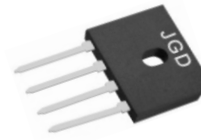


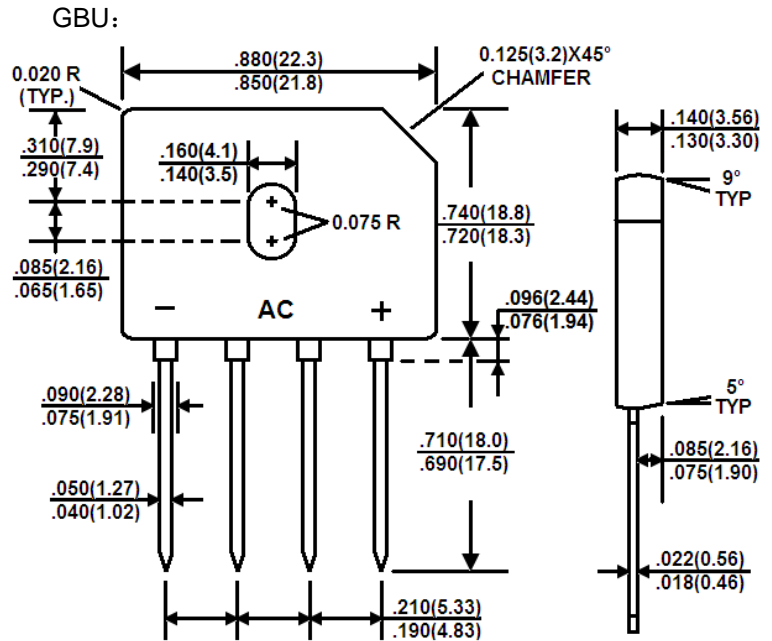
Features

- * Plastic package has underwriters laboratory flammability classification 94V-0
- * Ideal for printed circuit boards
- * Glass passivated chip junction
- * High Surge Current Capability
- * High temperature soldering guaranteed 270°C/10 seconds, 0.375(9.5mm) lead length



RoHS
COMPLIANT

Package Outline Dimensions in inches (millimeters)



Mechanical Data

- * Case: Molded plastic body over passivated junctions

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	GBU 6A	GBU 6B	GBU 6D	GBU 6G	GBU 6J	GBU 6K	GBU 6M	Unit
Maximum Repetitive 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 D.C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified output Current @ $T_C=90^\circ\text{C}$ (Note1) @ $T_A=25^\circ\text{C}$ (Note2)	$I_{F(AV)}$	6.0				3.0			A
Peak Forward Surge Current single half sine-wave superimposed on rated load	I_{FSM}	175							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	127							A^2sec
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F	1.0							V
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0				500			μA
Typical junction capacitance per leg at 4.0V/1MHz	C_J	211				94			pF
Typical thermal resistance (Note2) (Note1/3)	$R_{\theta JA}$ $R_{\theta JC}$	20				2.5			$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Unit case mounted on Al plate heat sink.

2. Unit mounted in free air, no heat sink on P.C.B., 0.5×0.5 " ($12 \times 12\text{mm}$) copper pads, 0.375" (9.5mm) lead length.

3. Recommended mounting position is to bolt down on heat sink with silicone thermal compound for maximum heat transfer with #6 screws.

Ratings and Characteristic Curves

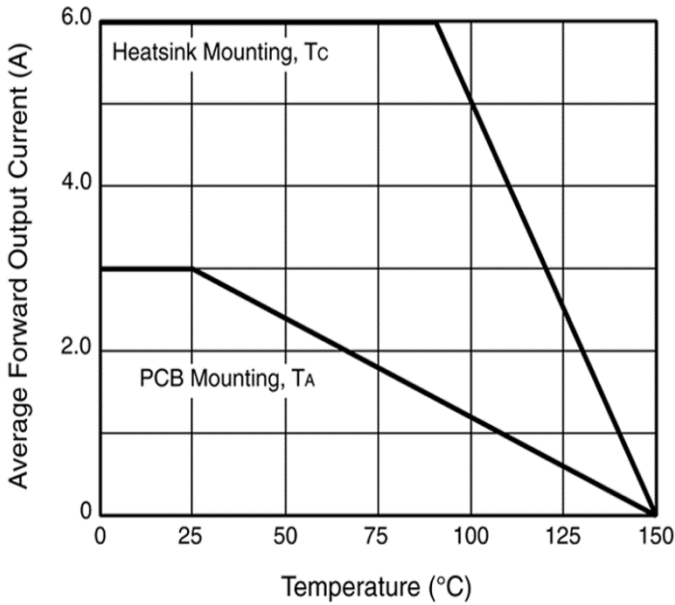


Figure 1. Derating Curve Output Rectified Current

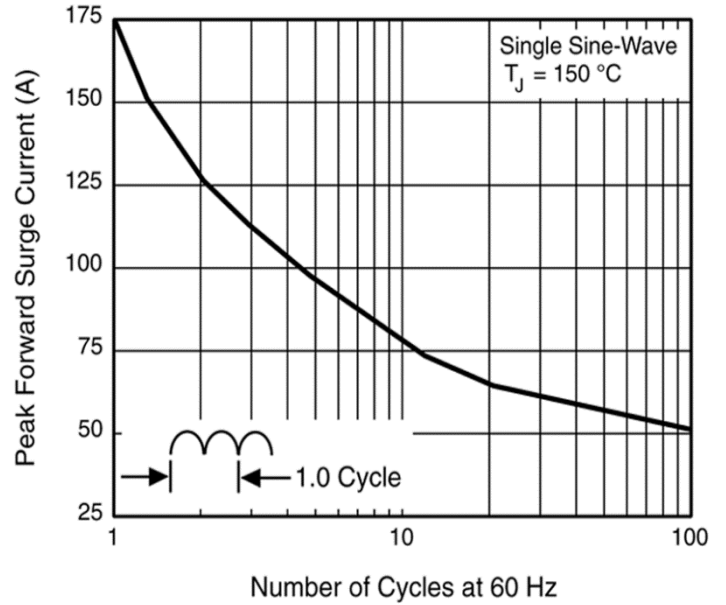


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

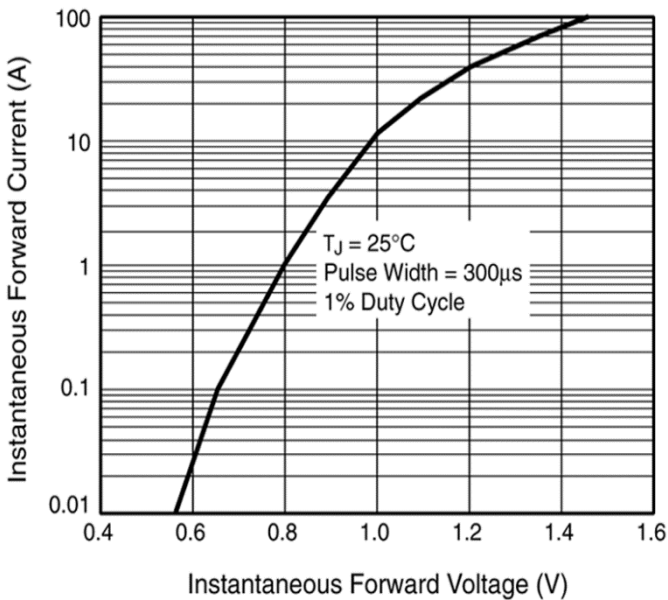


Figure 3. Typical Forward Characteristics Per Leg

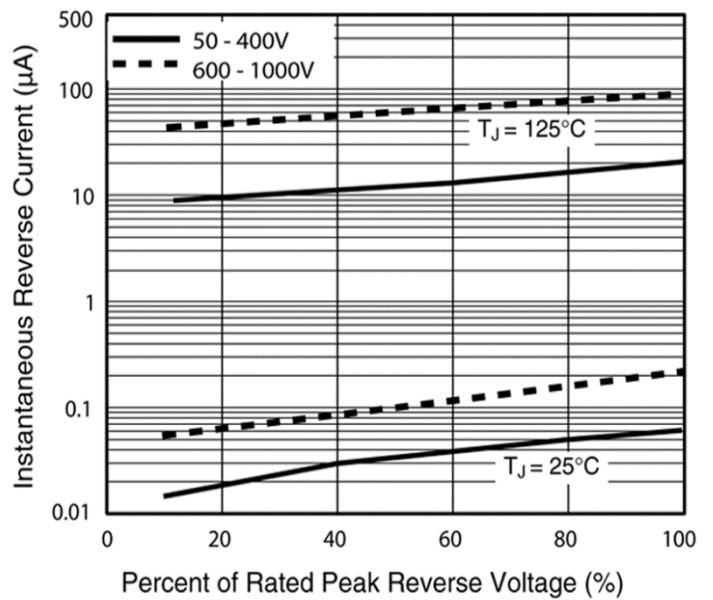


Figure 4. Typical Reverse Leakage Characteristics Per Leg



GBU6A THRU GBU6M

Glass Passivated Single Phase Bridge Rectifiers

Ordering Information

Part No.	Package	Packing
GBU6A~ GBU6M	GBU	20pcs/Tube