



# SB6G, SBT6G SERIES

Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers



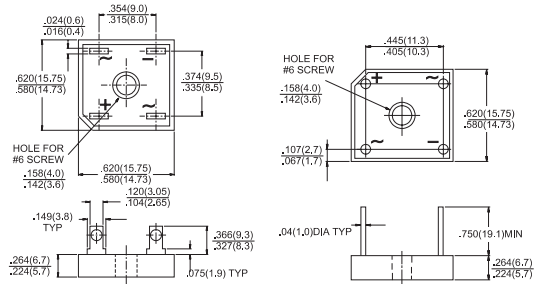
Voltage Range  
50 to 1000 Volts  
Current  
6.0 Amperes

## 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

### SBT-6

### SB-6



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	SB	SB	SB	SB	SB	SB	Units
		601G	602G	603G	604G	605G	606G	607G	
		SBT	SBT	SBT	SBT	SBT	SBT	SBT	
		601G	602G	603G	604G	605G	606G	607G	
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							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	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" (12mm x 12mm) Copper Pads.

2. Unit Mounted on 2" x 3" x 0.25" Al. Plate.



RATINGS AND CHARACTERISTIC CURVES ( SB601G THRU SB607G )  
 SBT601G SBT607G

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

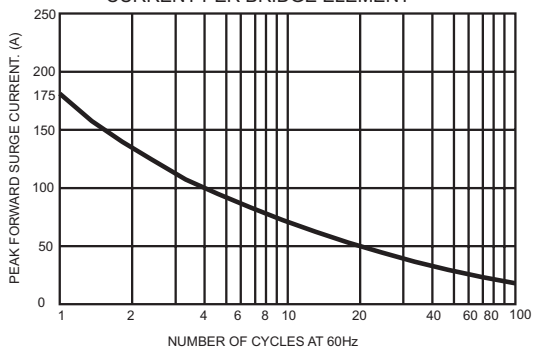


FIG.2- TYPICAL FORWARD CURRENT DERATING CURVE

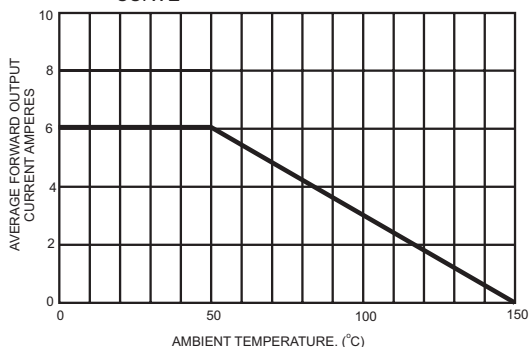


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

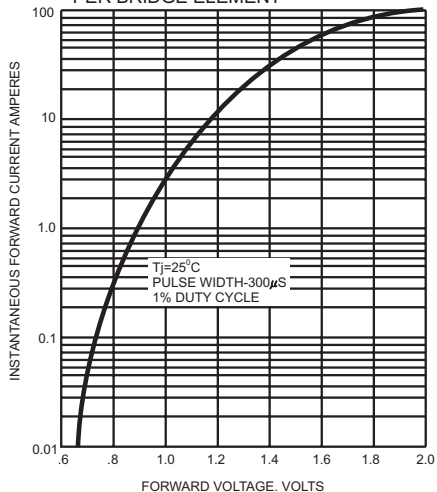


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

