



GBU4005C thru GBU410C

SILICON BRIDGE RECTIFIERS

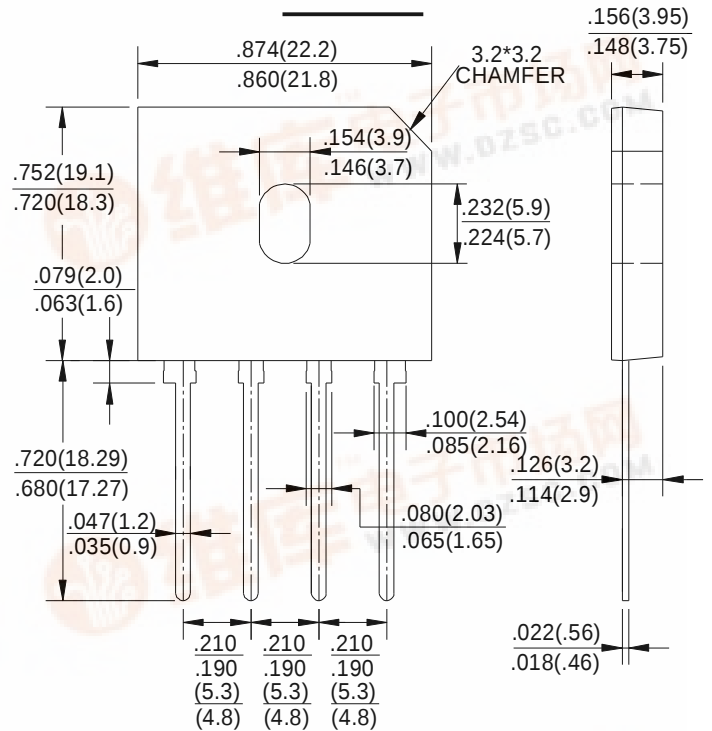
REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 4.0 Amperes

FEATURES

- Surge overload rating -150 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any

GBU-C



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU 4005C	GBU 401C	GBU 402C	GBU 404C	GBU 406C	GBU 408C	GBU 410C	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	30	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T _c =100°C (with heatsink Note 2)	I _(AV)				4.0				A
@ T _c =100°C (without heatsink)					2.4				
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}				150				A
Maximum Forward Voltage at 4.0A DC	V _F				1.0				V
Maximum DC Reverse Current @ T _J =25°C	I _R				10.0				uA
at Rated DC Blocking Voltage @ T _J =125°C					500				
I ² t Rating for Fusing (t<8.3ms)	I ² t				93				A ² s
Typical Junction Capacitance Per Element (Note1)	C _J				45				pF
Typical Thermal Resistance (Note2)	R _{θJC}				2.2				°C/W
Operating Temperature Range	T _J				-55 to +125				°C
Storage Temperature Range	T _{STG}				-55 to +150				°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 50mm*50mm*1.6mm cu plate heatsink.



RATING AND CHARACTERISTIC CURVES
GBU4005C thru GBU410C



FIG.1-FORWARD CURRENT DERATING CURVE

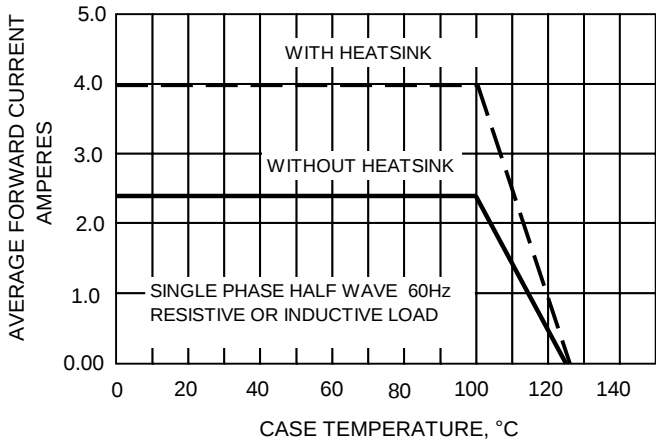


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

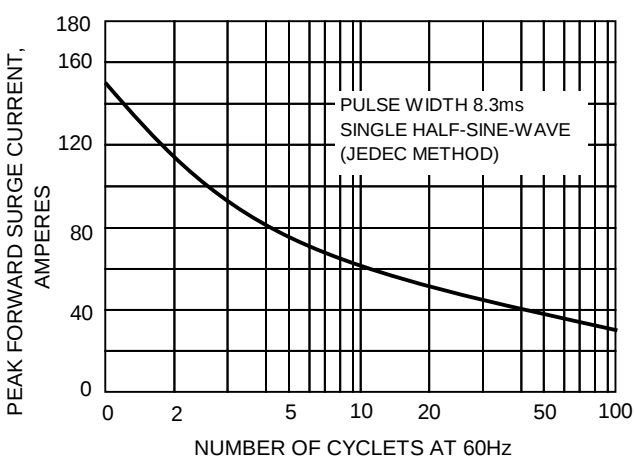


FIG.3-TYPICAL JUNCTION CAPACITANCE

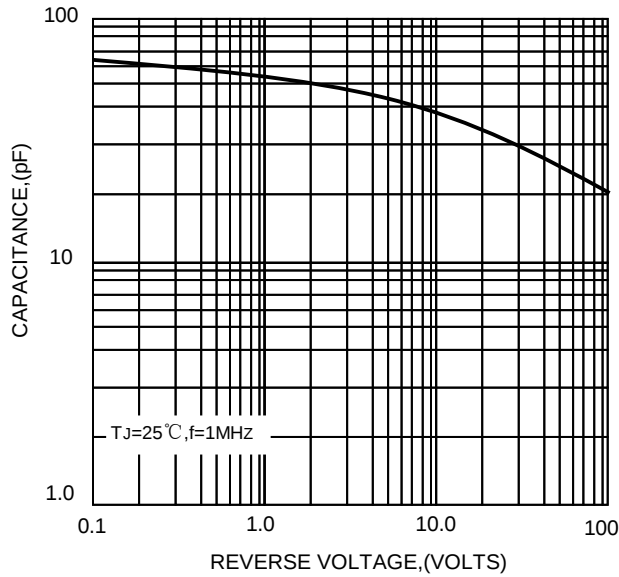


FIG.4-TYPICAL FORWARD CHARACTERISTICS

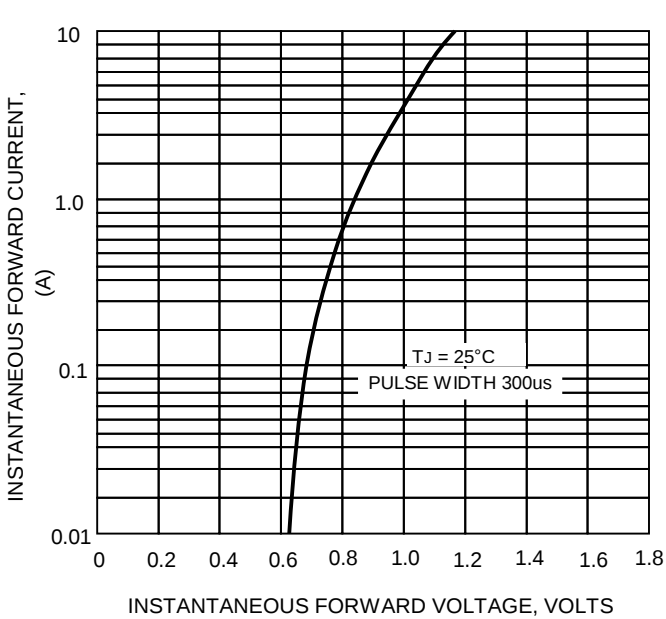


FIG.5-TYPICAL REVERSE CHARACTERISTICS

