



GBU6A ~ GBU6M

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 6 Amperes

GBU Unit : inch(mm)

Recongized File #E228882

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating : 175 Amperes peak
- Lead free in comply with EU RoHS 2011/65/EU directives

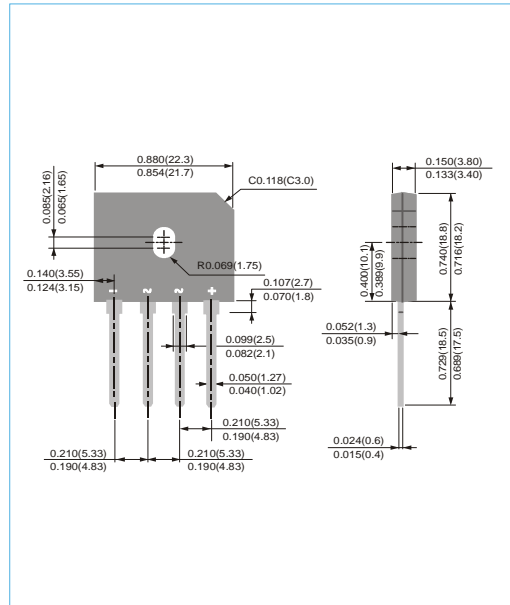
MECHANICAL DATA

Case : Reliable low cost construction utilizing molded plastic technique

Terminals : Leads solderable per MIL-STD-750, Method 2026

Mounting torque : 5 in. lb. Max.

Weight : 0.15 ounce, 4 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	GBU6M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 $T_C=100^\circ\text{C}$ Rectified Output Current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	6							A
I ² t Rating for fusing (t<8.3ms)	I ² t	127							A ² sec
Peak Forward Surge Current single sine-wave superimposed on rated load	I_{FSM}	175							Apk
Maximum Instantaneous Forward Voltage Drop per element at 3A	V_F	1							Vpk
Maximum Reverse Leakage Current at Rated @ $T_A=25^\circ\text{C}$ Dc Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	5 500							μA
Typical Thermal Resistance per leg (Note 2) (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	22 5							$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							$^\circ\text{C}$

NOTES:

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.
3. Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.



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RATING AND CHARACTERISTIC CURVES

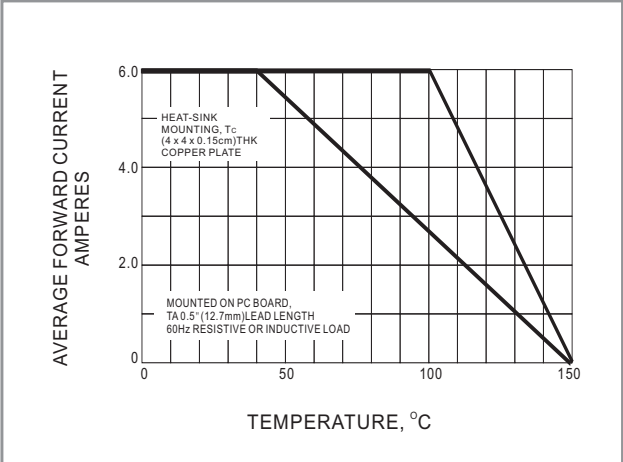


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

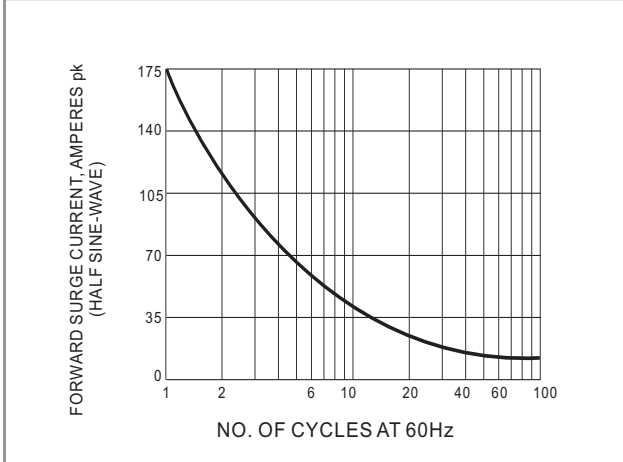


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

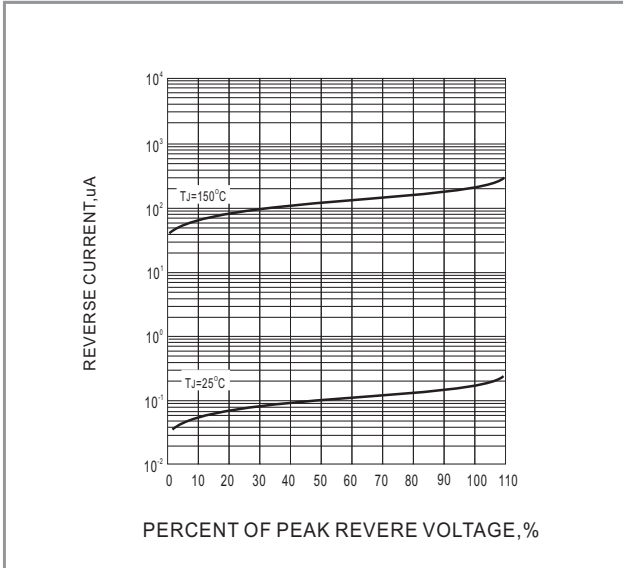


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

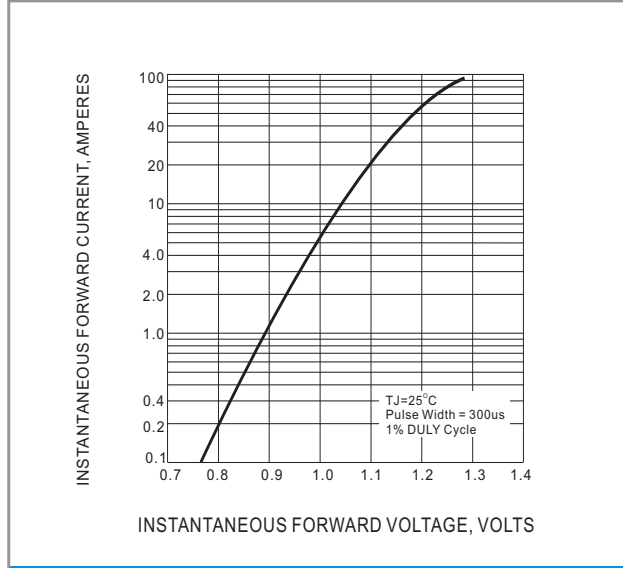


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT



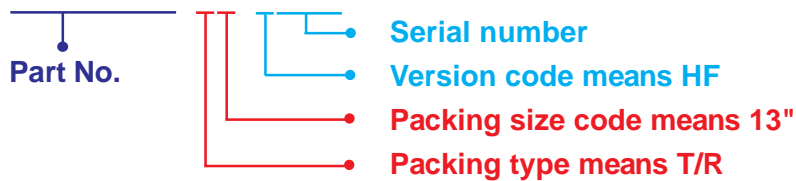
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Part No_packing code_Version

GBU6A_B0_00001
 GBU6A_B0_10001
 GBU6A_T0_00001
 GBU6A_T0_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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