GBL005 THRU GBL10

SINGL PHASE GLASS PASSIVATED BRIDGE RECTIFIER

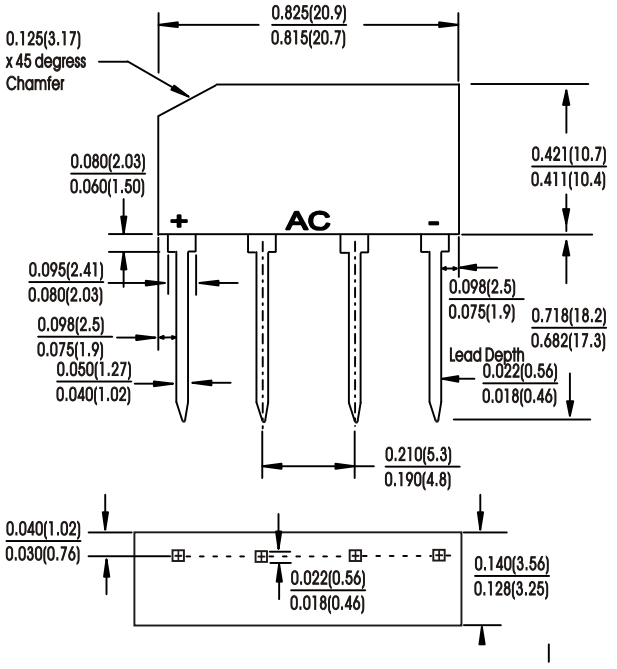
GBL

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized
- Glass passivated chip junction
- High case dielectric strength
- Typical I_R less than 0.1 A
- High surge current capability
- Ideal for printed circuit boards

MECHANICAL DATA

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight: 0.071 oz., 2.0 g



Polarity shown on form side of case: positive lead by beveled cormer

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	GBL 005	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 10	Units
Maximum recurrent 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 voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Tc=50℃ (NOTE 1) Tc=40℃ (NOTE 2)	I_O	4.0 3.0							Amps
Peak forward surge current, 8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I_{FSM}	150							Amps
Rating for fusing(t<8.3ms)	I^2T	93.0							A^2Sec
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage(Per leg) Ta=25° C Ta=125° C	I_R	5.0 500							μA
Typical junction (Per leg) (NOTE 3)	C_J	95.0				40.0			PF
Typical thermal resistance(Per leg) (NOTE 1) (NOTE 2)	Rth JA Rth JL	22.0 3.5							° C/W
Operating Junction and storage temperature range	T_J, Tstg	-55 to+150							

NOTES:
(1)Unit mounted on 3.0 x 3.0 x0.11"thick(7.5 x 7.5 x0.3cm) Al.plate
(2)Unit mounted on P.C.B. At 0.375"(9.5mm) lead lenght and 0.5 x 0.5"(12 x 12mm) copper pads
(3)Measured at 1.0 MHZ and applied reverse of 4.0 Volts

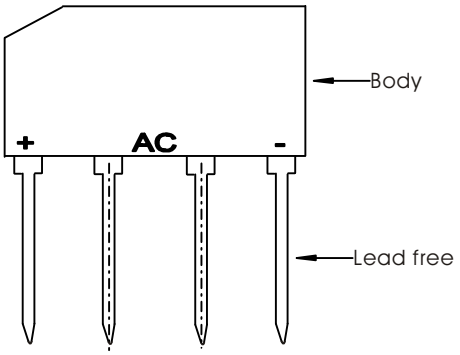

Body
+
AC
-
Lead free

FIG.1-DERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT

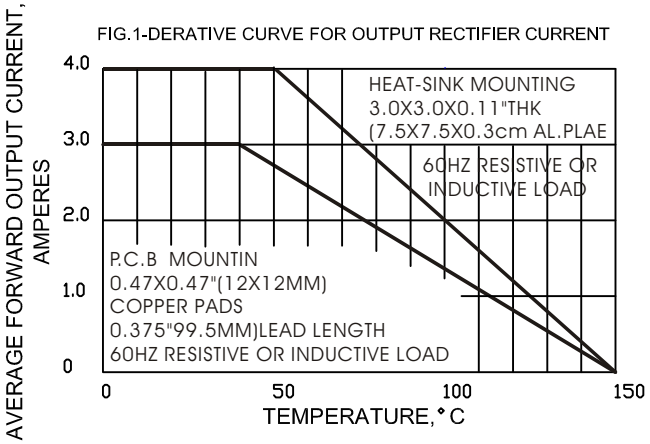


FIG. 2 - MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

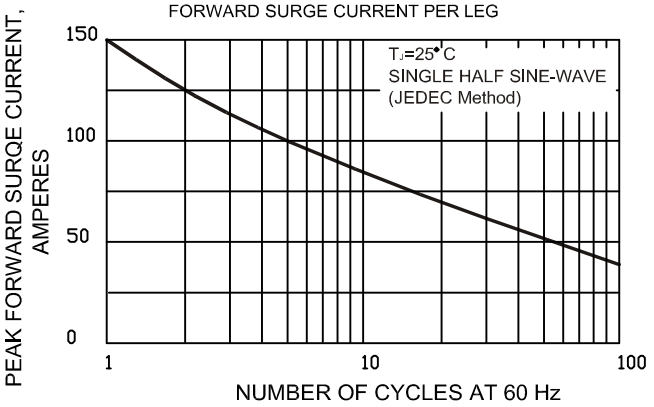


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

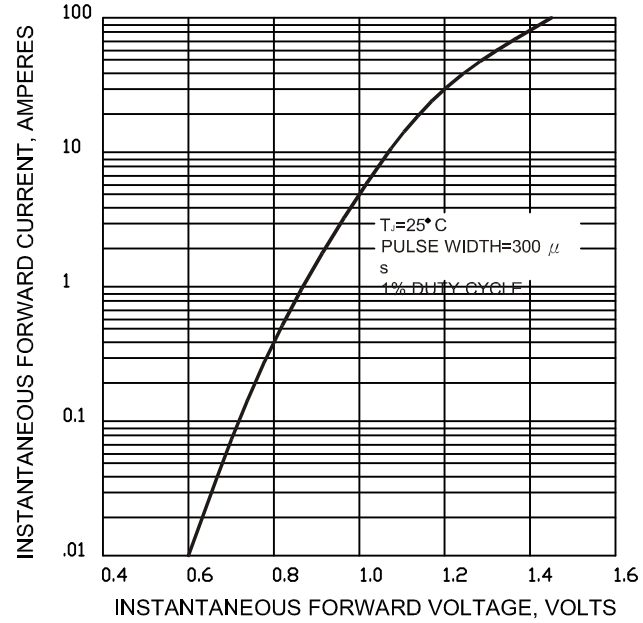


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

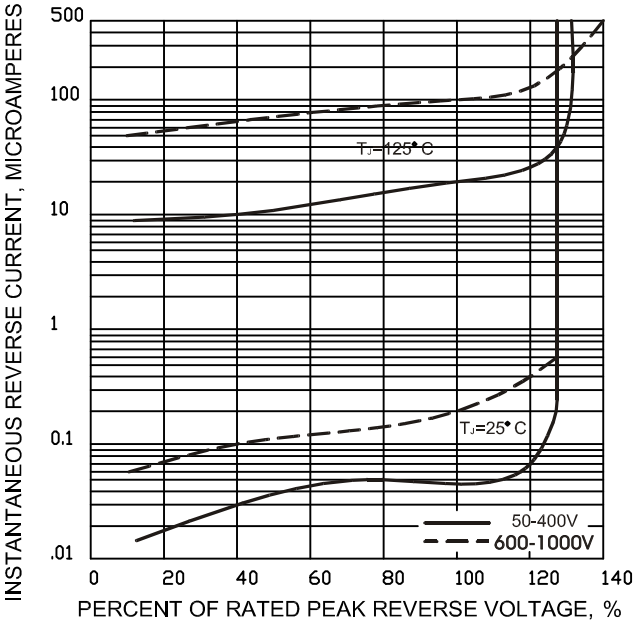


FIG.5-TYPICAL JUNTION CAPACITANCE PER LEG

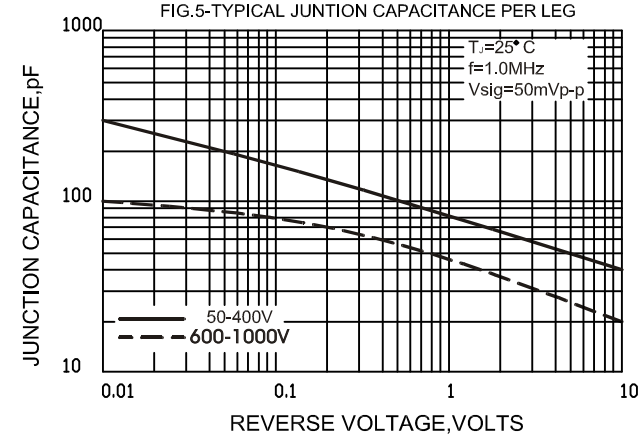


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE