

VOLTAGE RANGE: 50 - 1000V
CURRENT: 8.0 A

Features

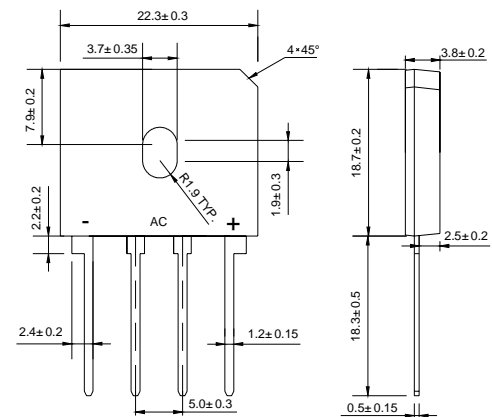
- High Reliability
- High Current Capability
- Low Forward Voltage Drop
- Glass Passivated Die Construction
- High Surge Current Capability
- Ideal for Printed Circuit Boards

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



GBU



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	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 Rectified Output Current $T_c=100^\circ\text{C}$ (Note2)	$I_{F(AV)}$	8.0							A
Peak Forward Surge Current, 8.3ms Single half sine-wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Rating for fusing ($t < 8.3$ ms.)	I^2t	166							A^2S
Maximum Instantaneous Forward Voltage per leg at $I_F = 8$ A	V_F	1.0							V
Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage per leg $T_J = 100^\circ\text{C}$	I_R	5.0							μA
	$I_{R(H)}$	500							
Typical Junction capacitance per element (Note1)	C_J	211				94			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	- 50 to + 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 50 to + 150							$^\circ\text{C}$

Notes :

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC
- (2) Units case mounted on 3.2" x 3.2" x 0.12" THK (8.2 x 8.2 x 0.3cm Al. Plate heatsink).



RATING AND CHARACTERISTIC CURVES (GBU8A - GBU8M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

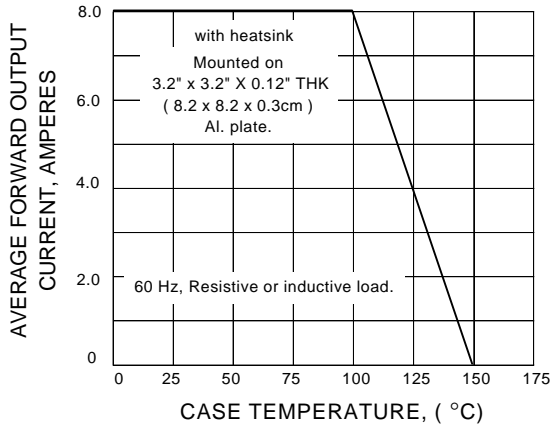


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

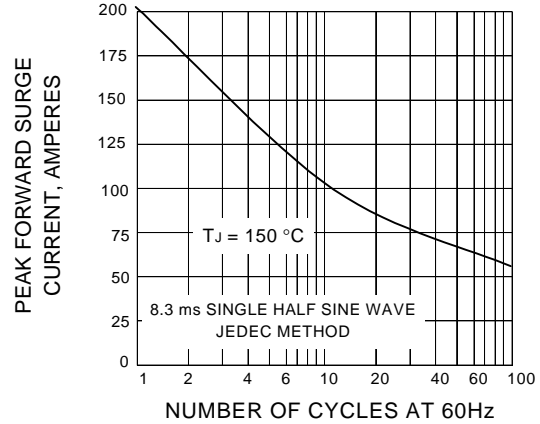


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

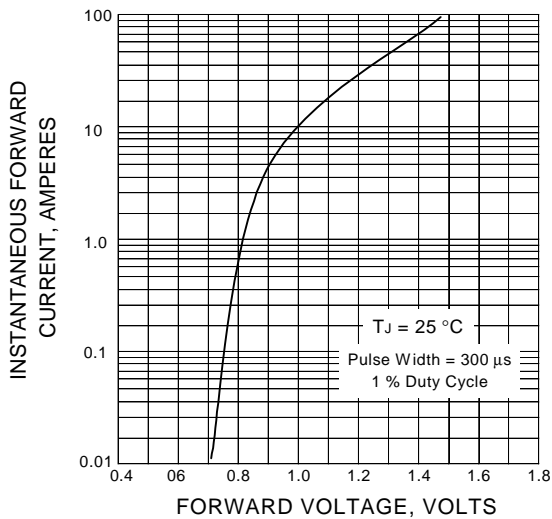


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

