

Glass Passivated Bridge Rectifiers



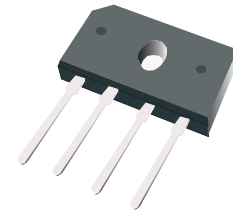
SMD Diodes Specialist

GBU15005-G Thru. GBU1510-G

Reverse Voltage: 50 to 1000V

Forward Current: 15.0A

RoHS Device

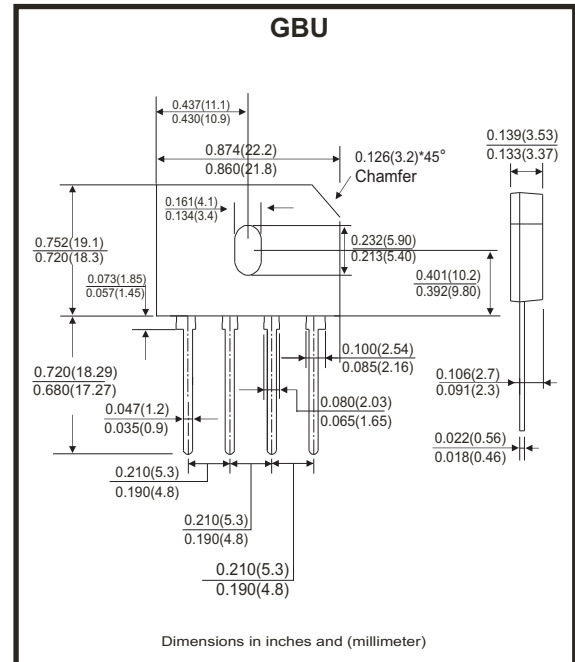


Features

- Surge overload rating - 240 amperes peak.
- Ideal for printed circuit board.

Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic, GBU
- Mounting position: Any
- Weight: 3.91grams



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 15005-G	GBU 1501-G	GBU 1502-G	GBU 1504-G	GBU 1506-G	GBU 1508-G	GBU 1510-G	Unit
Maximum Reverse Peak Repetitive 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 hestsink)	I_{AV}	15.0 3.2							A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load(JEDEC Method)	I_{FSM}	240							A
Maximum Forward Voltage at 7.5A	V_F	1.1							V
Maximum DC Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C	I_R	10.0 500							μA
I ² T Rating for Fusing(t<8.3ms)	I^2t	200							A ² s
Typical Junction Capacitandce Per Element (Note 1)	C_J	70							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 100mm*100mm*1.6mm Cu plate heatsink.

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Rating and Characteristics Curves (GBU15005-G Thru. GBU1510-G)

Fig.1- Derating Curve Output Rectified Current

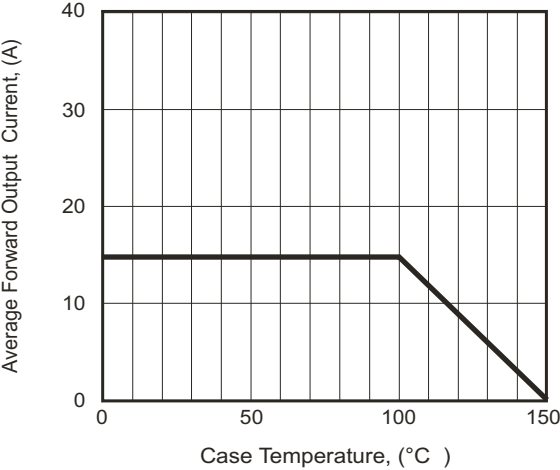


Fig.2- Maximum Forward Surge Current

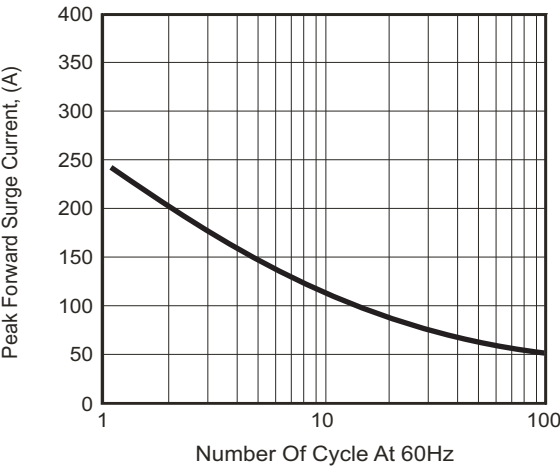


Fig.3- Typical Forward Characteristics

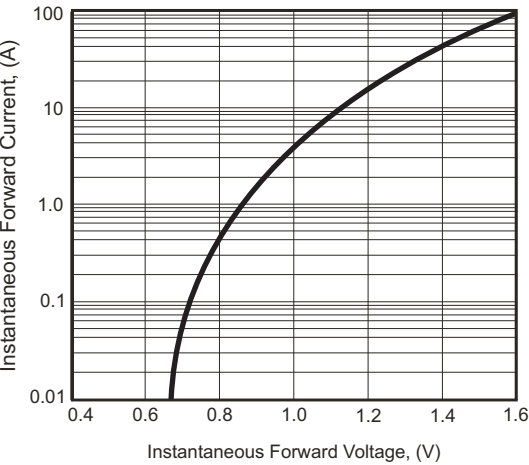
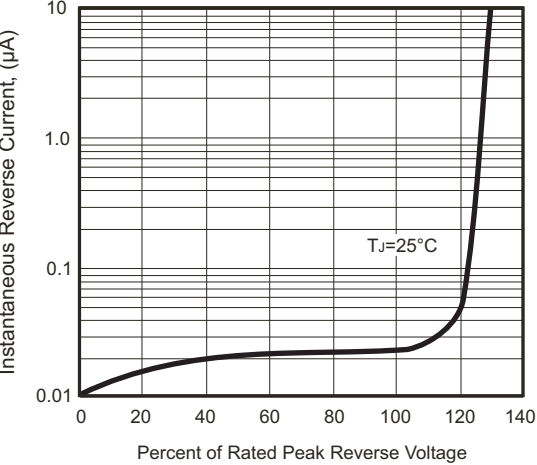


Fig.4- Typical Reverse Characteristics



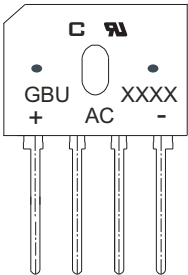
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Marking Code

Part Number	Marking code
GBU15005-G	GBU15005
GBU1501-G	GBU1501
GBU1502-G	GBU1502
GBU1504-G	GBU1504
GBU1506-G	GBU1506
GBU1508-G	GBU408
GBU1510-G	GBU1510



XXXX / XXXXX = Product type marking code
C = Compchip Logo

Standard Package

Case Type	TUBE PACK		
	TUBE (EA)	BOX (EA)	CARTON (EA)
GBU	20	1000	2000