fusing (t<8.3ms)	I ² t	93.403						59.778			A ² S	
Maximum Instantaneous Forward Voltage at 5A	V _F	0.55		0.70		0.85		0.90	0.92		V	
Maximum DC Reverse Current at T _A =25°C	I _R	0.5						0.1			mA	
at Rated DC Blocking Voltage T _A =100°C		50						50				
Typical Junction Capacitance (Note 1)	C _J	500			380						pF	
Typical Thermal Resistance (Note 2)	R _{θJA}	15			10						°C/W	
Operating Junction Temperature Range	T _J	-55 to +150										°C
Storage Temperature Range	T _{STG}	-55 to +150										°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead Vertical PCB Mounting 0.375" (9.5mm) Lead Lengths.

DEVICE CHARACTERISTICS

SB520 THRU SB5200

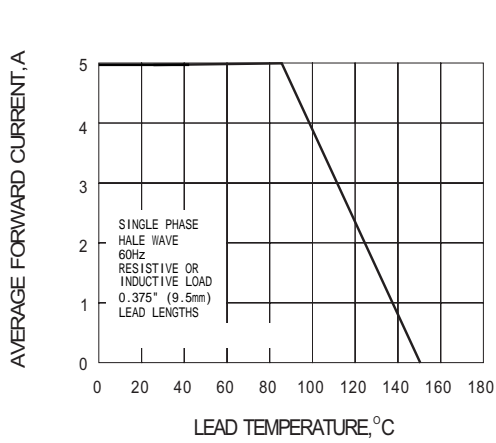


Fig. 1-FORWARD CURRENT DERATING CURVE

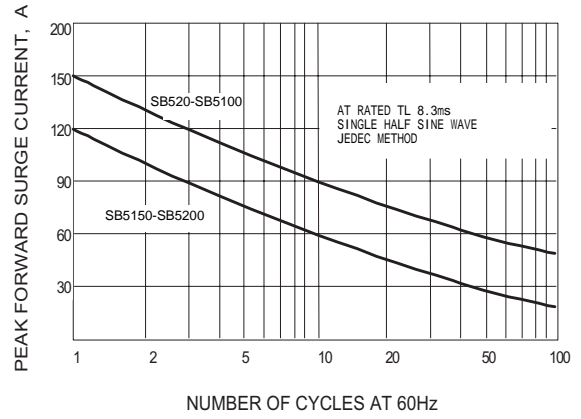


Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

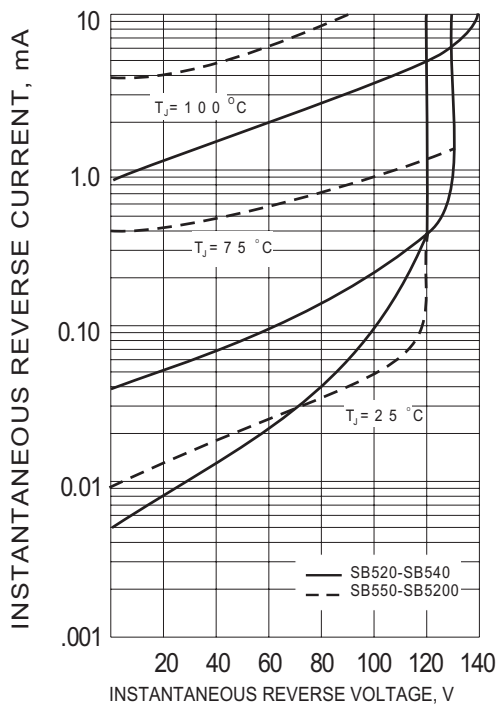


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

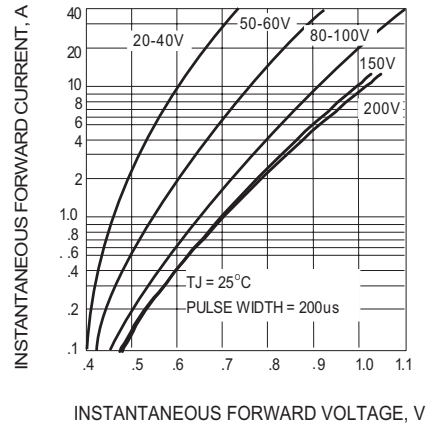


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

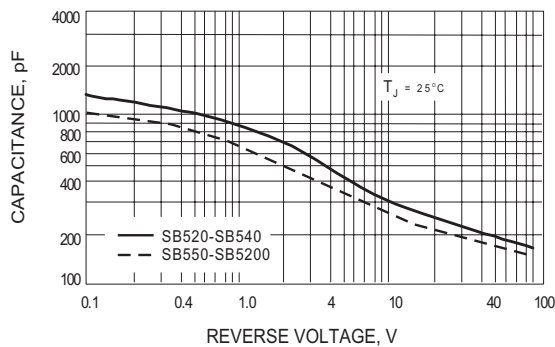


Fig. 5-TYPICAL JUNCTION CAPACITANCE