

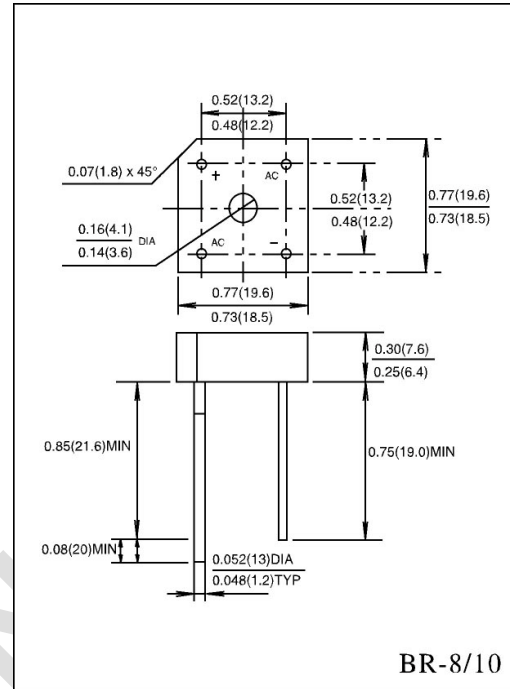
SINGLE-PHASE BRIDGE RECTIFIER

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High isolation voltage from case to leads.
- High temperature soldering guaranteed:
260°C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Lead solderable per MIL - STD - 202E method 208C
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #6 screw, 5 in.,- lbs. Torqute Max.
- Weight: 0.20 ounce, 5.62 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	KBPC 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	UNIT
		BR805	BR81	BR82	BR84	BR86	BR88	BR810	
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 Rectified Output Current, at	$I_{(AV)}$	8.0							Amps
$T_C = 50^\circ\text{C}$ (Note1)		6.0							
$T_A = 50^\circ\text{C}$ (Note2)		6.0							
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	125							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 per element	$T_A = 25^\circ\text{C}$	10							μA
	$T_A = 100^\circ\text{C}$	1.0							mA
Isolation Voltage from case to leads.	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	6.0							$^\circ\text{C/W}$
Operating Temperature Range	T_J	(-55 to +125)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^\circ\text{C}$

1. Unit mounted on 8.7" X 8.7" X 0.24" thick (22 X 22 X 0.6cm) Al. Plate.

2. Unit mounted on P.C. Borad 0.375" (9.5mm) lead length with 0.47" X 0.47" (12 X 12mm) copper pads.

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

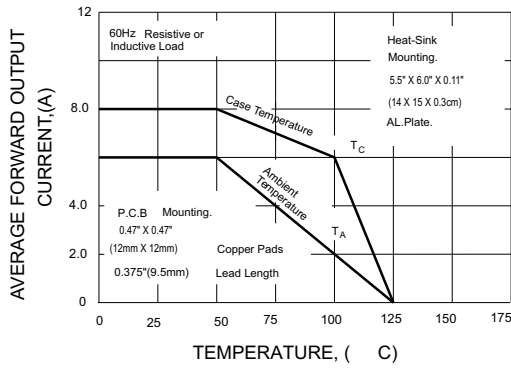


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

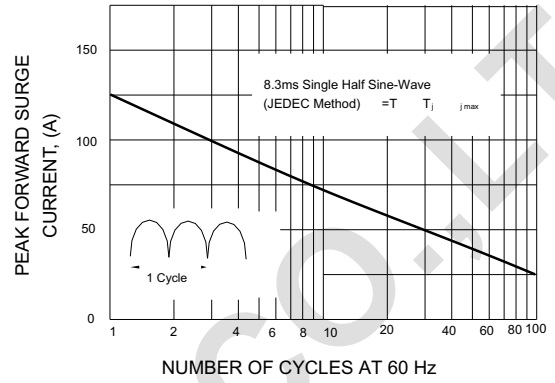


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

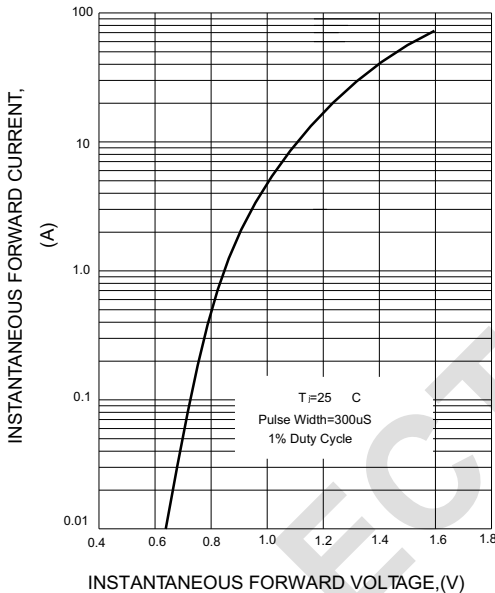


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

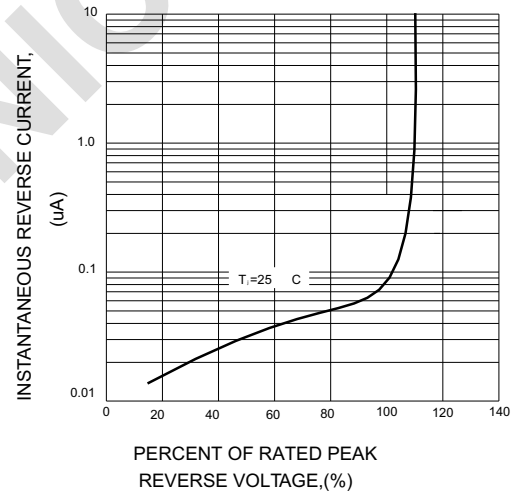


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

