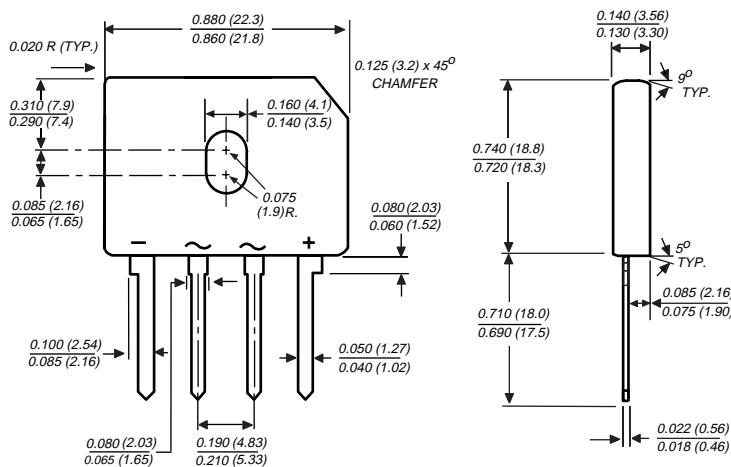



Case Style GBU

Polarity shown on front side of case, positive lead by beveled corner
Dimensions in inches and (millimeters)

Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 50 and 1000 V
Forward Current 4.0 A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- High case dielectric strength of 1500 VRMS
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any (NOTE 4)

Weight: 0.15 ounce, 4.0 grams

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GBU 4A	GBU 4B	GBU 4D	GBU 4G	GBU 4J	GBU 4K	GBU 4M	UNITS
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 DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T _c =100°C (NOTE 1) T _A =40°C (NOTE 2)	I _{F(AV)}				4.0				A
					3.0				
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) T _J =150°C	I _{FSM}				150				A
Rating for fusing (t<8.3ms)	I _f t				93				A ² sec
Typical thermal resistance per leg (NOTE 2) (NOTE 1)	R _{θJA} R _{θJC}				22				°C/W
Operating junction and storage temperature range	T _J , T _{STG}				-55 to +150				°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GBU 4A	GBU 4B	GBU 4D	GBU 4G	GBU 4J	GBU 4K	GBU 4M	UNITS
Maximum instantaneous forward drop per leg at 4.0 Amperes	V _F				1.0				V
Maximum DC reverse current at rated DC blocking voltage per leg T _A = 25°C T _A =125°C	I _R				5.0				μA
					500				
Typical junction capacitance per leg at 4.0V, 1MHz	C _J			100			45		pF

Notes:

- (1) Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15cm) Al. Plate
- (2) Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length
- (3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG. 1 - DERATING CURVE OUTPUT
RECTIFIED CURRENT

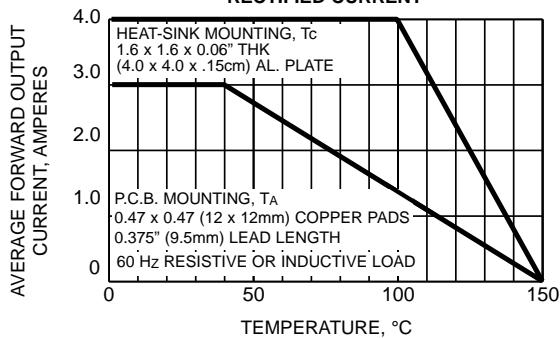


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

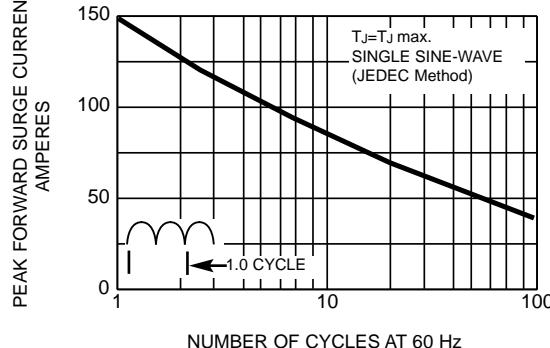


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

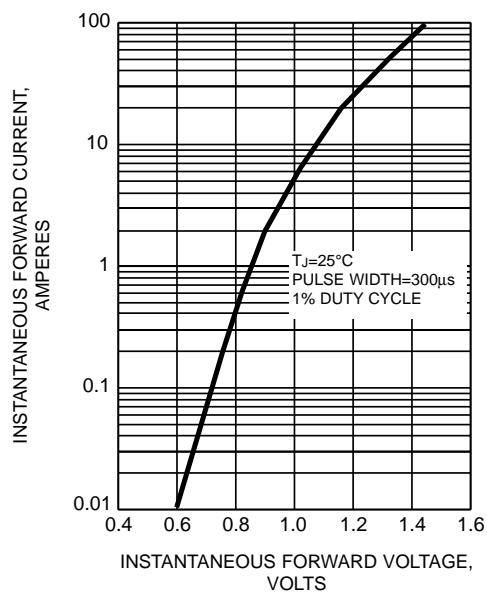


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

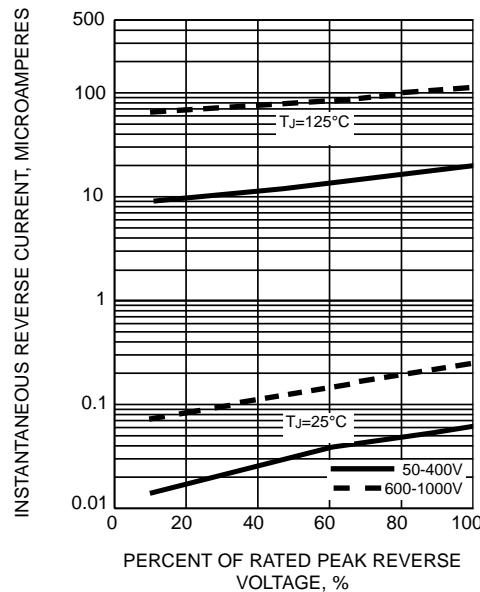


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

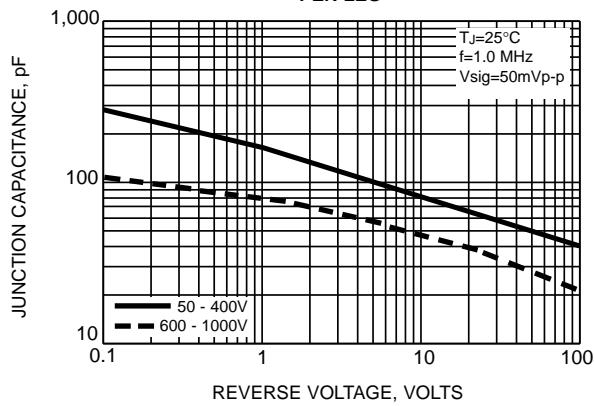


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

