SB1020 THRU SB1045

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 45 Volts Forward Current - 10.0 Ampere

FEATURES

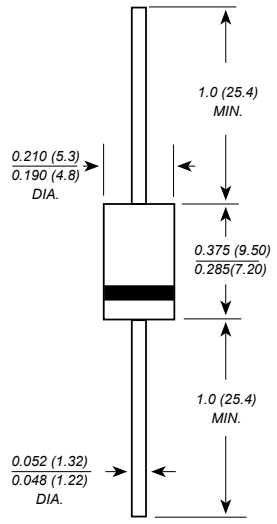
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds,0.375″(9.5mm) lead length, 5 lbs. (2.3kg) 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

RoHS Compliant

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Characteristic	*SYMBOLS*	SB1020	SB1030	SB1035	SB1040	SB1045	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	35	40	45	V
Maximum RMS voltage	V_{RMS}	14	21	25	28	32	V
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	V
Maximum average forward rectified current 0.375″(9.5mm) lead length(see fig.1)	$I_{(AV)}$	10.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	340.0					A
Maximum instantaneous forward voltage at 10.0A	V_F	0.55					V
Maximum DC reverse current T_A=25℃	I_R	0.8					mA
at rated DC blocking voltage T_A=100℃		70					
Typical junction capacitance (NOTE 1)	C_J	900					pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	8.0					°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

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RATINGS AND CHARACTERISTIC CURVES

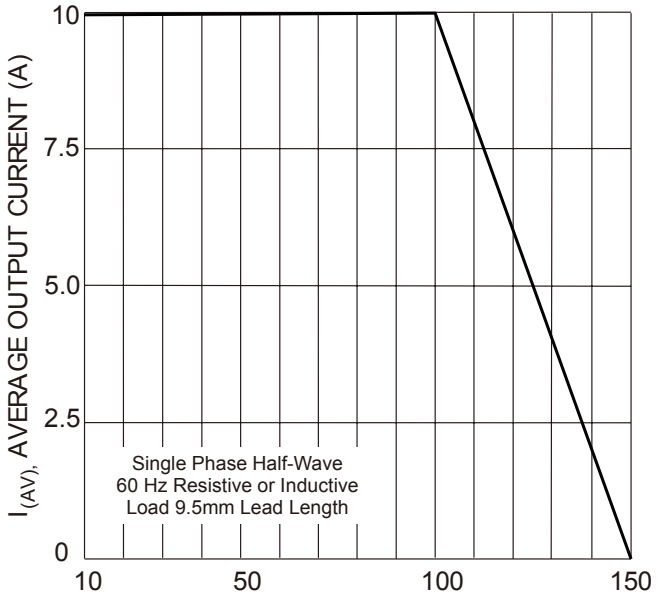

Fig. 1 Forward Current Derating Curve

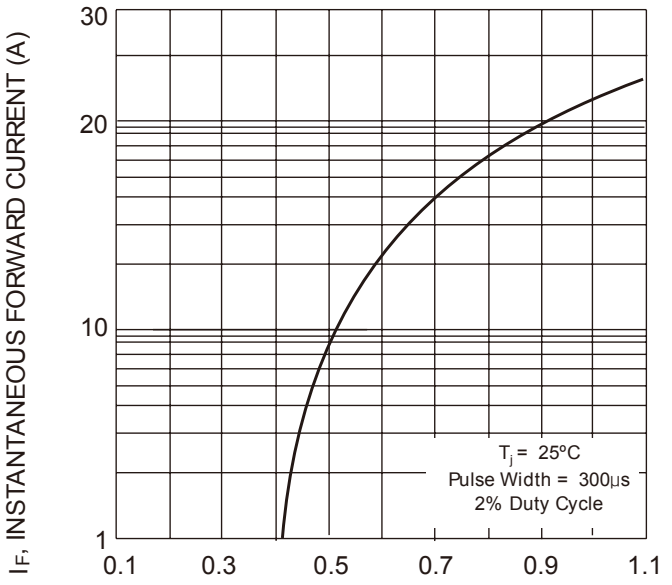

Fig. 2 Typical Forward Voltage Characteristics

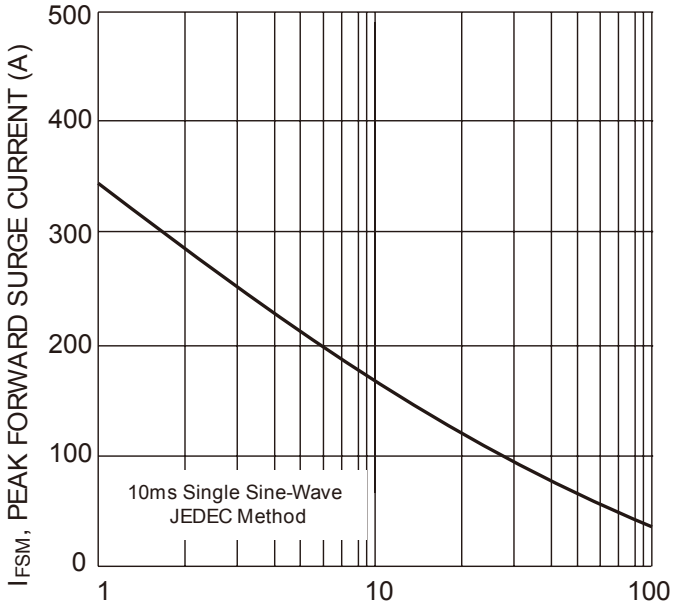

Fig. 3 Peak Forward Surge Current

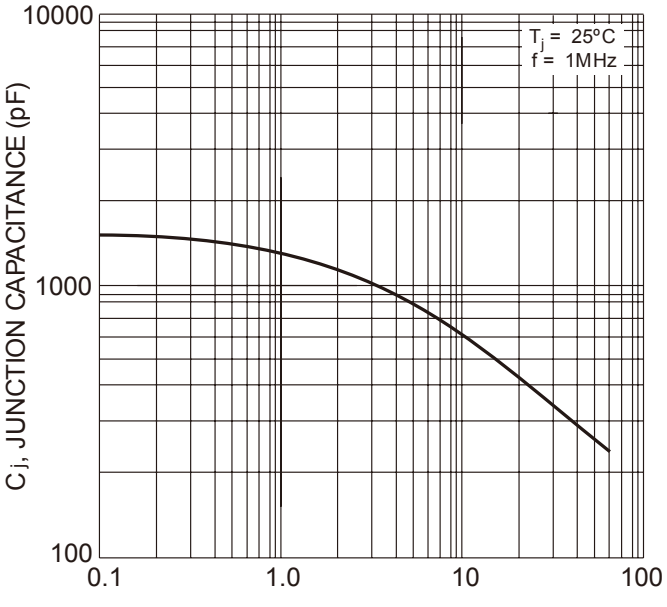

Fig. 4 Typical Junction Capacitance