

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

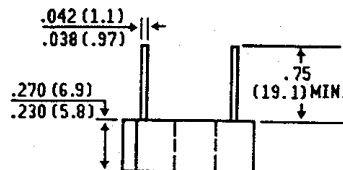
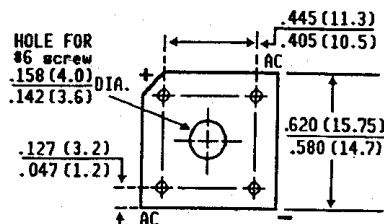
VOLTAGE RANGE

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		Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		Vrms	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward	TC=100°C(Note2)	I(AV)	6.0							A
Rectifier Output Current at	TA=25°C(Note3)		3.0							
Peak Forward Surge Current 8.3 ms single half sine wave superimposed on rated load (JEDEC method)		Ifsm	150							A
Maximum instantaneous Forward Voltage drop per Bridge Element at 3.0A		VF	1.2							V
Maximum Reverse Current at Rated DC @TA=25°C		IR	10.0							uA
Blocking Voltage per element @TA=100°C		HTIR	1.0							mA
Typical Junction Capacitance (Note1)		CJ	35.0							pf
Typical Thermal Resistance (Note2)		RTHjc	8.0							°C/W
Operating and Storage Temperature Range		TJ, Tstg	-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

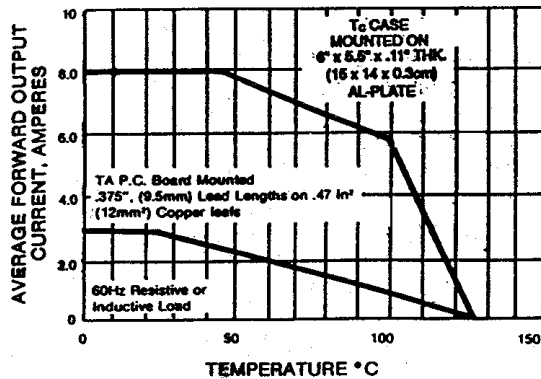


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

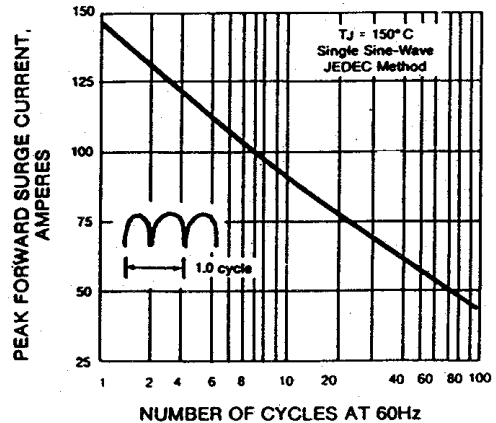


FIG. 3 — TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

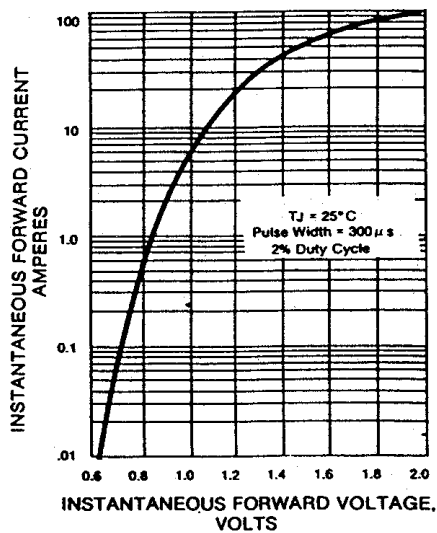


FIG. 4 — TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

