GBU6005 ~ GBU610

Voltage 50V ~ 1000V

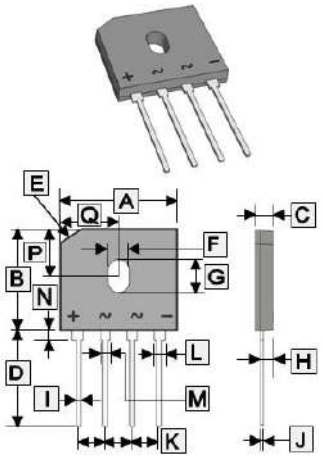
6.0Amp Glass Passivited Bridge Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Surge overload rating -175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has Underwriters Laboratory flammability classification 94V-0
- Mounting position: Any

GBU



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	21.80	22.20	I	0.9	1.2
B	18.30	19.10	J	0.46	0.56
C	3.37	3.53	K	4.80	5.30
D	17.27	18.29	L	2.16	2.54
E	3.2 x 45°		M	1.65	2.03
F	3.40	4.10	N	1.45	1.85
G	5.40	5.90	P	9.80	10.20
H	2.30	2.70	Q	10.90	11.10

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number							Unit
			GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	
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 (with heat sink) [2]		$I_{(AV)}$	6							A
Rectified Current T_C=100°C (without heat sink)			2.8							
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)		I_{FSM}	175							A
Maximum Forward Voltage @ 3.0A		V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	T_J=25°C	I_R	10							μA
	T_J=125°C		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	127							A^2s
Typical Junction Capacitance Per Element[1]		C_J	50							pF
Typical Thermal Resistance		$R_{\theta JC}$	2.2							°C/W
Operating and Storage temperature range		T_J,T_{STG}	-55~150							°C

Notes：

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 75mm*75mm*1.6mm Cu plate heat sink.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

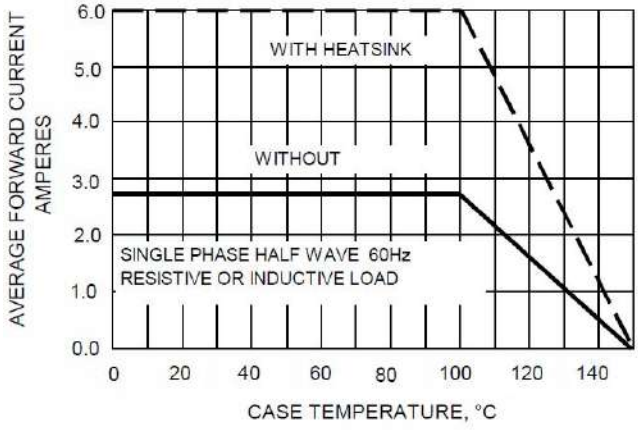

FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

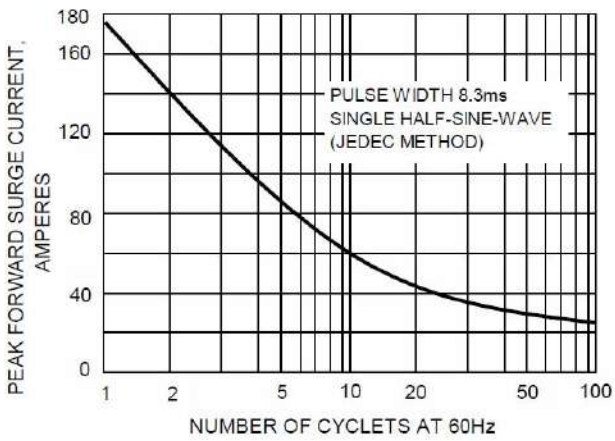

FIG.3-TYPICAL JUNCTION CAPACITANCE

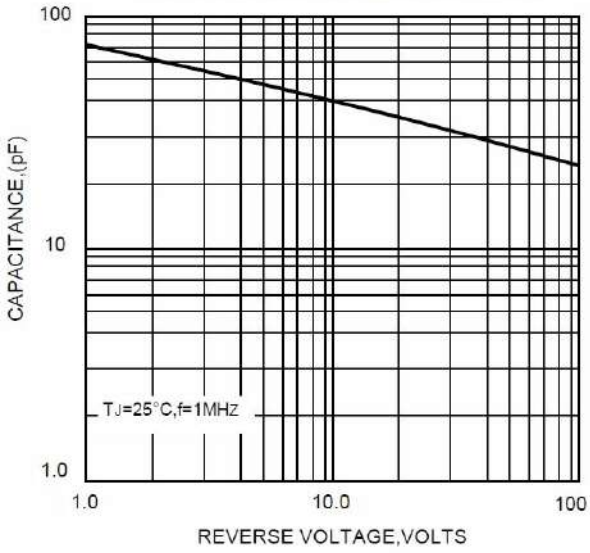

FIG.4-TYPICAL FORWARD CHARACTERISTICS

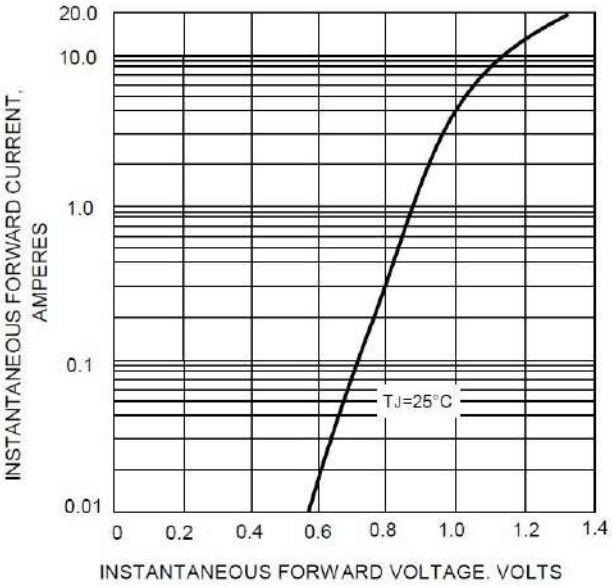

FIG.5-TYPICAL REVERSE CHARACTERISTICS