GBU6A ~ GBU6M

SILICON BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts
Io : 6.0 Amperes

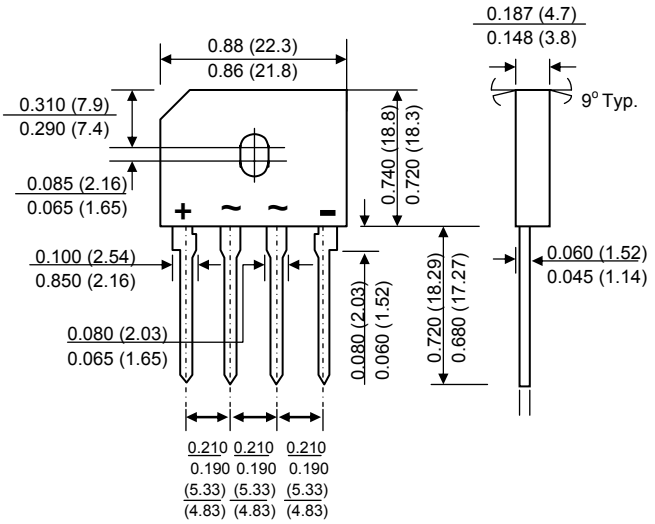
FEATURES :

* 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

GBU



Dimensions in inches and (millimeter)

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 6A	GBU 6B	GBU 6D	GBU 6G	GBU 6J	GBU 6K	GBU 6M	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 Tc = 100 °C	$I_{F(AV)}$	6.0							A
Maximum Peak Forward Surge Current (Single sine-wave Superimposed on rated load)	I_{FSM}	175							A
Maximum Instantaneous Forward Voltage drop per leg at I_F = 4.0 A	V_F	1.0							V
Maximum DC Reverse Current Tj = 25 °C	I_R	5.0							µA
at Rated DC Blocking Voltage per leg Tj = 125 °C	$I_{R(H)}$	500							µA
Typical junction Capacitance per leg (Note 3)	Cj	200				90			pF
Typical Thermal Resistance, Junction to Case (Note 1)	$R_{\Theta JC}$	2.2							°C/W
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\Theta JA}$	7.4							°C/W
Operating Junction and Storage Temperature Range	T_j , T_{STG}	- 55 to + 150							°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 length
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 volt

RATING AND CHARACTERISTIC CURVES (GBU6A THRU GBU6M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

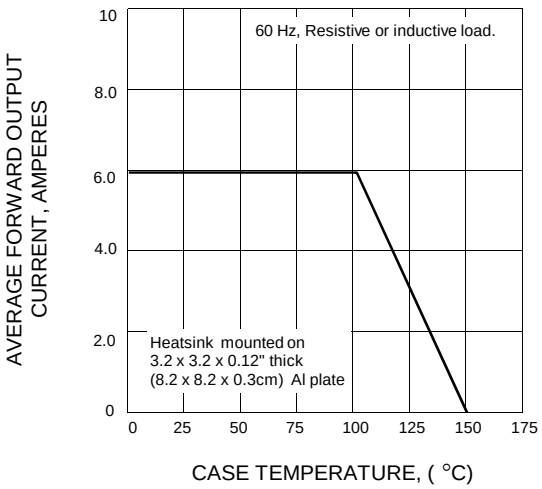


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

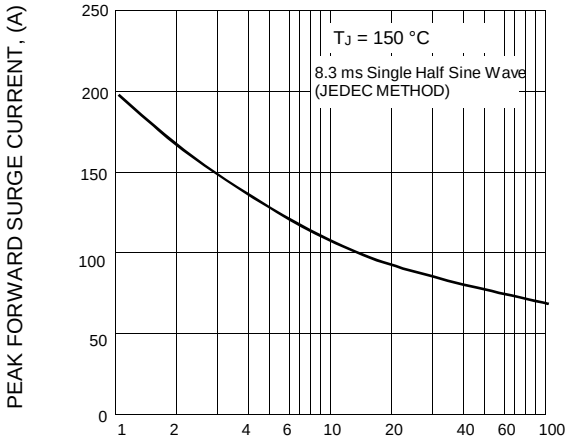


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

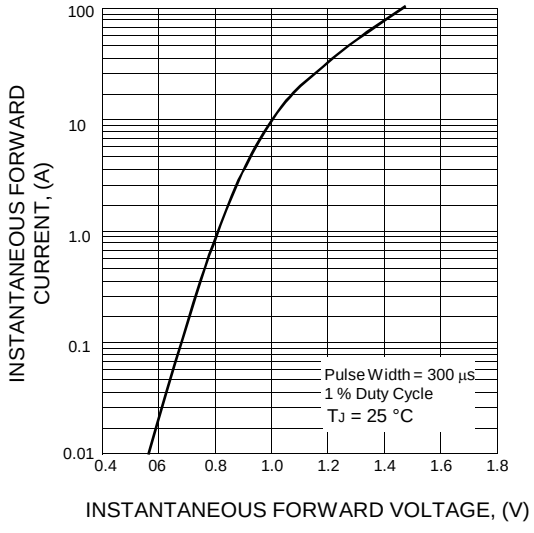


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG