

GBU4A ~ GBU4M

PRV : 50 - 1000 Volts

Io : 4.0 Amperes

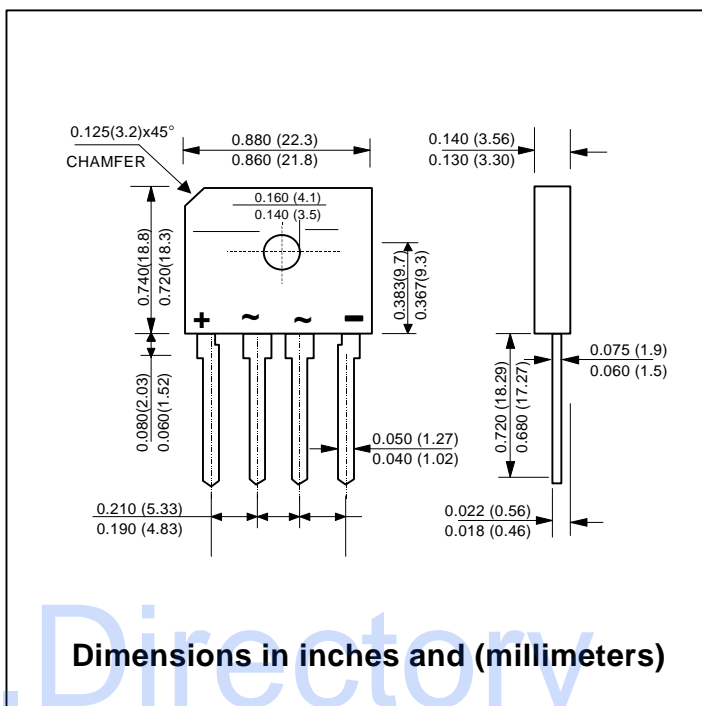
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * Very good heat dissipation
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Terminals : Plated lead solderable per MIL-STD-705, Method 2026
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 4.0 grams

SILICON BRIDGE RECTIFIERS



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%.

RATING	SYMBOL	GBU 4A	GBU 4B	GBU 4D	GBU 4G	GBU 4J	GBU 4K	GBU 4M	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_R	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current $T_c = 100^\circ\text{C}$	$I_{F(AV)}$	4.0								A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sinwave, Single Shot)	I_{FSM}					80				A
Maximum Instantaneous Forward Voltage drop per leg at $I_F = 4.0\text{ A}$	V_F					1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R					5.0				μA
	$I_{R(H)}$					500				μA
Typical junction Capacitance per leg (Note 3)	C_j	101				46				pF
Typical Thermal Resistance, Junction to Case (Note 1)	$R_{\theta JC}$					2.5				$^\circ\text{C/W}$
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$					22				$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_j, T_{STG}					- 55 to + 150				$^\circ\text{C}$

Notes : 1. Unit case mounted on 1.6"x1.6"x0.06" THK (4.0x4.0x0.15cm) Al. Plate.
 2. Units mounted on P.C. Board with 0.5"x0.5" (12mmx15mm) copper pads and 0.375"(9.5mm) lead lengths.
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (GBU4A THRU GBU4M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

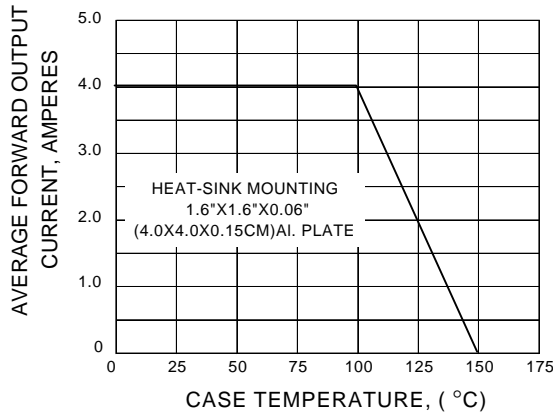


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

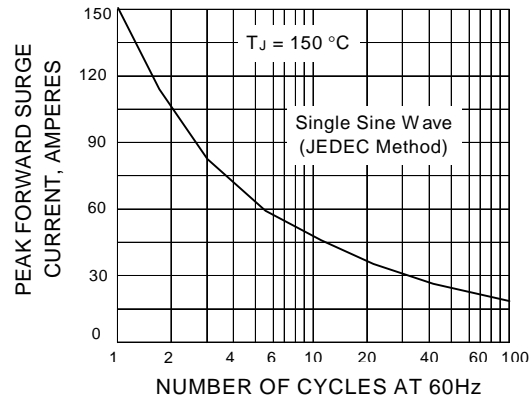


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

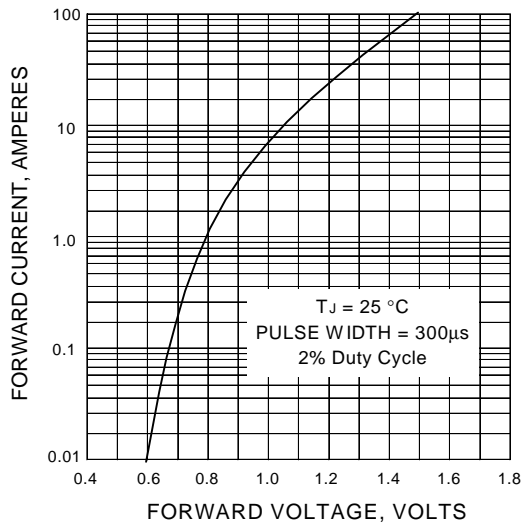


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

