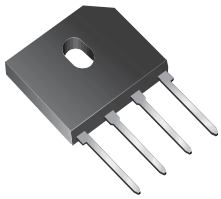
Elektronische Bauelemente

GBU6005 THRU GBU610

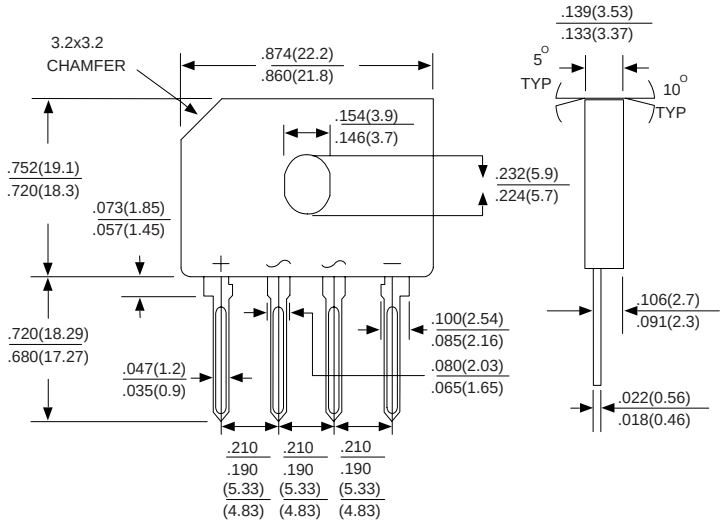
VOLTAGE 50V~ 1000V

6 .0 AMP Glass Passivated Bridge Rectifiers

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



GBU



Dimensions in inches and (millimeters)

FEATURES

- Surge Overload Rating -175 AMP Peak
- Ideal For Printed Circuit Board
- Reliable Low Cost Construction Utilizing Molded Plastic Technique
- Plastic Material Has Underwrites Laboratory Flammability Classification 94V-0
- Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNITS
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_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T_C=100℃(without heatsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surge Current, 8.3 ms single half Sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	175							A
Maximum Forward Voltage at 3.0A DC	V_F	1.1							V
Maximum DC Reverse Current Ta=25℃ at Rated DC Blocking Voltage Ta=125℃	I_R	10.0 500							μA
I^2t Rating for fusing (t<8.3ms)	I^2t	127							A^2S
Typical Junction Capacitance per element (Note1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R\theta_{JC}$	2.2							℃/ W
Operating Temperature Range	T_J	- 55 ~ + 150							℃
Storage Temperature Range	T_{STG}	- 55 ~ + 150							℃

NOTES:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

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Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

FIG.1-FORWARD CURRENT DERATING CURVE

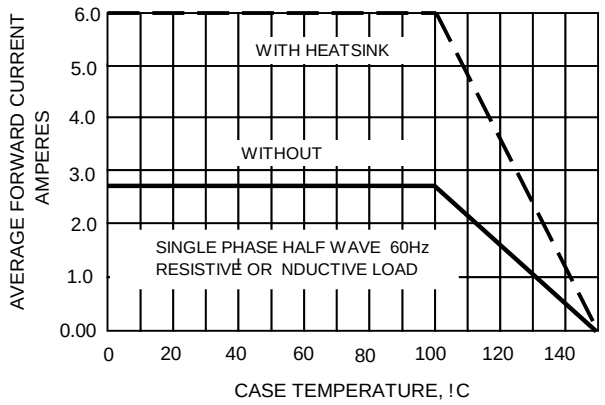

FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

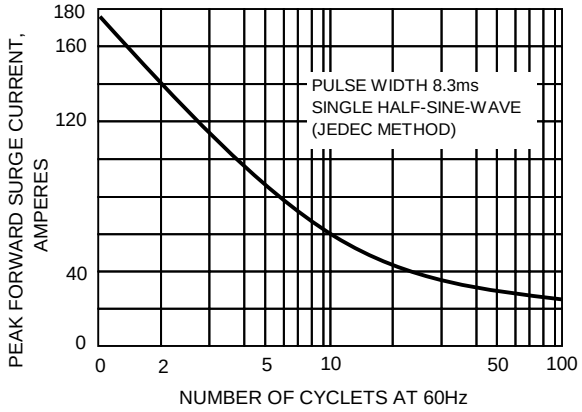

FIG.3-TYPICAL JUNCTION CAPACITANCE

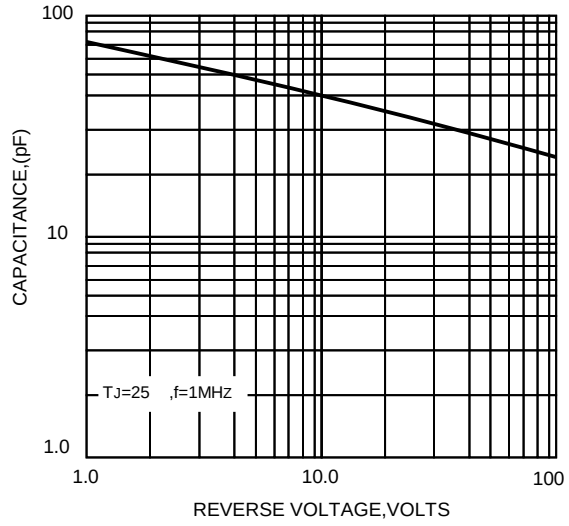

FIG.4-TYPICAL FORWARD CHARACTERISTICS

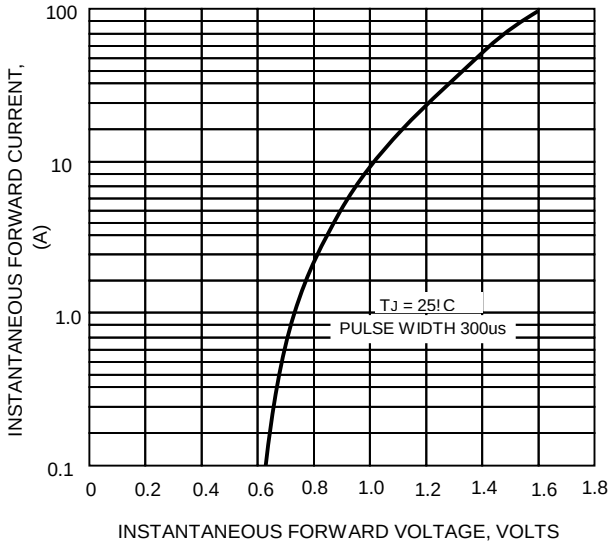

FIG.5-TYPICAL REVERSE CHARACTERISTICS