



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

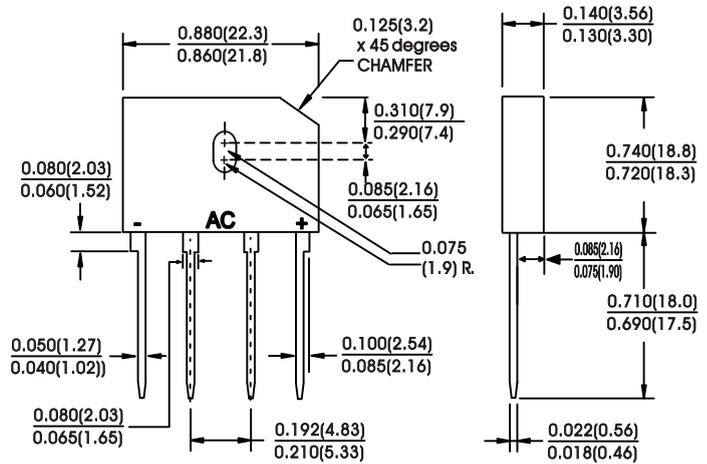
GBU

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 VRMS
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge overload rating
- High temperature soldering guaranteed:  
260°C/10 seconds 0.375" (9.5mm) lead Length

MECHANICAL DATA

**Case:** Molded plastic body over passivated junctions  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any (NOTE 2)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

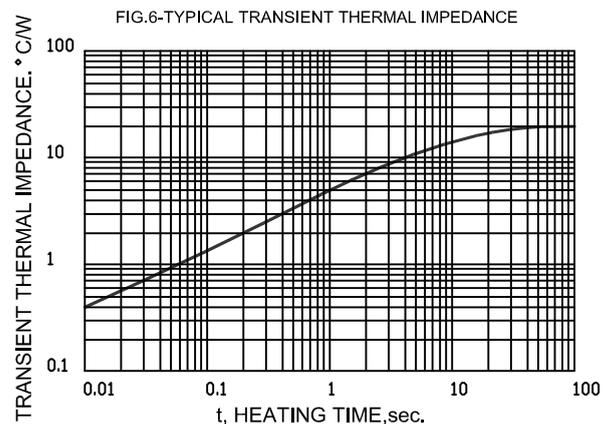
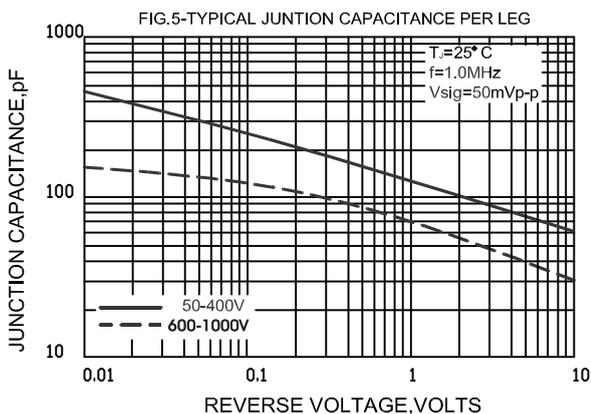
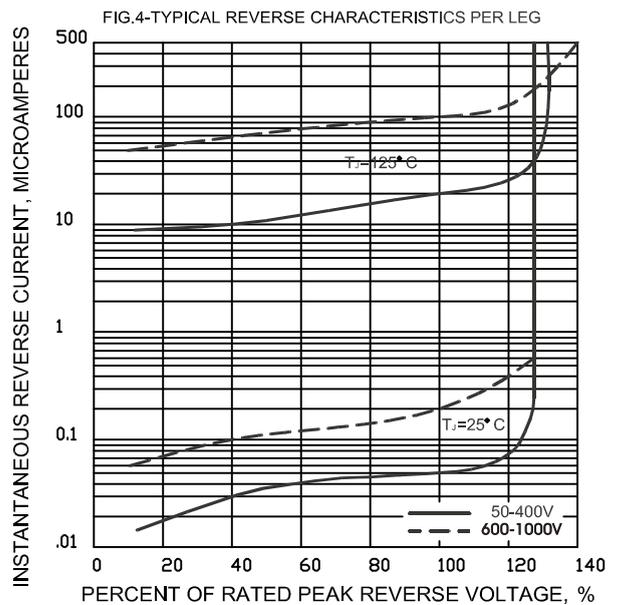
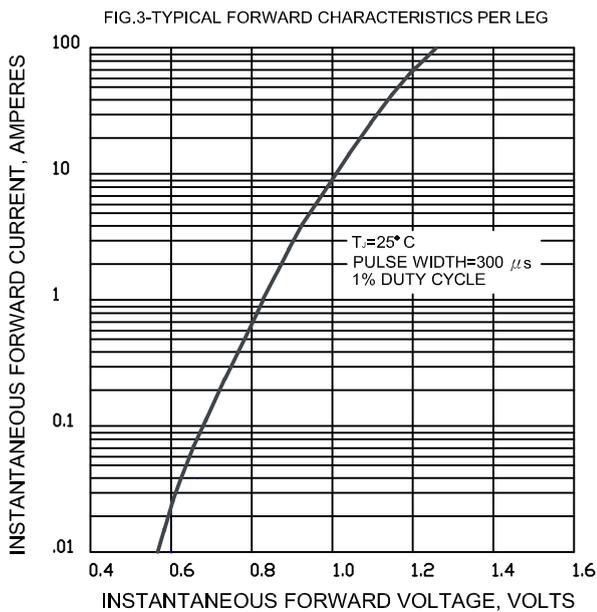
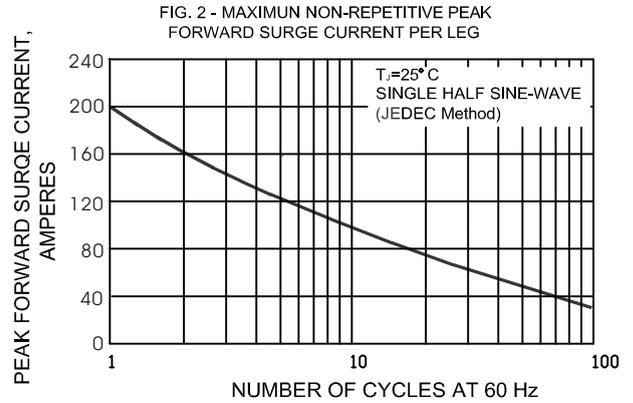
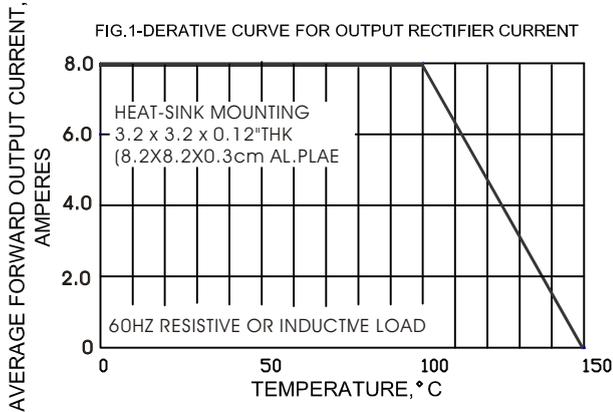
Rating at 25° C ambient temp. unless otherwise specified.  
 Single phase, half sine wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20 %.

Characteristic	Symbol	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_c=100^\circ C$ (NOTE1)	$I_o$	8.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200.0							Amps
Rating for fusing ( $t < 8.3ms$ )	$I^2 T$	166.0							$A^2 sec$
Maximum instantaneous forward voltage drop per leg at 8.0A	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg) $T_a=25^\circ C$ $T_a=125^\circ C$	$I_R$	5.0 500							$\mu A$
Typical Junction (Per leg) (NOTE2)	$C_J$	211.0					94.0		PF
Typical thermal resistance (Per leg) (NOTE4,1)	$R_{th JA}$ $R_{th JL}$	21.0				2.2		$^\circ C/W$	
Operating Junction and storage temperature range	$T_J, T_{stg}$	-55 to +150							$^\circ C$

- NOTES:  
 (1) Unit case mounted on 3.2 x 3.2 x 0.12" thick (8.2 x 8.2 x 0.3cm) Al. plate heatsink  
 (2) Measured at 1.0MHZ and applied reverse of 4.0Volts  
 (3) Recommended mounted position is bolt to down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws  
 (4) Units mounted in free air, no heat on P.C.B. 0.5 x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length



RATINGS AND CHARACTERISTIC CURVES





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