SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 70 --- 100 V
CURRENT: 2.0 A

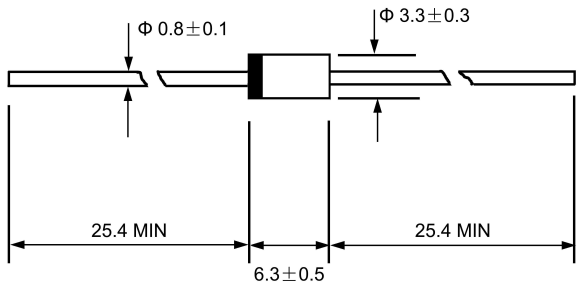
FEATURES

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop,low switching losses
- ◇ High surge capability
- ◇ For use in low voltage,high frequency inverters free wheeling,and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case:JEDEC DO--15,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-750,Method 2026
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014ounces,0.39 grams
- ◇ Mounting position: Any

DO - 15



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		SB270	SB280	SB290	SB2100	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	70	80	90	100	V
Maximum RMS voltage	V_{RMS}	49	56	63	70	V
Maximum DC blocking voltage	V_{DC}	70	80	90	100	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	2.0				A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	60.0				A
Maximum instantaneous forw ard voltage @ 2.0A (Note 1)	V_F	T_J=25℃: 0.85 T_J=100℃: 0.69				V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	0.5 20.0				mA
Typical junction capacitance (Note2)	C_J	250				pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	35				℃/W
Operating junction temperature range	T_J	- 55 ---- + 150				℃
Storage temperature range	T_{STG}	- 55 ---- + 150				℃

NOTE: 1. Pulse test:300us pulse width,1% duty cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient

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FIG.1 -- FORWARD CURRENT DERATING CURVE

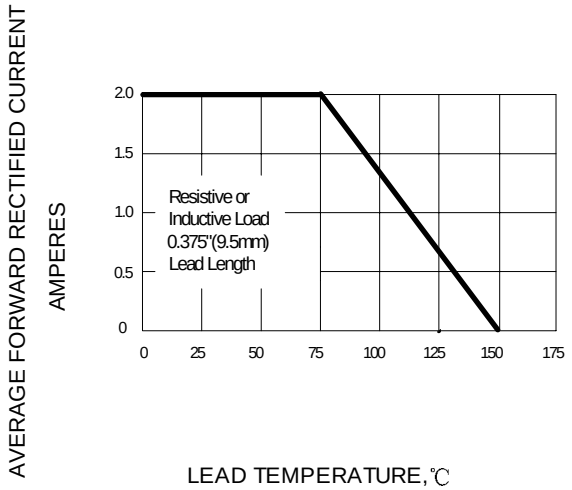


FIG.2 -- PEAK FORWARD SURGE CURRENT

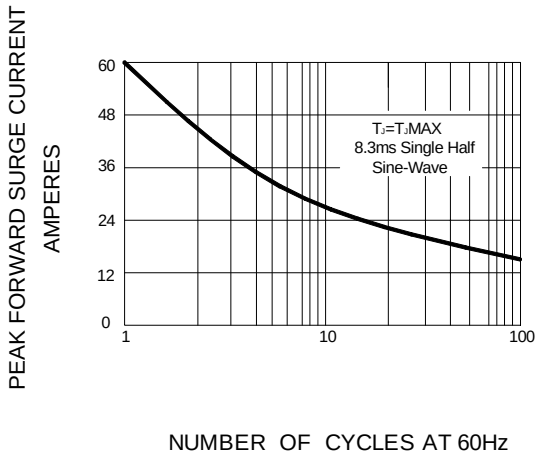


FIG.3 -- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

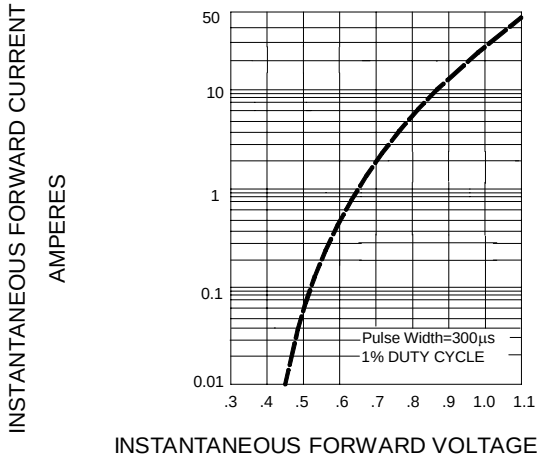


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

