GBU10005G THRU GBU1010G

BRIDGE RECTIFIERS

FEATURES

- UL Recognized File #E469616
- 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

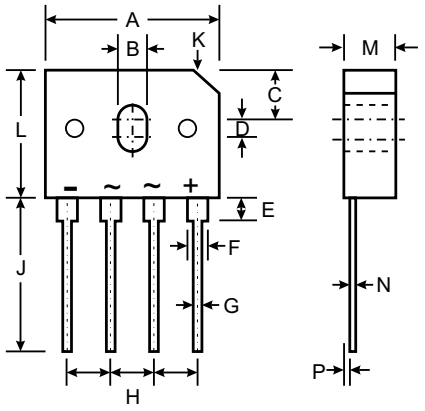
Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

Weight: 0.15ounce, 4.0gram

GBU



Dim	Min	Max
A	21.8	22.3
B	3.5	4.1
C	7.4	7.9
D	1.65	2.16
E	2.25	2.75
F	2.05	2.3
G	1.02	1.27
H	4.83	5.33
J	17.5	18.0
K	4.2 X 45°	
L	18.3	18.8
M	3.30	3.56
N	0.46	0.56
P	0.76	1.0

Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOL	GBU 10005G	GBU 1001G	GBU 1002G	GBU 1004G	GBU 1006G	GBU 1008G	GBU 1010G	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=90℃	$I_{F(AV)}$	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	220							A
Forward Voltage per element @IF=5A @IF=10A	V_{FM}	1.0 1.1							V
Peak Reverse Current @T_A=25℃ At Rated DC Blocking Voltage @T_A=125℃	I_R	5.0 500							uA
I^2t Rating for fusing (t <8.3ms)	I^2t	166							A^2s
Typical Junction Capacitance per leg (Note 2)	C_J	70							pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	30.9 7.3							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig. 1 Output Current Derating Curve

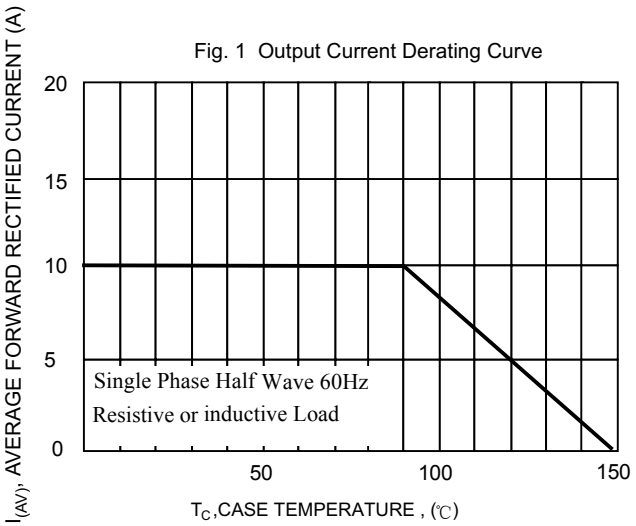


Fig. 2 Typical Forward Characteristics (per leg)

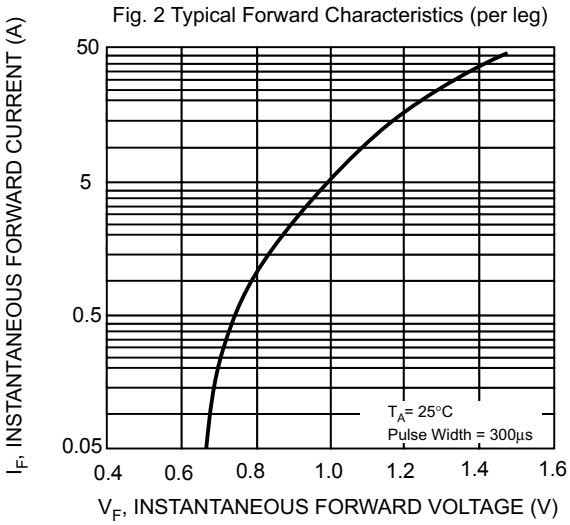


Fig. 3 Maximum Peak Forward Surge Current (per leg)

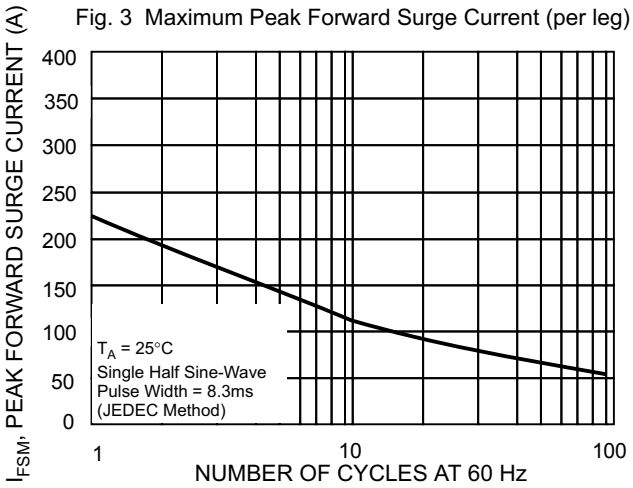


Fig. 4 Typical Junction Capacitance

