

RoHS Compliant Product

FEATURES

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Plastic Material-UL Flammability 94V-0

GBU

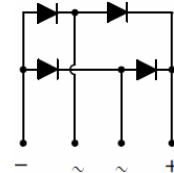


MECHANICAL DATA

- Case: GBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number

ORDER INFORMATION

Part Number	Type
GBU8005~GBU810	Lead (Pb)-free
GBU8005H~GBU810H	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current ¹	I_F	8							A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175							A
Forward Voltage per element	$I_F=4A$	1							V
	$I_F=8A$	1.1							
Peak Reverse Current @Rated DC Blocking Voltage	$T_J=25^{\circ}C$	5							μA
	$T_J=125^{\circ}C$	200							
Typical Junction Capacitance ²	C_J	45							pF
Typical Thermal Resistance	$R_{\theta JA}$	21							$^{\circ}C/W$
	$R_{\theta JC}$	3.4							
	$R_{\theta JL}$	2.1							
Operating Junction & Storage Temperature	T_J, T_{STG}	-55~150							$^{\circ}C$

Notes:

1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1MHz and applied reverse voltage of 4V D.C.

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Forward Current Derating Curve

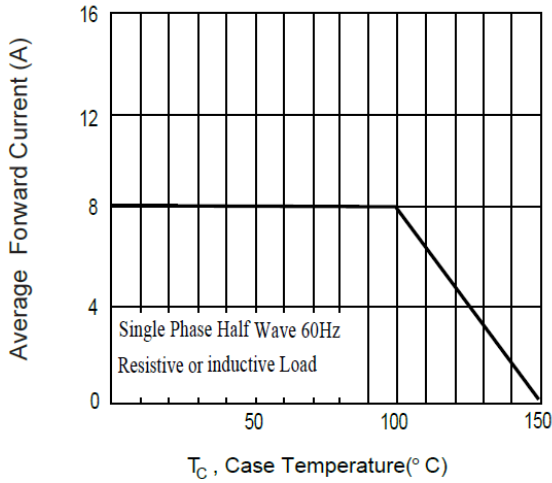


Fig. 2 Typ. Forward Characteristics

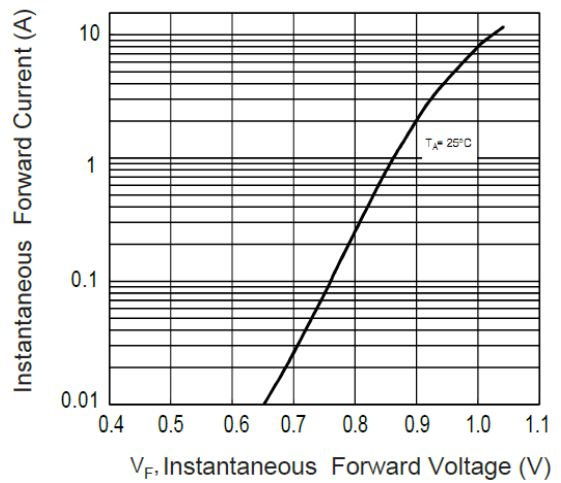


Fig.3 Maximum Peak Forward Surge Current

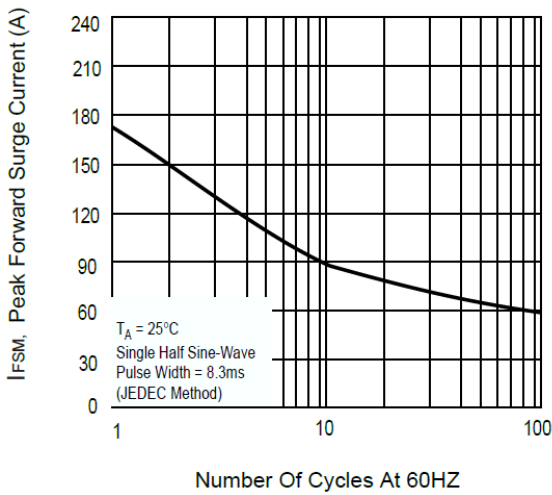


Fig. 4 Typical Junction Capacitance

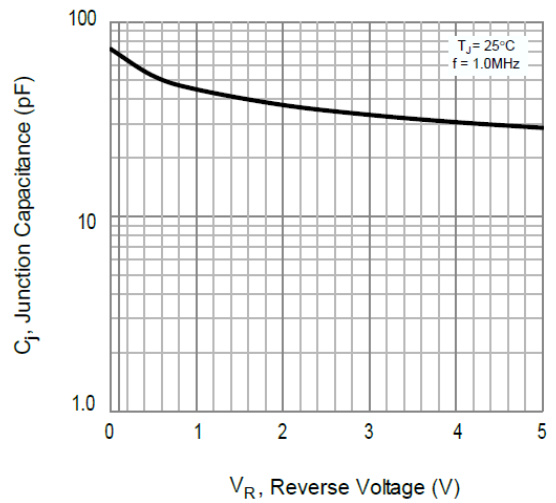
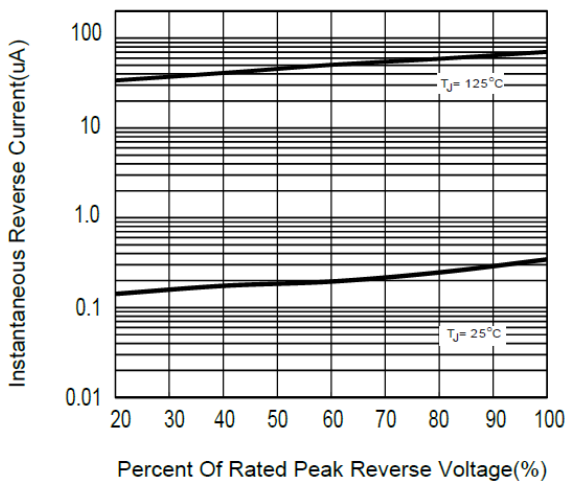
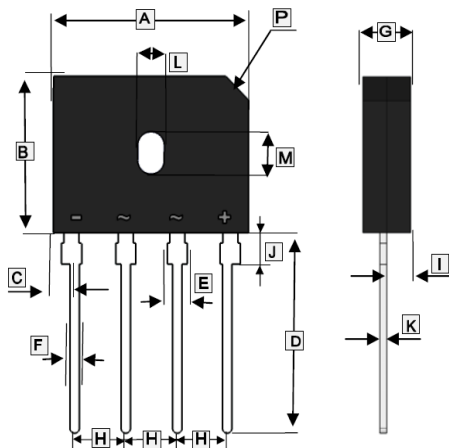


Fig.5 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

GBU



REF.	Millimeter	
	Min.	Max.
A	21.70	22.30
B	18.20	19.10
C	3.40 REF.	
D	17.27	18.50
E	1.80	2.54
F	0.90	1.30
G	3.30	3.80
H	4.80	5.33
I	1.80	2.66
J	1.80	2.54
K	0.40	0.60
L	3.50	4.10
M	5.70 TYP.	
P	3*45° TYP.	