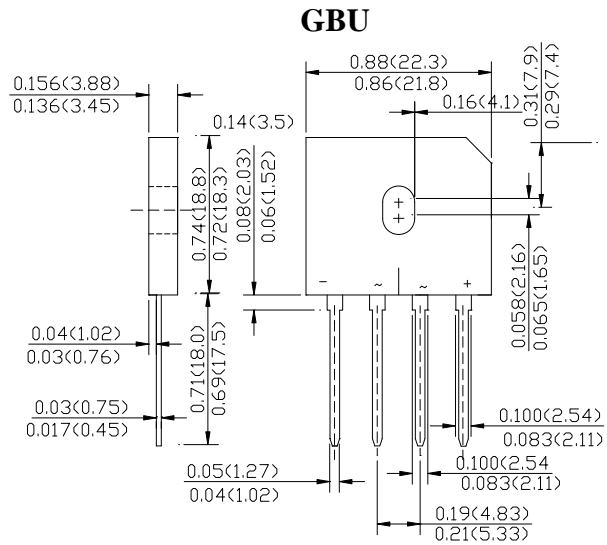


SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS

GBU4005 thru GBU410 SERIES 50 to 1000 V 4.0 A

FEATURES

- Surge overload rating-150 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



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase , half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

		GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_c = 100^\circ\text{C}$ (without heatsink)	I_{AV}					4			Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					150			Amp
Maximum DC Forward Voltage at 2.0A DC	V_F					1.0			Volts
Maximum DC Reverse Current at rated @ $T_A = 25^\circ\text{C}$ DC Blocking Voltage Per Element @ $T_A = 125^\circ\text{C}$	I_R					5			uAmp
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t					93			A^2S
Typical Junction Capacitance (Note 1)	C_J					45			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$					2.2			$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J					-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}					-55 to +150			$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 50mm x 50mm X 1.6mm Cu Plate Heatsink.

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RATINGS AND CHARACTERISTIC CURVES (GBU4A THRU GBU4M)

FIG. 1 - FORWARD CURRENT DERATING CURVE

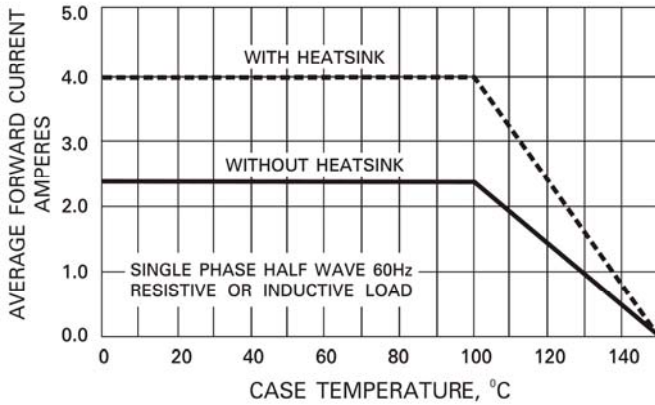


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

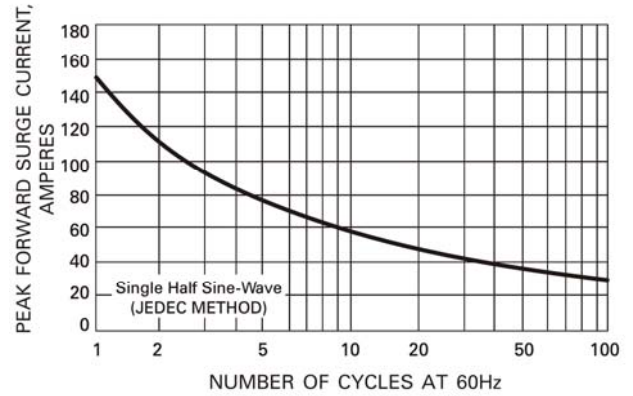


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

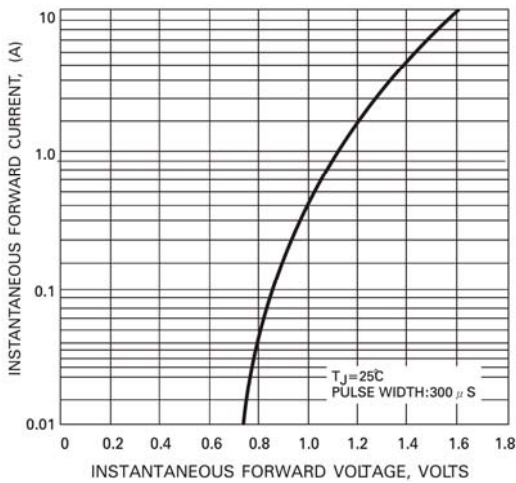


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

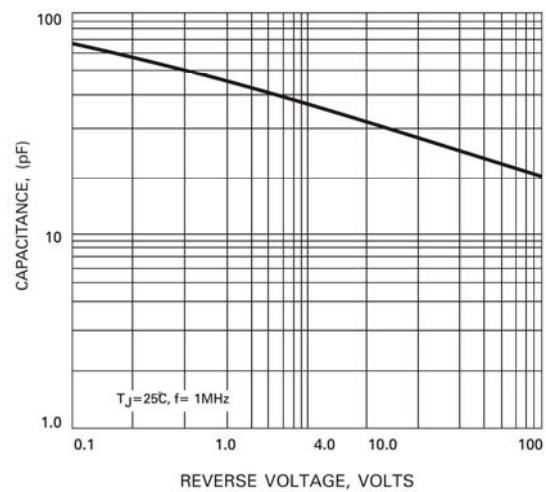


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

