

SINGLE-PHASE SILICON BRIDGE RECTIFIER

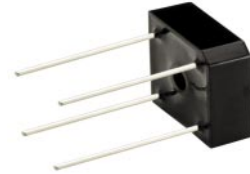
VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

FEATURES

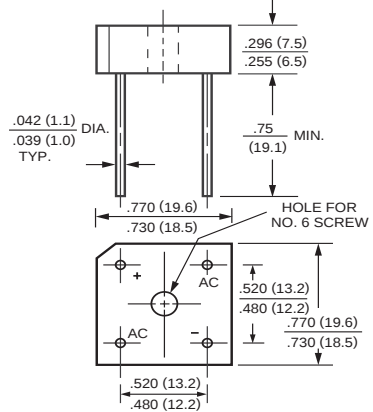
- * Surge overload rating: 125 amperes peak
- * Low forward voltage drop
- * Mounting position: Any
- * Mounting: Hole thru for # 6 screw

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O



BR-8



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%.

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	BR805	BR81	BR82	BR84	BR86	BR88	BR810	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Tc = 50°C Rectified Output Current at: Tc = 100°C TA = 50°C	IO	8.0 6.0 6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	125							Amps
Typical Thermal Resistance from junction to case	RθJC	7							°C/W
Typical Thermal Resistance from junction to ambient	RθJA	28							
Operating Temperature Range	TJ	-55 to + 150							°C
Storage Temperature Range	TSTG	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	BR805	BR81	BR82	BR84	BR86	BR88	BR810	UNITS
Maximum Forward Voltage Drop per element at 4.0A DC	VF	1.1							Volts
Maximum Reverse Current at Rated	IR	5.0							uAmps
DC Blocking Voltage per element		0.2							mAmps

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2005-3

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RATING AND CHARACTERISTIC CURVES (BR805 THRU BR810)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

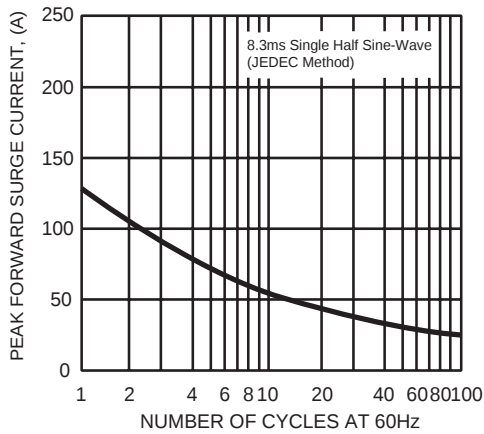


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

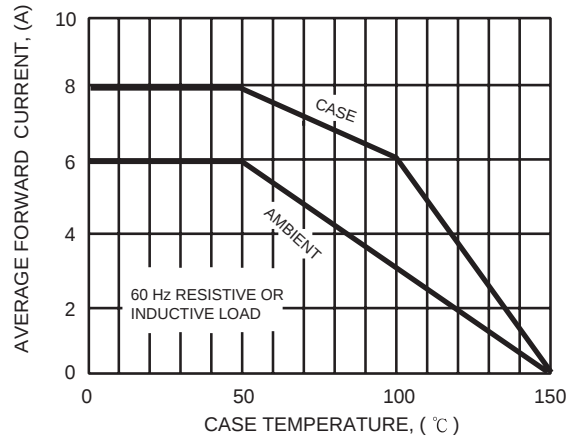


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

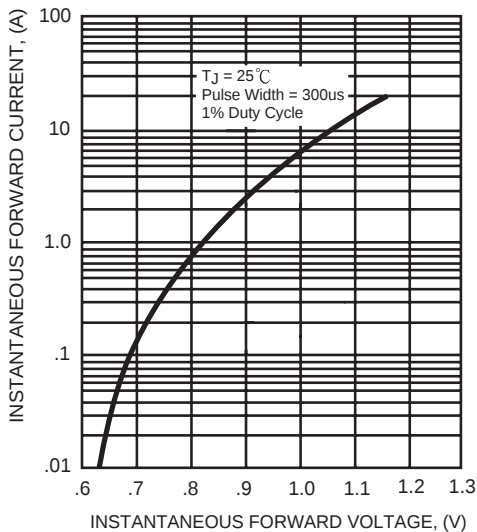


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

