



Elektronische Bauelemente

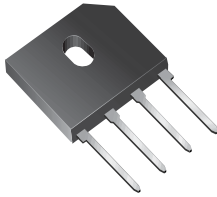
GBU8005 THRU GBU810

VOLTAGE 50V ~ 1000V

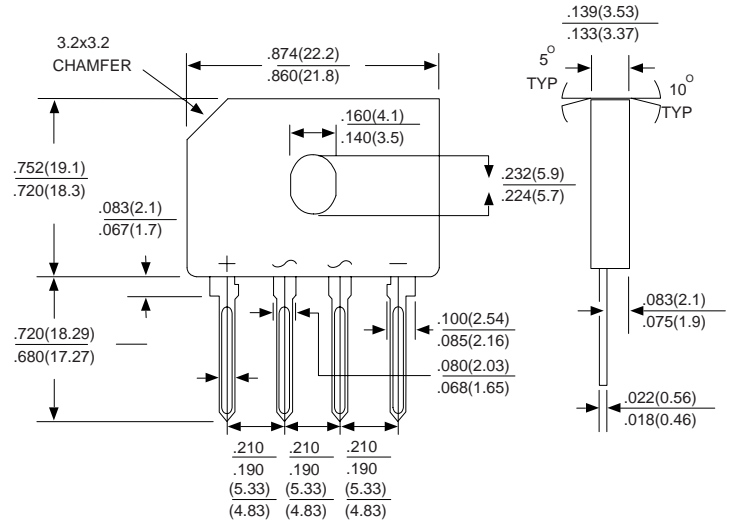
8.0 AMP Glass Passivated Bridge Rectifiers

RoHS Compliant Product

A suffix of "-C" specifies halogen-free.



GBU



Dimensions in inches and (millimeters)

FEATURES

- * Surge Overload Rating -170 AMP Peak
- * Ideal 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 @ $T_C=100^\circ$ (without heatsink)	$I_{(AV)}$				8.0				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 $T_a=25^\circ C$ at Rated DC Blocking Voltage $T_a=125^\circ C$	I_R				5.0				μA
I^2t Rating for fusing ($t < 8.3ms$)	I^2t				166				A ² S
Typical Junction Capacitance per element (Note1)	C_J				60				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$				2.2				$^\circ C / W$
Operating Temperature Range	T_J				- 55 ~ + 150				$^\circ C$
Storage Temperature Range	T_{STG}				- 55 ~ + 150				$^\circ C$

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.

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

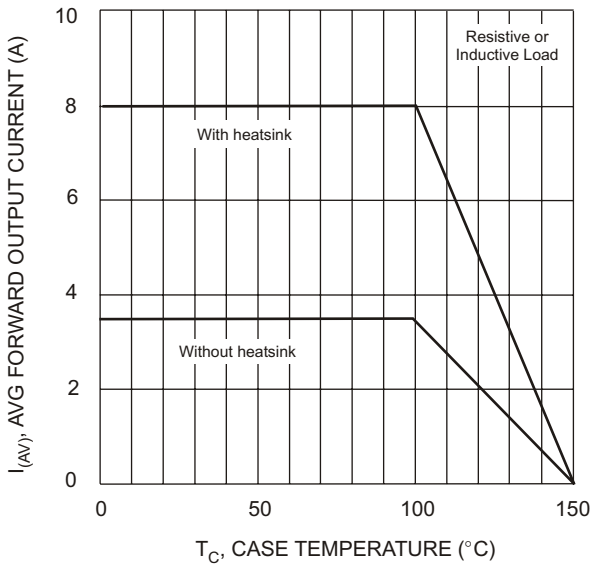


Fig. 1 Forward Current Derating Curve

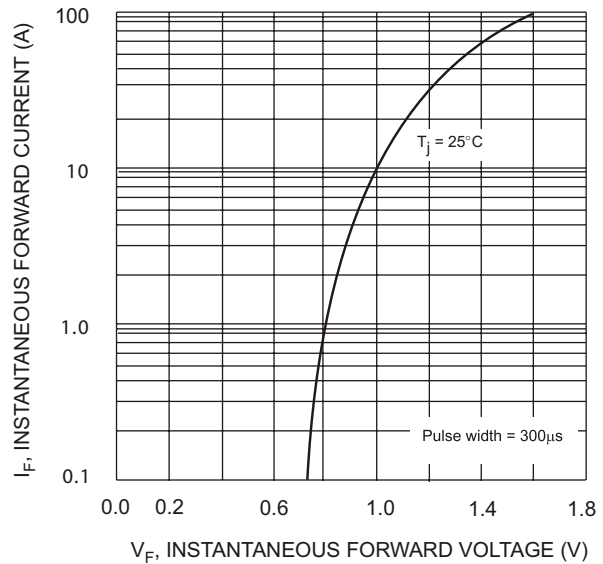


Fig. 2 Typical Forward Characteristics

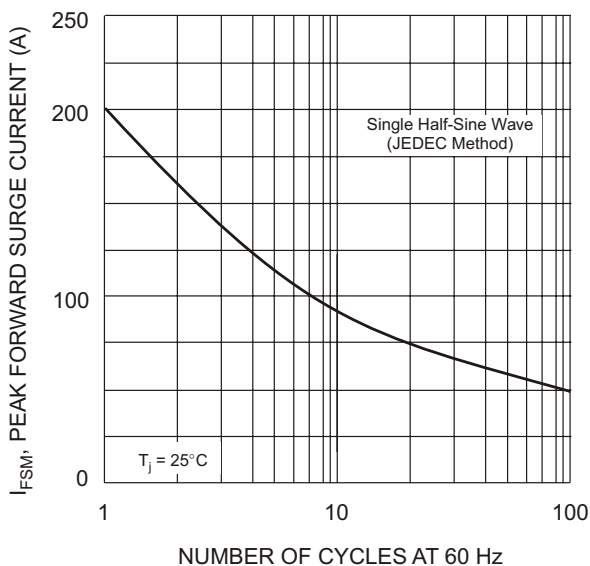


Fig. 3 Maximum Non-Repetitive Surge Current

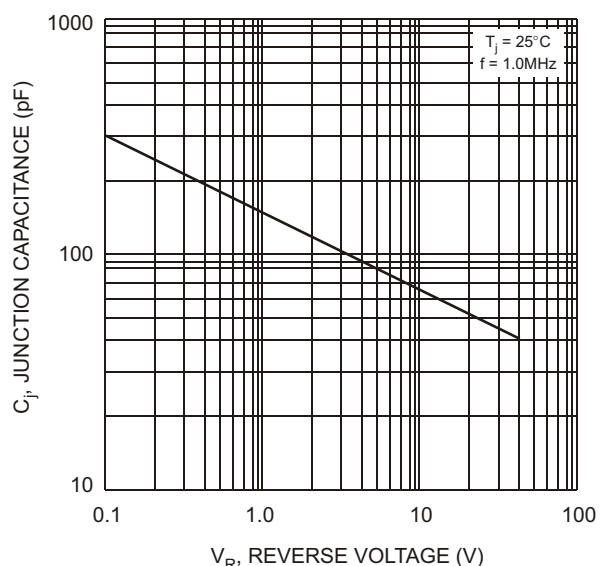


Fig. 4 Typical Junction Capacitance