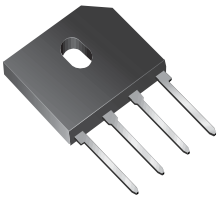
GBU8005 THRU GBU810

VOLTAGE 50V~ 1000V

8 .0 AMP Glass Passivated Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen-free.



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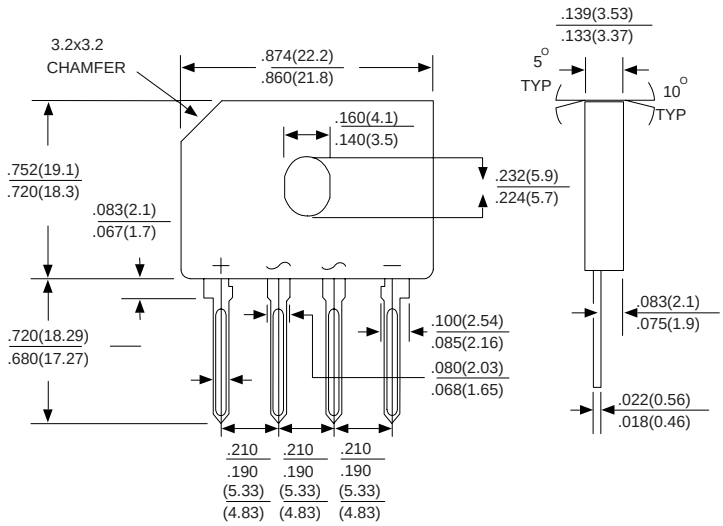

Dimensions in inches and (millimeters)

FEATURES

- Surge Overload Rating -170 AMP Peak
- Ldeal For Printed Circuit Board
- Reliable Low Cost Construction Utilizing Molded Plastic Technique
- Plastic Material Has Underwrites Laboratory Flammability Classification 94V-0
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Resistive or inductive load, 60Hz,
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T_C=100 (without heatsink)	$I_{(AV)}$	8.0 3.2							A
Peak Forward Surge Current, 8.3 ms single half Sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	170							A
Maximum Forward Voltage at 4.0A	V_F	1.10							V
Maximum DC Reverse Current Ta=25°C at Rated DC Blocking Voltage Ta=125°C	I_R	5.0 500							μA
I^2t Rating for fusing (t<8.3ms)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R\theta_{JC}$	2.2							°C / W
Operating Temperature Range	T_J	- 55 ~ + 150							°C
Storage Temperature Range	T_{STG}	- 55 ~ + 150							°C

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

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Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

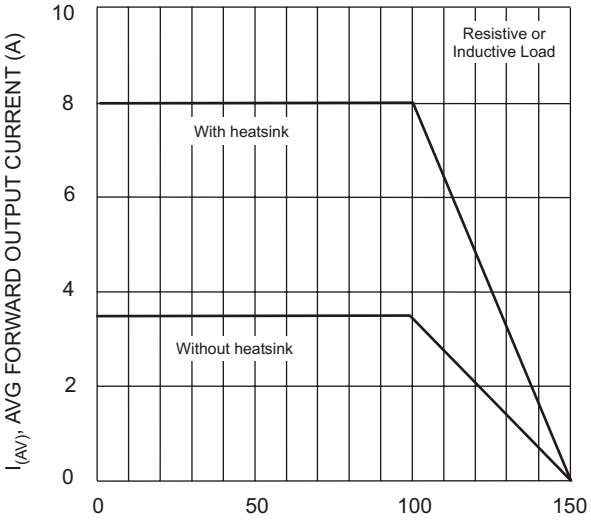

Fig. 1 Forward Current Derating Curve

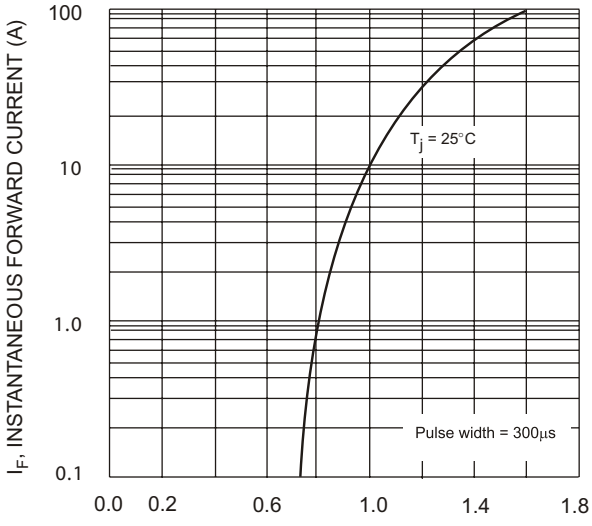

Fig. 2 Typical Forward Characteristics

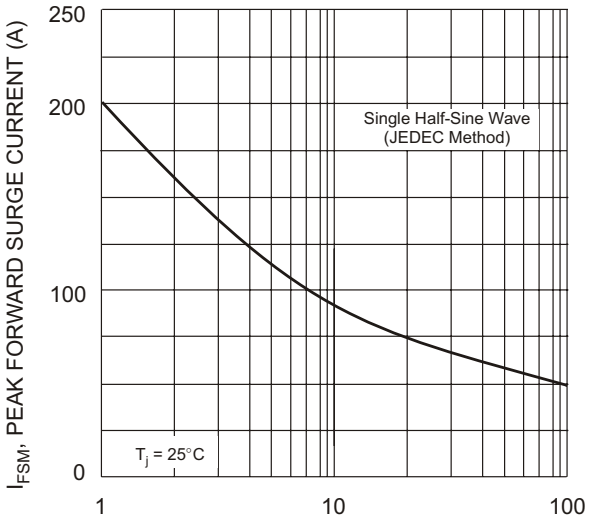

Fig. 3 Maximum Non-Repetitive Surge Current

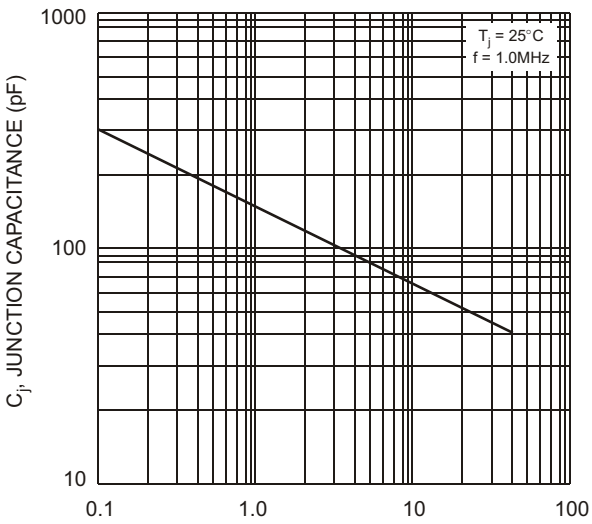

Fig. 4 Typical Junction Capacitance