



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

BR1005 - BR1010

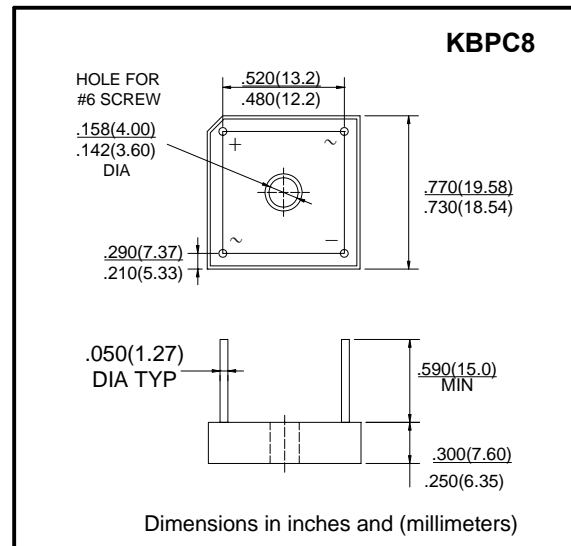
VOLTAGE RANGE - 50 to 1000 V
CURRENT - 10 A

FEATURES

- Glass Passivated Chip
- This series is UL recognized
- 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 molded on case
- Mounting: Thru hole for #6 screw, 5 in.-lbs torque max.
- Weight: 0.20ounce, 5.62 grams



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	BR1005	BR101	BR102	BR104	BR106	BR108	BR1010	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 Rectified Output Current, at $T_C=50^\circ C$	$I_{(AV)}$	10.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Rating for Fusing($t < 8.3ms$)	I^2T	166							A^2S
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	I_R	$T_A=25^\circ C$							$\mu Amps$
		$T_A=150^\circ C$							mAmps
Isolation Voltage from case to leads	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	6.0							$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

NOTES:

1. Unit mounted on 8.7"×8.7"×0.24" thick (22×22×0.6mm) Al. plate.
2. Unit mounted on P.C.B at 0.375" (9.5mm) lead length with 0.47"×0.47" (12×12mm) copper pads.



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RATING AND CHARACTERISTIC CURVES BR1005 - BR1010

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

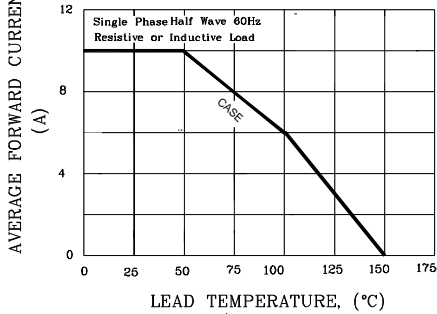


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

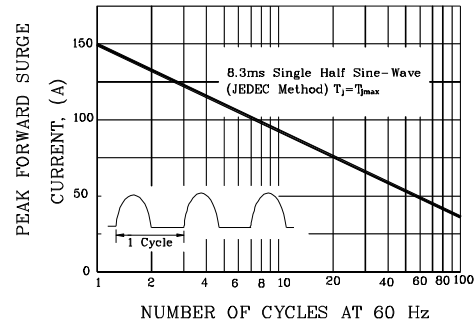


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

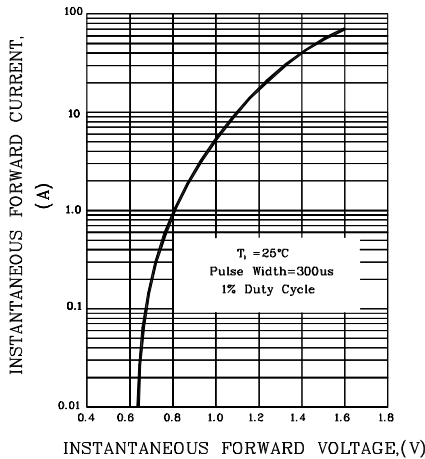


FIG.4-TYPICAL REVERSE CHARACTERISTICS

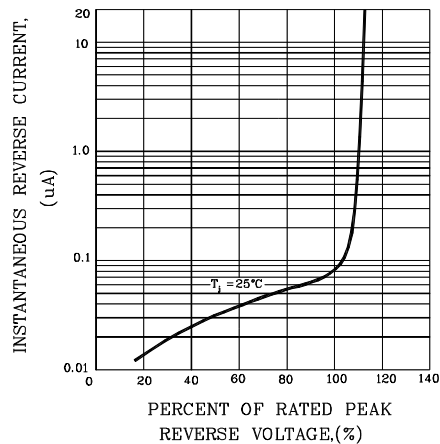


FIG.5-TYPICAL JUNCTION CAPACITANCE

