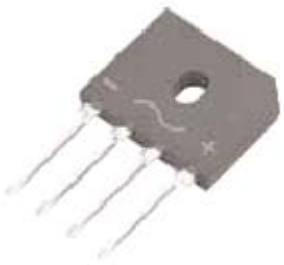
GBU1- Series

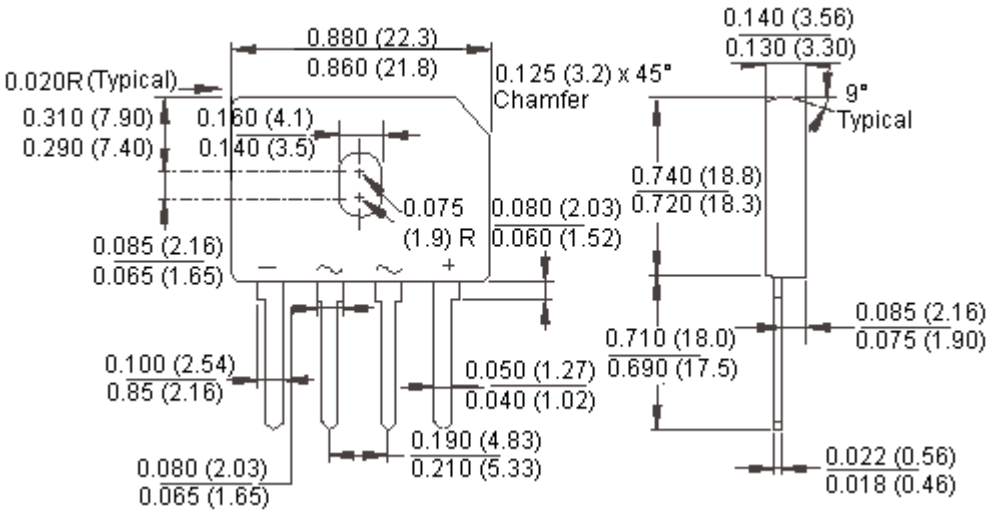


Features:

- Ideal for printed circuit board.
- Reliable low cost construction.
- Plastic material.
- High case dielectric strength of 1500VRMS.
- Surge overload rating to 200 amperes peak
- High temperature soldering guaranteed: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths.

RoHS Compliant

GBU



Dimensions: Inches (Milimeters)

Mechanical Data:

Case	: Molded plastic body.
Terminals	: Plated leads solderable per MIL-STD-750, Method 2026.
Weight	: 0. 3 ounce, 8.0 grams.
Mounting torque	: 5in. lb. Maximum.

Maximum Ratings and Electrical Characteristics

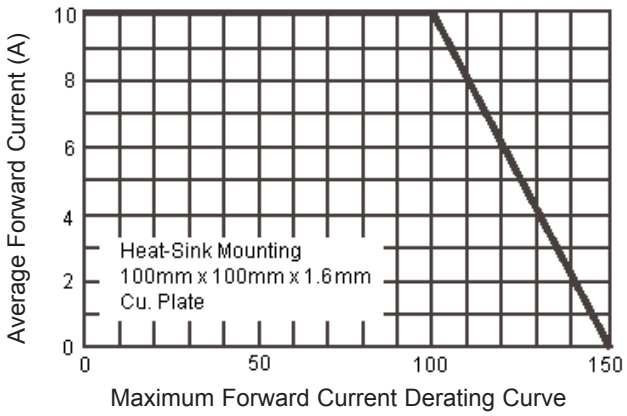
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Type Number	Symbol	GBU 1001	GBU 1002	GBU 1003	GBU 1004	GBU 1005	GBU 1006	GBU 1007	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	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current at T_C = 100°C	$I_{(AV)}$	10.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	220							
Maximum Instantaneous Forward Voltage at 5.0A at 10A	V_F	1.0 1.1							V
Maximum DC Reverse Current at T_A = 25°C at Rated DC Blocking Voltage at T_A = 125°C	I_R	5.0 500							µA µA
Typical Junction Capacitance (Note 3)	C_j	221				94			pF
Typical Thermal Resistance Per Leg (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	21 2.0							°C/W
Operating Temperature Range	T_J	-50 to +150							°C
Storage TemperatureRange	T_{STG}								

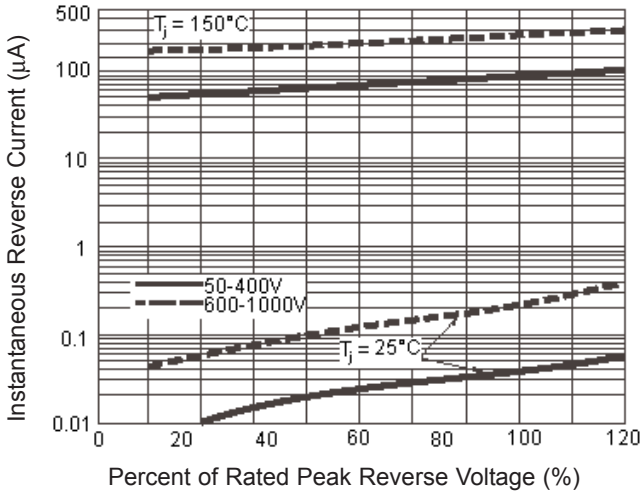
Notes 1: Units Mounted in Free Air No Heat Sink on PCB 0.5 x 0.5 inches (12mm x 12mm) Copper Pads, 0.375 inch (9.5mm) Lead Length.
2: Device Mounted on 4 x 6 x 0.25 inches Plate Heatsink.
3. Measured at 1.0MHz and applied Reverse Voltage of 4.0V.

Ratings and Characteristic Curves (GBU1001 thru GBU1007)

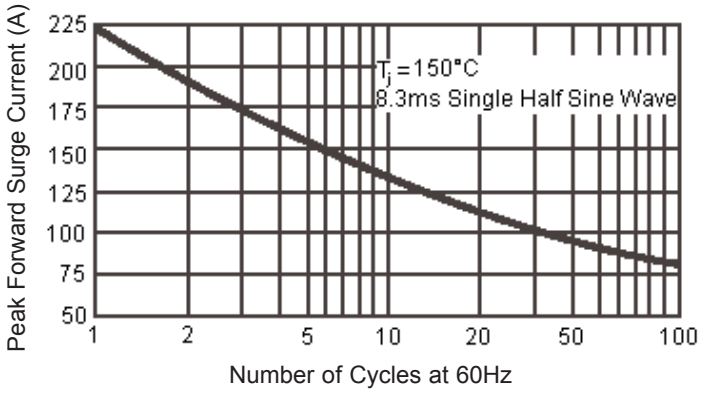
Maximum Forward Current Derating Curve



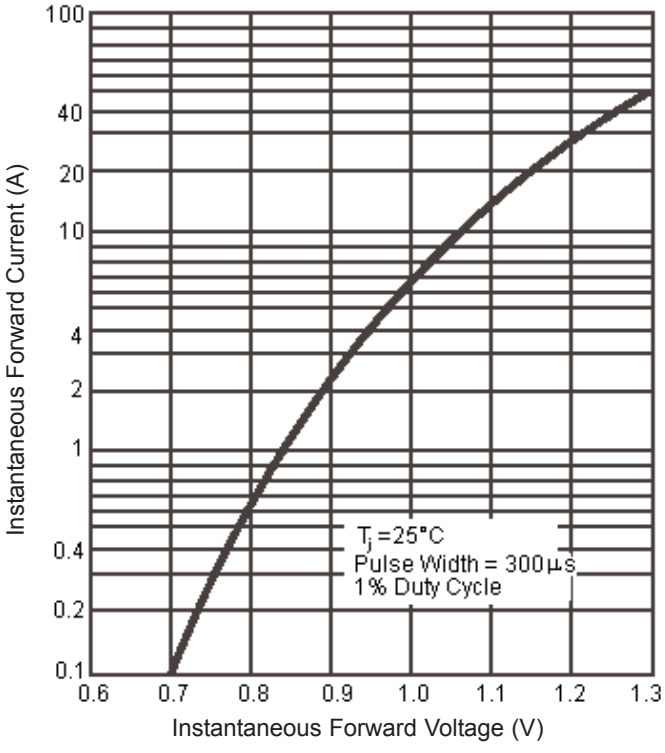
Typical Reverse Characteristics Per Bridge Element



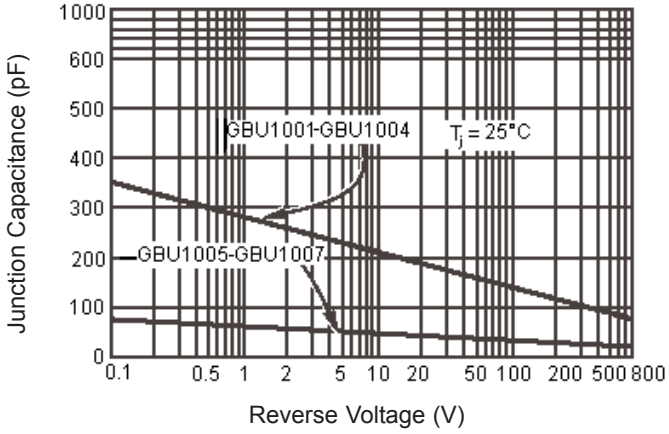
Maximum Non-Repetitive Forward Surge Current Per Bridge Element



Typical Instantaneous Forward Characteristics Per Bridge Element



Typical Junction Capacitance



Part Number Table

Description	Part Number
Bridge Rectifier, 10A, 50V	GBU1001
Bridge Rectifier, 10A, 100V	GBU1002
Bridge Rectifier, 10A, 200V	GBU1003
Bridge Rectifier, 10A, 400V	GBU1004
Bridge Rectifier, 10A, 600V	GBU1005
Bridge Rectifier, 10A, 800V	GBU1006
Bridge Rectifier, 10A, 1000V	GBU1007

Notes:

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