

GBU4005 THRU GBU410



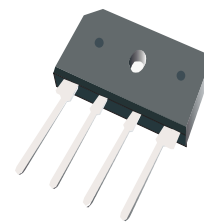
Glass Passivated Bridge Rectifiers

Reverse Voltage: 50 to 1000 Volts

Forward Current: 4.0 Ampere

RoHS Device

Halogen Free

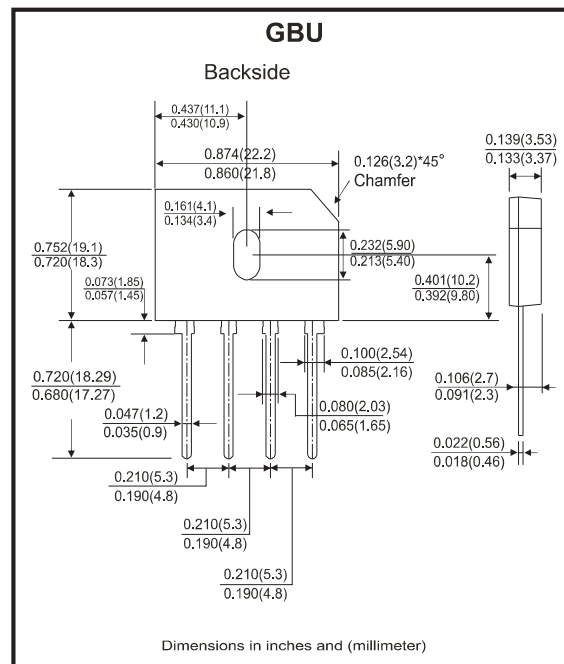


Features

- Surge overload rating -150 amperes peak.
- Ideal for printed circuit board.

Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic, GBU.
- Mounting position: Any.
- Weight: 3.91 grams (approx.).



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbol	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	Unit
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 @Tc=100°C (without heatsink)	I_{AV}	4.0 2.4							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	150							A
Maximum Forward Voltage at 2.0A DC	V_F	1.0							V
Maximum Forward Voltage at 4.0A DC	V_F	1.1							V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	I_R	10.0 500							μA
I^2T Rating for Fusing (t<8.3ms)	I^2t	93							A ² s
Typical Junction Capacitance Per Element (Note 1)	C_J	45							pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.

Company reserves the right to improve product design , functions and reliability without notice.

Rev:1.0

Rating and Characteristics Curves

Fig.1 - Forward Current Derating Curve

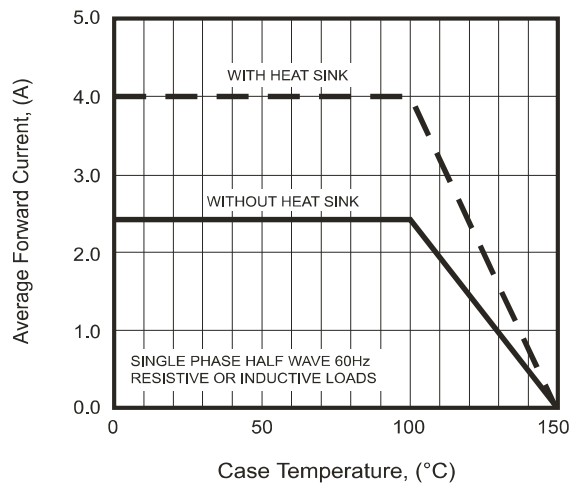


Fig.2 - Typical Forward Characteristics

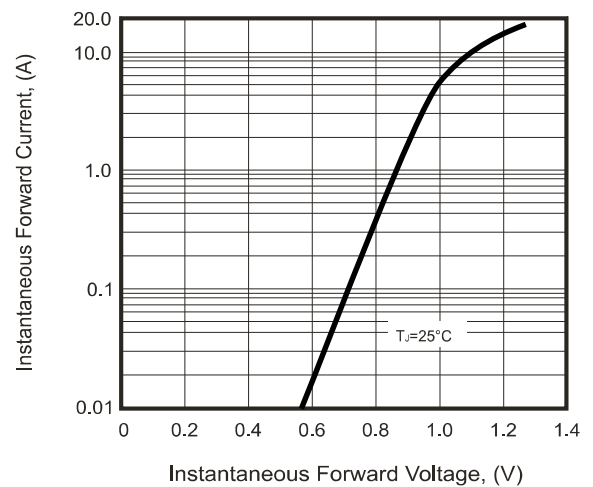


Fig.3 - Maximum Non-Repetitive Surge Current

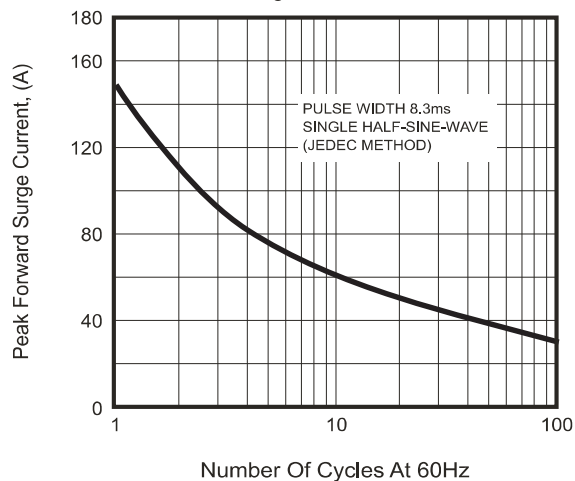


Fig.4 - Typical Junction Capacitance

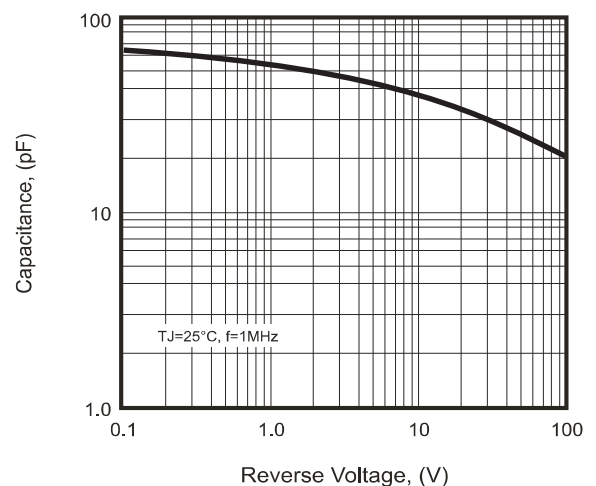
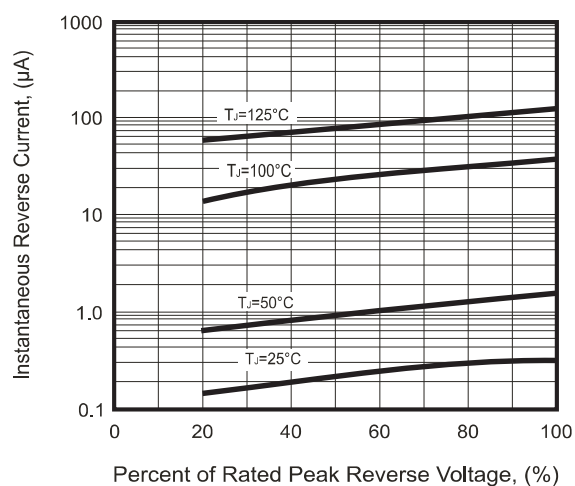
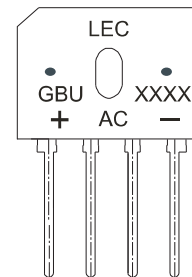


Fig.5 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
GBU4005	GBU4005
GBU401	GBU401
GBU402	GBU402
GBU404	GBU404
GBU406	GBU406
GBU408	GBU408
GBU410	GBU410



XXX / XXXX = Product type marking code
LEC = Longmacro Logo

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	Carton (pcs)
GBU	250	3,000