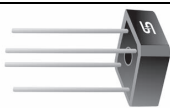




SB6G, SBT6G SERIES

Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers



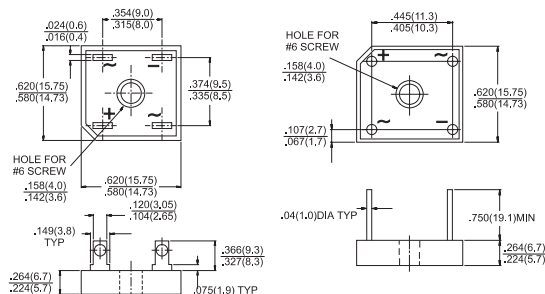
Voltage Range
50 to 1000 Volts
Current
6.0 Amperes

SBT-6

SB-6

Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Surge overload rating 175 amperes peak
- ✧ Low forward voltage drop
- ✧ Mounting position: Any
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds / 0.375" (9.5mm)
lead length at 5 lbs., (2.3 kg) tension
- ✧ Small size, simple installation
- ✧ Leads solderable per MIL-STD-202
Method 208



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	SB 601G SBT 601G	SB 602G SBT 602G	SB 603G SBT 603G	SB 604G SBT 604G	SB 605G SBT 605G	SB 606G SBT 606G	SB 607G SBT 607G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175							A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10 500							μA μA
Typical Thermal resistance (Note 1) (Note 2)	R θ JA R θ JL	22 7.3							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Unit Mounted on P.C.B. at 0.375" (9.5mm) Lead Length with 0.5 x 0.5" (12 x 12mm)

Copper Pads.

2. Unit Mounted on 5.5 x 6.0 x 0.11" thick (14 x 15 x 0.3cm) Al. Plate.

RATINGS AND CHARACTERISTIC CURVES (SB601G THRU SB607G) SBT601G SBT607G

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

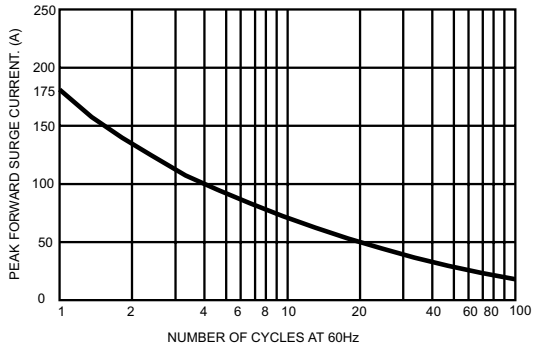


FIG.2- TYPICAL FORWARD CURRENT DERATING CURVE

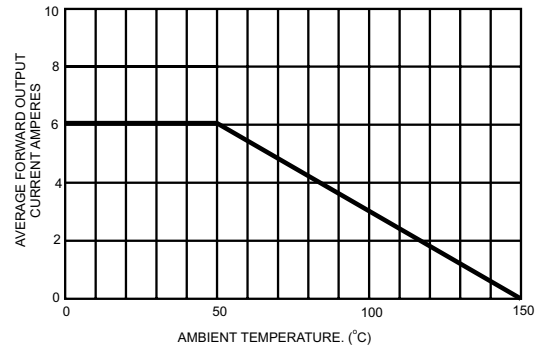


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

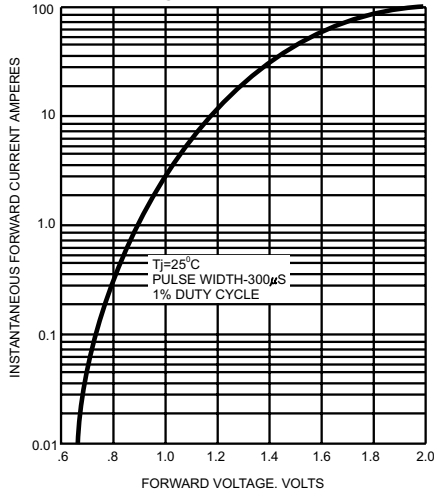


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

