



BR805 THRU BR810

SINGLE-PHASE SILICON BRIDGE

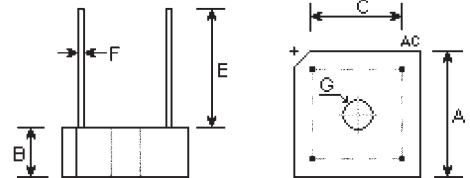
Reverse Voltage - 50 to 1000 Volts

Forward Current - 8.0 Amperes

Features

- Surge overload rating - 125 amperes peak
- Low forward voltage drop
- Mounting position: Any
- Small size; simple installation
- Silver plated copper leads
- Ceramic case on BR8 series

BR8



DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.730	0.770	18.542	19.558	
B	0.250	0.300	6.35	7.63	
C	0.480	0.520	12.19	13.21	
E	0.750	-	19.1	-	
F	0.380	0.042	0.97	1.07	ϕ
G	0.140	0.150	3.56	3.81	ϕ

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

For capacitive load, derate current by 20%.

	Symbols	BR805	BR81	BR82	BR84	BR86	BR88	BR810	Units	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum average forward rectified output current at $T_C=100^\circ\text{C}$ * $T_A=50^\circ\text{C}$ **	$I_{(AV)}$	8.0					8.0			Amps
Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load	I_{FSM}	125.0								Amps
Maximum forward Voltage drop per bridge element at 4.0A peak	V_F	1.1								Volts
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	10.0					1.0			uA mA
Operating temperature range	T_J	-55 to +125								°C
Storage temperature range	T_{STG}	-55 to +150								°C

Notes:

* Unit mounted on metal chassis

** Unit mounted on P.C. board

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – MAXIMUM FORWARD SURGE CURRENT

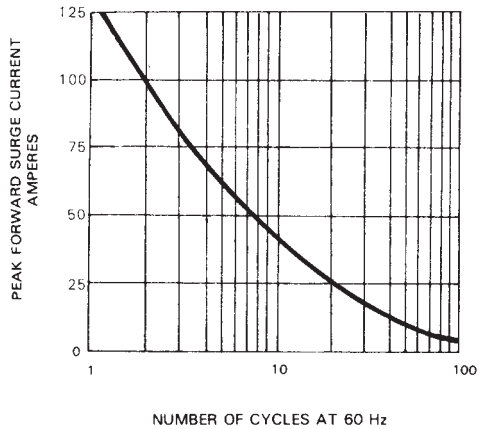


Fig. 2 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

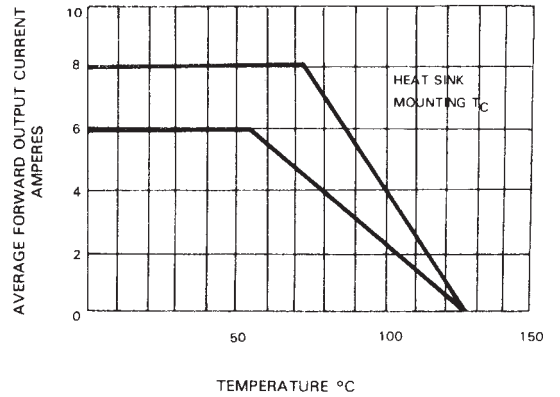


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

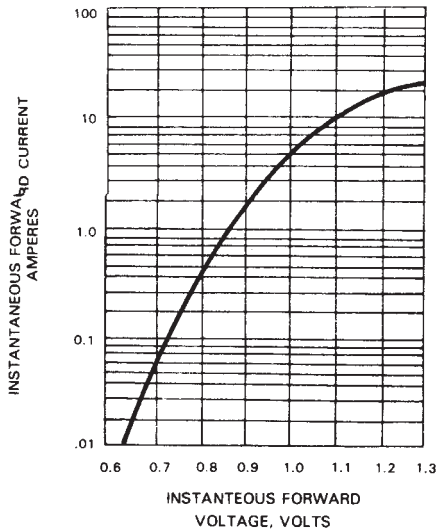


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

