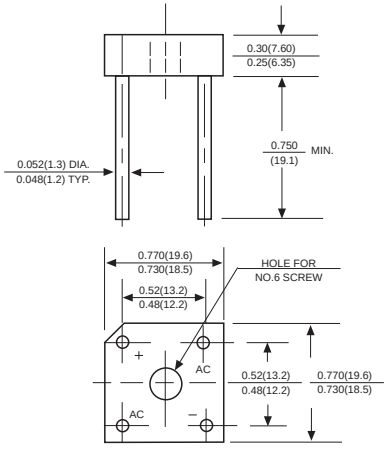
BR8005 THRU BR810

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Amperes

BR-8



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260℃/10 seconds,at 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting:Thru hole for #6 serew,5in.-lbs. torque max.
Weight:0.20o unce, 5.62 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

TWGMC Catalog Number		*SYMBOLS*	BR8005	BR801	BR802	BR804	BR806	BR808	BR810	UNITS
Maximum repetitive 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 output rectified current at	T_C=50℃ (Note 1)	$I_{(AV)}$	8.0							Amps
	T_C=100℃ (Note 1)		6.0							
	T_A=50℃ (Note 2)		6.0							
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	125.0							Amps
Rating for Fusing(t<8.3ms)		I^2t	64							A^2s
Maximum instantaneous forward voltage drop per bridge element at 4.0A		V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	T_A=25℃	I_R	10							μA
	T_A=100℃		1.0							mA
Isolation voltage from case to leads		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	6.0							°C/W
Operating junction temperature range		T_J	-55 to +125							°C
storage temperature range		T_{STG}	-55 to +150							°C

NOTES:
1.Unit mounted on 8.7 ” x 8.7 ” x0.24 ” thick(22x22x0.6cm)Al.plate.
2.Unit mounted on P.C. board with 0.47 ” x 0.47 ” (12x12mm) copper pads,0.375 ”

RATINGS AND CHARACTERISTIC CURVES BR8005 THRU BR810

FIG. 1- FORWARD CURRENT DERATING CURVE

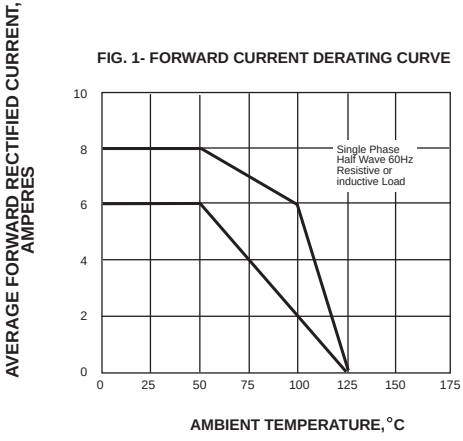


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

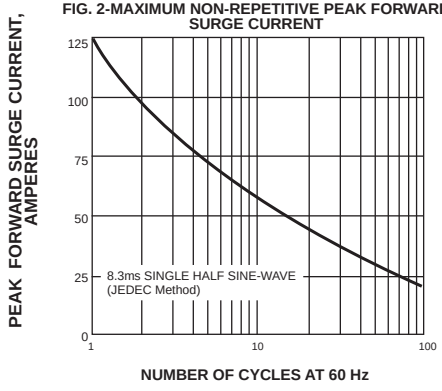


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

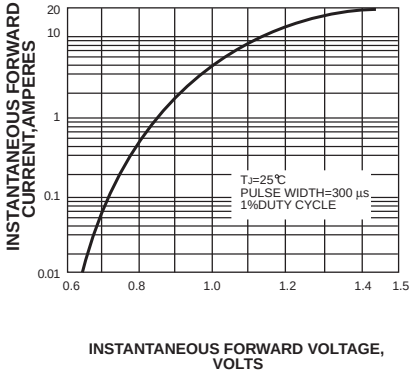


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

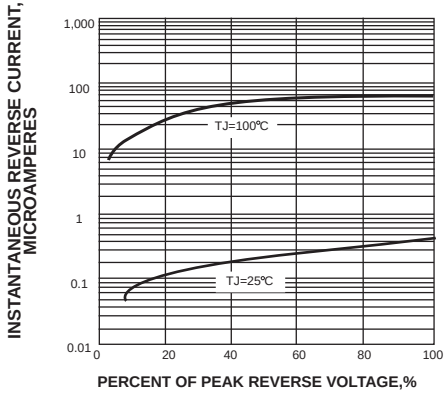


FIG. 5-TYPICAL JUNCTION CAPACITANCE

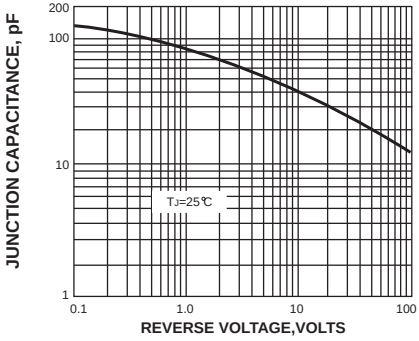


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE