PECLERS®

GBUL8005 THRU GBUL810

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE: **50 to 1000 VOLTS**
FORWARD CURRENT: **8.0 AMPERE**

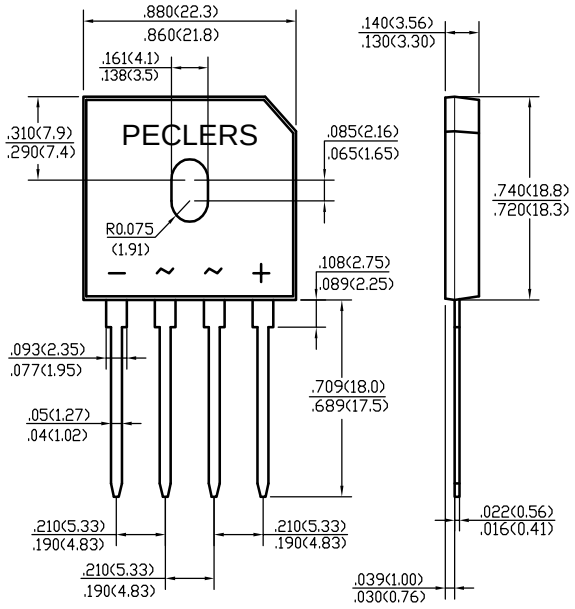
FEATURES

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

MECHANICAL DATA

Case: Molded plastic, GBU
Epoxy: UL 94V-O rate flame retardant
Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
Mounting position: Any
Weight: 0.15ounce, 4.0gram

GBU



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	*GBUL8005*	*GBUL801*	*GBUL802*	*GBUL804*	*GBUL806*	*GBUL808*	*GBUL810*	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 Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	**Volts**
Maximum Average Forward Rectified Current at T_C=100℃	$I_{(AV)}$	8.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							**Amp**
Maximum Forward Voltage at 4.0A DC and 25℃	V_F	0.92							**Volts**
Maximum Reverse Current at T_A=25℃ / **at Rated DC Blocking Voltage T_A=125℃**	I_R	5.0 / 500							**uAmp**
Typical Junction Capacitance (Note 3)	C_J	255				125			**pF**
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	8.6							**℃/W**
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.1							**℃/W**
Operating and Storage Temperature Range	T_J, Tstg	-55 to +150							**℃**

NOTES:

1- Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.

2- Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.

3- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

4- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Derating Curve Output Rectified Current

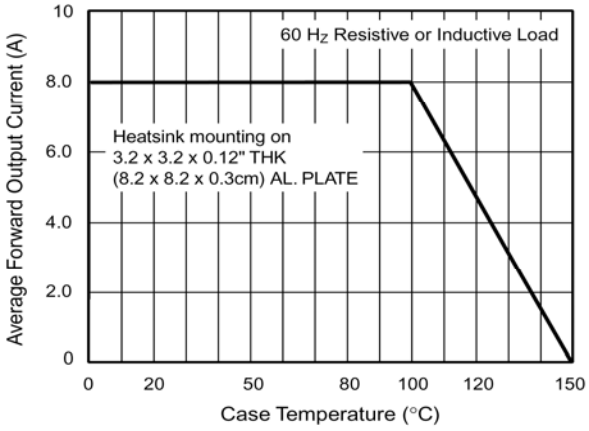


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

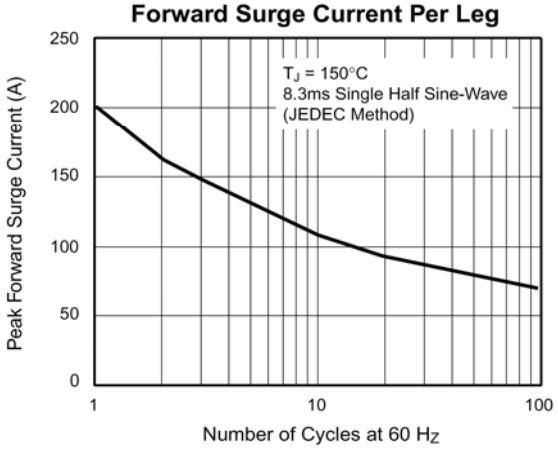


Fig. 3 – Typical Forward Characteristics Per Leg

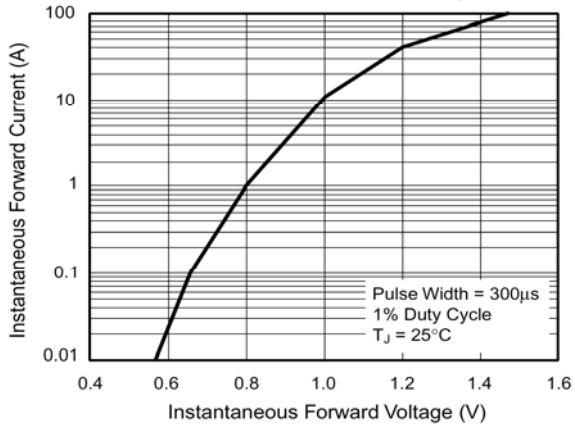


Fig. 4 – Typical Reverse Characteristics Per Leg

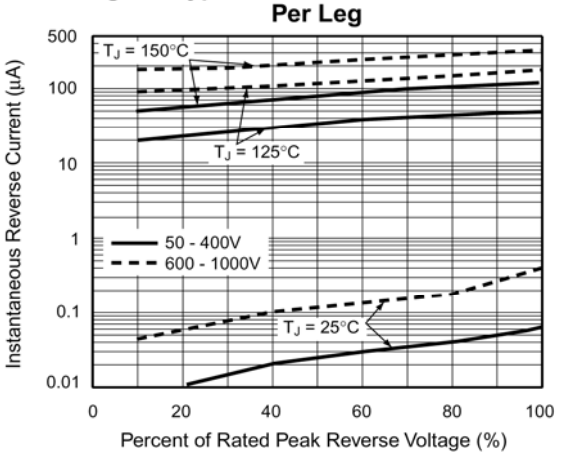


Fig. 5 – Typical Junction Capacitance Per Leg

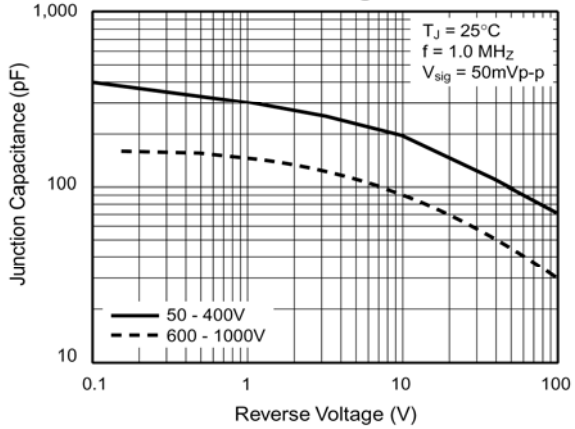


Fig. 6 – Typical Transient Thermal Impedance Per Leg