



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**BR805
THRU
BR810**

TECHNICAL SPECIFICATIONS OF 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

MECHANICAL DATA

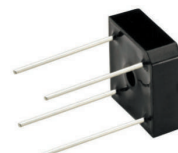
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 6.9 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

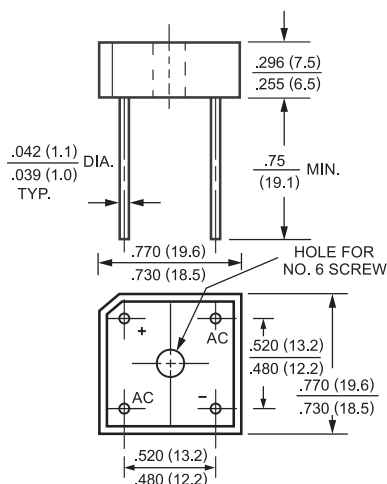
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



BR-8/10



Dimensions in inches and (millimeters)

		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 Rectified Output Current at Tc = 50°C		IO	8.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	125							Amps
Maximum Forward Voltage Drop per element at 4.0A DC		VF	1.1							Volts
Maximum DC Reverse Current at Rated	@ TA = 25°C	IR	10							uAmps
DC Blocking Voltage per element	@ TC = 100°C		500							
I²t Rating for Fusing (t<8.3ms)		I²t	166							A²Sec
Typical Junction Capacitance (Note1)		CJ	200							pF
Typical Thermal Resistance (Note 2)		RθJA	21							°C/W
Operating Temperature Range		TJ	-55 to + 125							°C
Storage Temperature Range		TSTG	-55 to + 150							°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.

RATING AND CHARACTERISTIC CURVES (BR805 THRU BR810)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

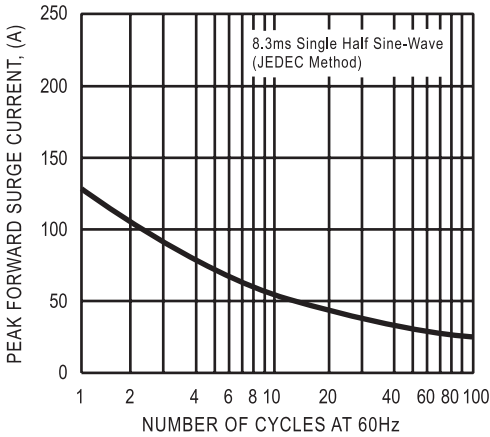


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

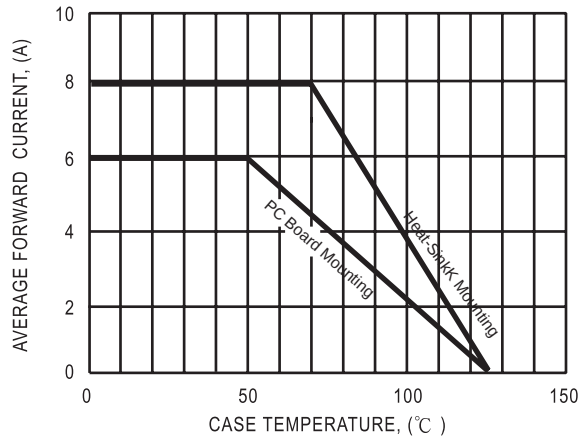


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

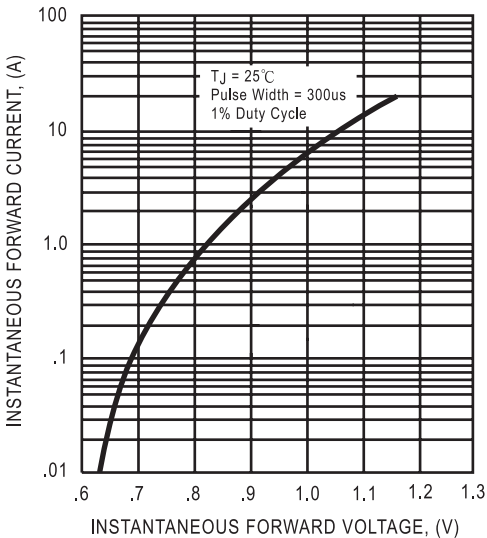
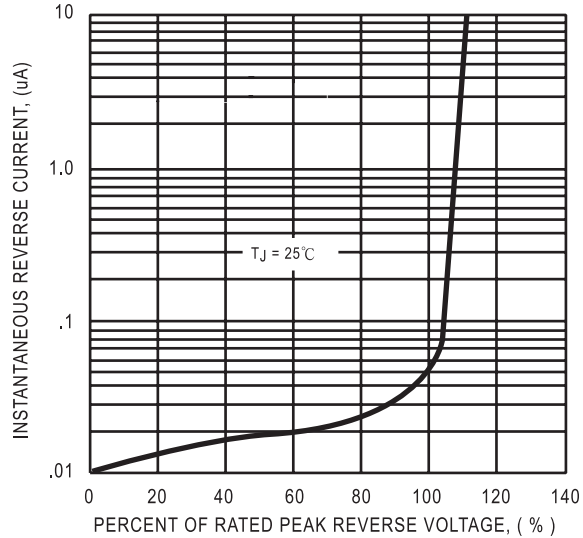


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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