

**SINGLE-PHASE SILICON BRIDGE RECTIFIER**

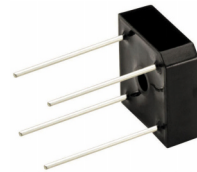
**VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes**

**FEATURES**

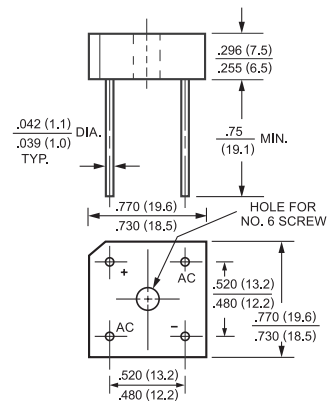
- \* Surge overloab rating: 125 amperes peak
- \* Low forward voltage drop
- \* Mounting position: Any
- \* Mounting: Hole thru for # 6 screw

**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%.



**BR-8**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS** (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

RATINGS	SYMBOL	BR805	BR801	BR802	BR804	BR806	BR808	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 $T_c = 50^\circ\text{C}$ Rectified Output Current at: $T_c = 100^\circ\text{C}$ $T_A = 50^\circ\text{C}$	$I_o$	8.0							Amps
		6.0							
		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							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150							$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** (At  $T_A = 25^\circ\text{C}$  unless otherwise noted)

CHARACTERISTICS	SYMBOL	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	UNITS
Maximum Forward Voltage Drop per element at 4.0A DC	$V_F$	1.1							Volts
Maximum Reverse Current at Rated	$I_R$	10							uAmps
DC Blocking Voltage per element		0.2							mAmps

# RATING AND CHARACTERISTIC CURVES ( BR805 THRU BR810 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

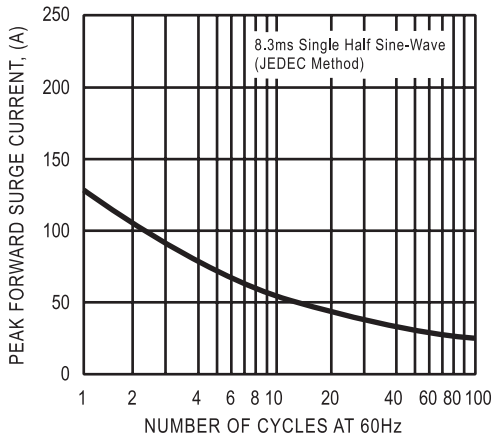


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

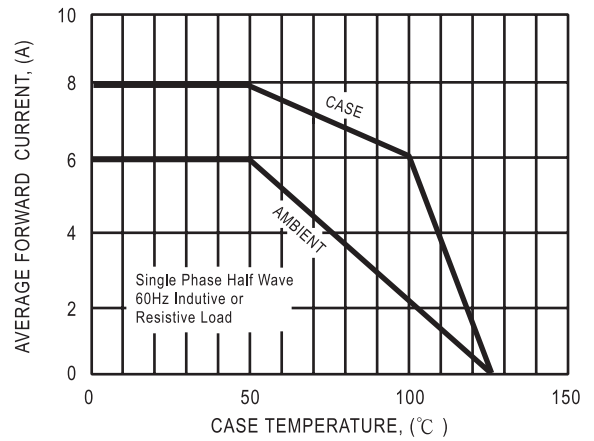


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

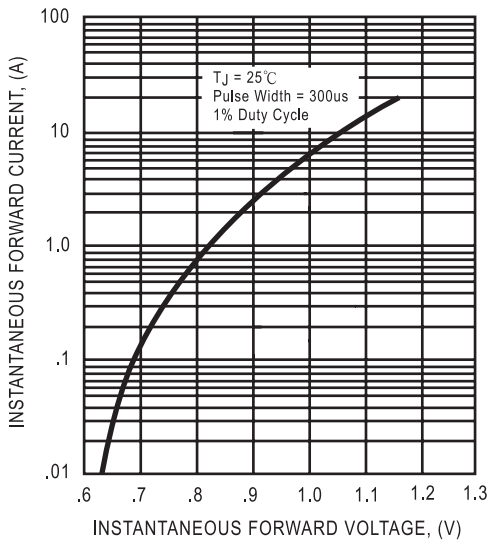


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

