RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

BR805 THRU BR810

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

FEATURES

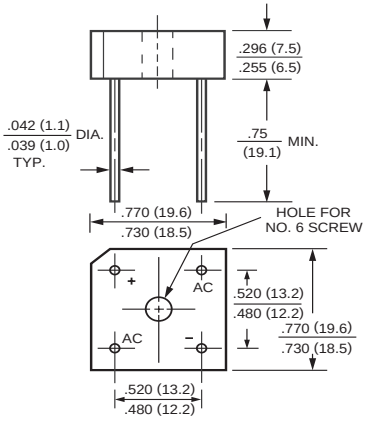
* Surge overload rating: 125 amperes peak
* Low forward voltage drop
* Mounting position: Any
* Mounting: Hole thru for # 6 screw

MECHANICAL DATA

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



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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 T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	BR805	BR81	BR82	BR84	BR86	BR88	BR810	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Tc = 50°C	I_O	8.0							Amps
Rectified Output Current at: Tc = 100°C		6.0							
T_A = 50°C		6.0							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125							Amps
Operating Temperature Range	T_J	-55 to + 125							°C
Storage Temperature Range	T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At T_A = 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		V_F	1.1							Volts
Maximum Reverse Current at Rated	@T_A = 25°C	I_R	10							uAmps
DC Blocking Voltage per element	@T_C = 100°C		0.2							mAmps

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RATING AND CHARACTERISTIC CURVES (BR805 THRU BR810)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

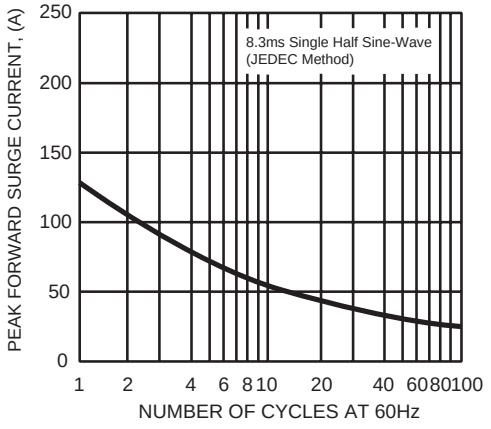


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

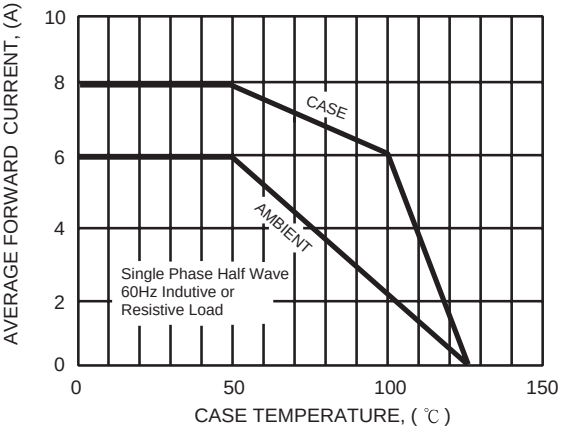


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

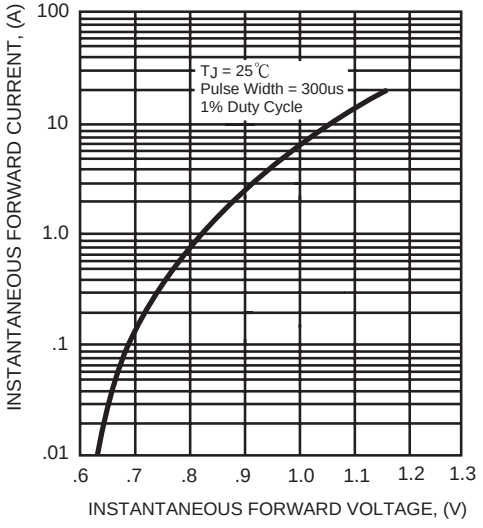


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

