

## SB601 THRU SB607

### 6.0 AMP SILICON BRIDGE

#### FEATURES

- \* Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- \* This series is UL recognized under component index, file number E127707
- \* High overload surge capacity
- \* Ideal for printed circuit board
- \* Typical IR less than 0.1 uA
- \* High case dielectric strength
- \* High temperature soldering guaranteed : 265°C/10 seconds/.375"(9.5mm)lead lengths at 5 lbs(2.3kg) tension

#### MECHANICAL DATA

- \* Case: Void-free plastic package
- \* Lead: Plated lead solderable per MIL-STD-202E method 208C
- \* Polarity: Polarity symbols marked on case
- \* Mounting: Thru hole for #6 screw
- \* Mounting position: Any
- \* Weight: 0.2 ounce, 5.5 grams

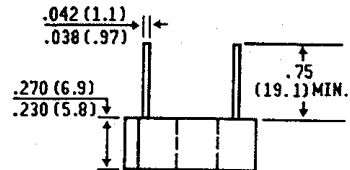
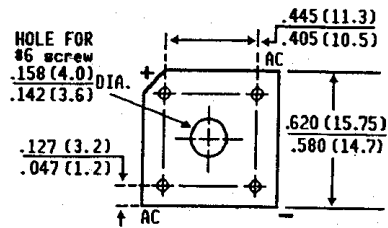
#### VOLTAGE RANGE

50 to 1000 Volts

#### CURRENT

6.0 Amperes

#### SB-6



Polarity shown on side of case: positive lead by beveled corner

Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

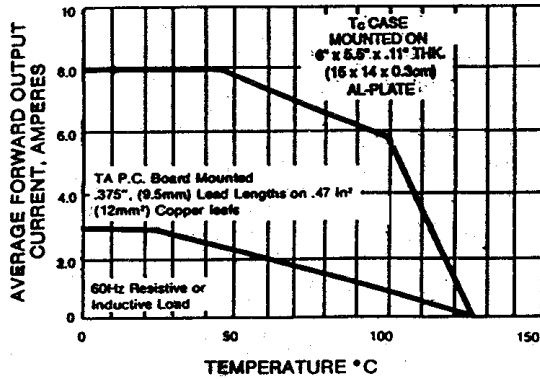
	SYMBOLS	SB601	SB602	SB603	SB604	SB605	SB606	SB607	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectifier Output Current at	I(AV)	TC=100°C(Note2)						6.0		A
		TA=25°C(Note3)						3.0		
Peak Forward Surge Current 8.3 ms single half sine wave superimposed on rated load (JEDEC method)	I <sub>fsm</sub>							150		A
Maximum instantaneous Forward Voltage drop per Bridge Element at 3.0A	V <sub>F</sub>							1.2		V
Maximum Reverse Current at Rated DC	I <sub>R</sub>							10.0		uA
Blocking Voltage per element	HTIR							1.0		mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>							35.0		pf
Typical Thermal Resistance (Note2)	R <sub>THjc</sub>							8.0		°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>stg</sub>							-65 TO +150		°C

#### NOTES :

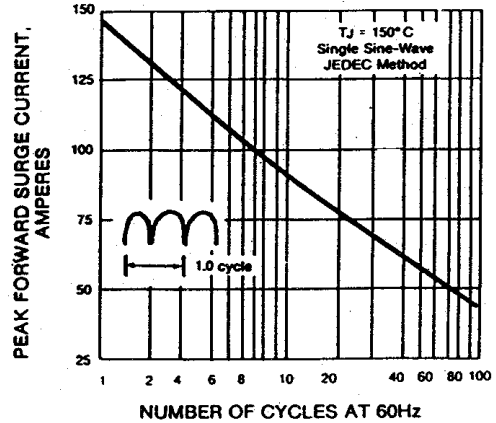
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Bridge mounted on a 6" x 5.5" x .11" THK(15cm x 14cm x 0.3cm)AL Plate
3. Bridge mounted on P.C.Board .375"(9.5mm)lead length with .47" sq.(12mm sq.) copper pads.

## RATINGS AND CHARACTERISTIC CURVES SB601 THRU SB607

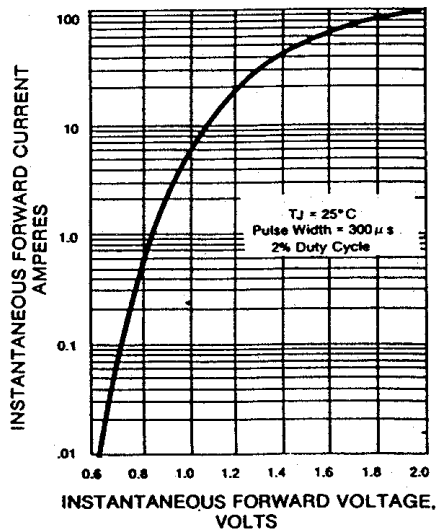
**FIG. 1 — DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT**



**FIG. 4 — TYPICAL REVERSE CHARACTERISTICS PER ELEMENT**

