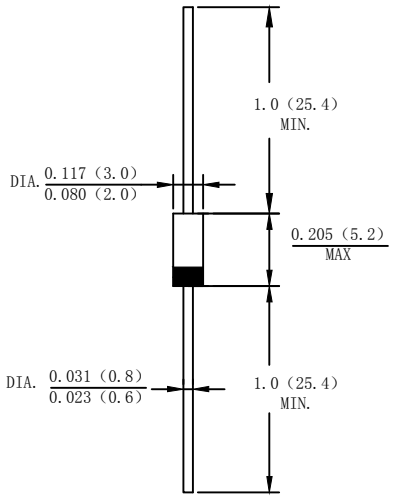
SB120U THRU SB1250U

1.0 AMP. Schottky Barrier Rectifiers

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing
- Flame Retardant Epoxy Molding Compound.
- For use in low voltage,high frequency inverters ,free wheeling , and polarity protection applications .
- Exceeds environmental standards of MIL-S-19500/228

DO-41



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Moeded plastic DO-41
- Terminals: Plated leads solderable per MIL-STD-202,Method 208 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For Rohs/Lead Free Version

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SB 120U	SB 130U	SB 140U	SB 150U	SB 160U	SB 180U	SB 1100U	SB 1150U	SB 1200U	SB 1250U	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @T_A =75℃	I_O	1.0										A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40										A
Forward Voltage @IF=1.0A	V_{FM}	0.50			0.67		0.82		0.90		0.92	V
Peak Reverse Current @T_A =25℃	I_R	0.1					0.05					mA
At Rated DC Blocking Voltage @T_A =100℃		10.0					5.0					
Typical Junction Capacitance (Note 2)	C_J	110										pF
Typical Thermal Resistance Junction to Ambient(Note 1)	$R_{\theta JA}$	80										℃/W
Operating Temperature Range	T_J	-55 to+150										℃
Storage Temperature Range	T_{STG}	-55 to+150										℃

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

Fig.1-FORWARD CURRENT DERATING CURVE

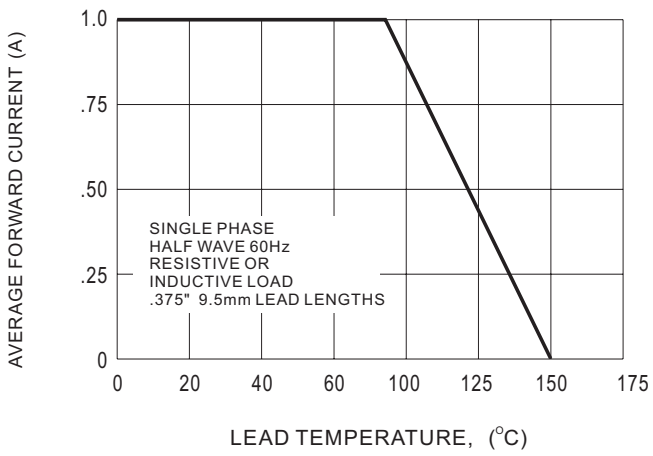


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

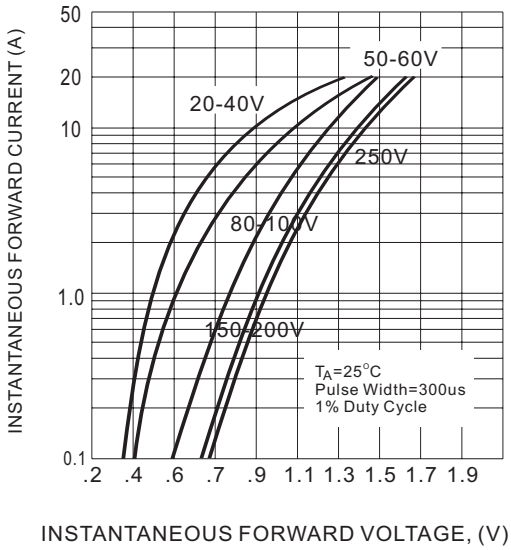


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

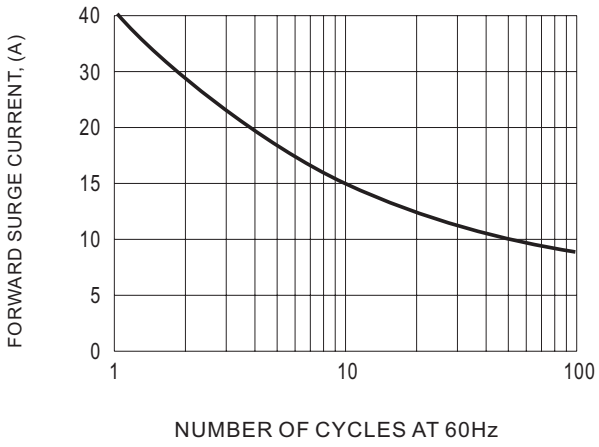


Fig.4-TYPICAL JUNCTION CAPACITANCE