

GBU6005G THRU GBU610G
BRIDGERECTIFIERS



VOLTAGE 50 THRU 1000 Volts **CURRENT** 6.0 Amperes

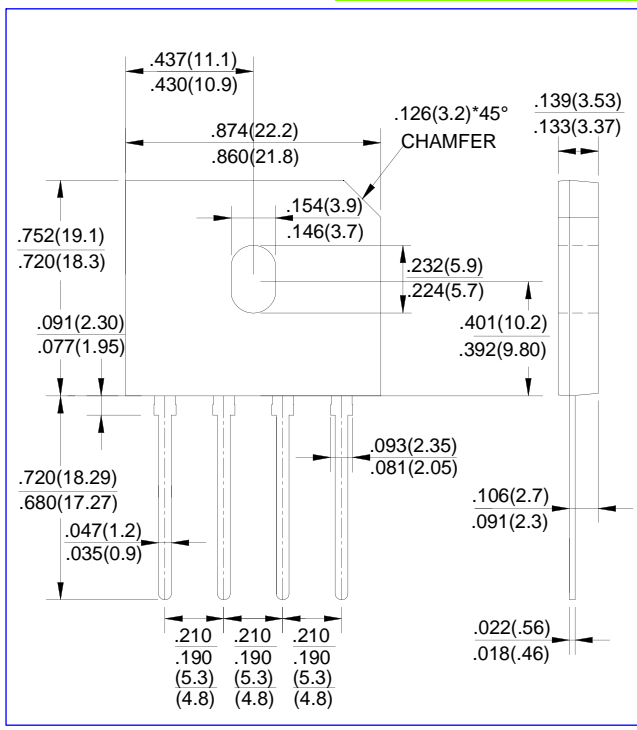
GBU Unit:(mm)

FEATURES

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

MECHANICAL DATA

- Case: G B U , molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C(UNLESS OTHERWISE NOTED))

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU6005G	GBU601G	GBU602G	GBU604G	GBU606G	GBU608G	GBU610G	UNIT	
Maximum Recurrent Peak Reverse Voltag	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltag	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 Note 2) Rectified Current @ T _c =100°C (without heatsink)	I _(AV)	6.0						3.0		A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150								A
Forward Voltage per element @ I _F =3A @ I _F =6A	V _{FM}	1.0						1.1		V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0						500		uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	93								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	65								pF
Operating Temperature Range	T _J	-55 to +150								°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.

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RATING AND CHARACTERISTIC CURVES (TA=25°C (UNLESS OTHERWISE NOTED))

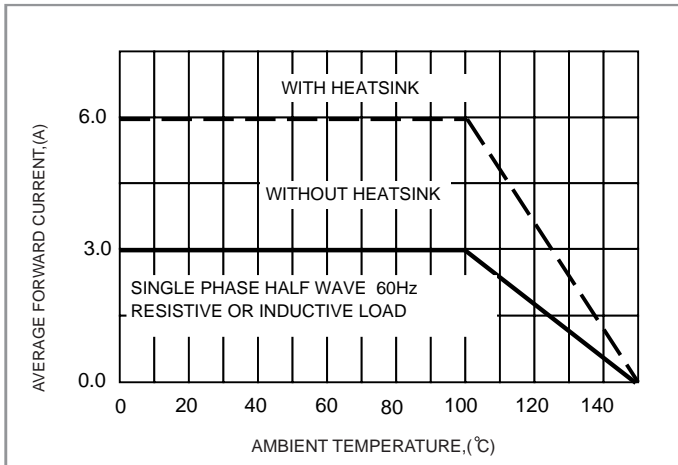


Fig. 1- FORWARD CURRENT DERATING CURVE

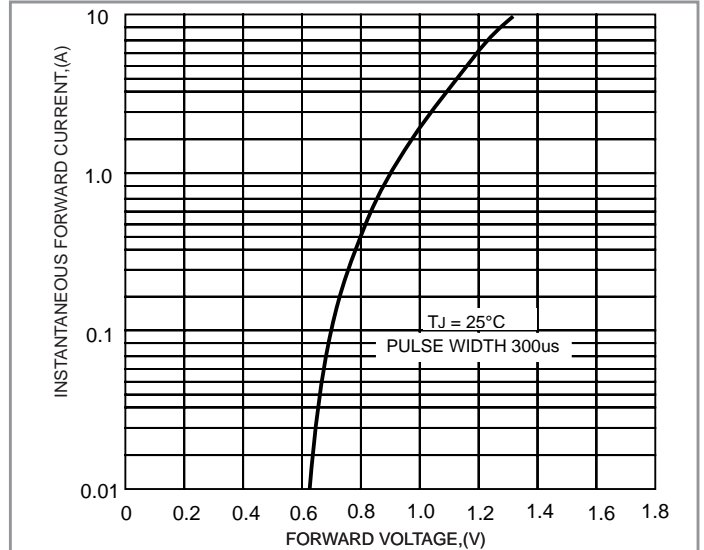


Fig. 2- TYPICAL INSTANTANEOUS FORWARD

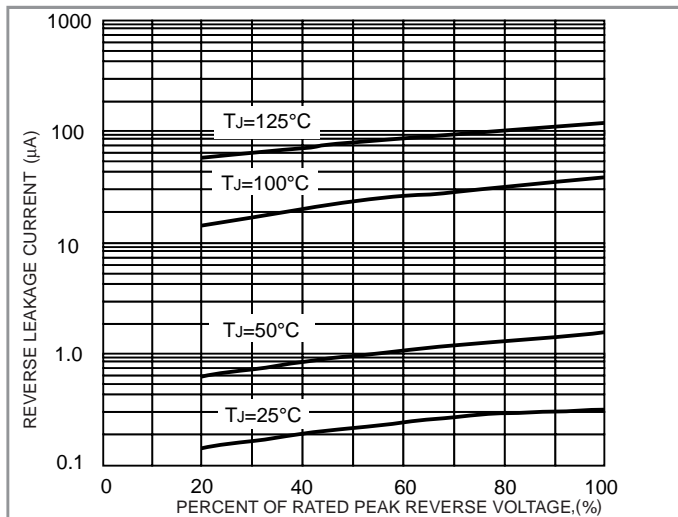


Fig. 3 TYPICAL REVERSE CHARACTERISTICS

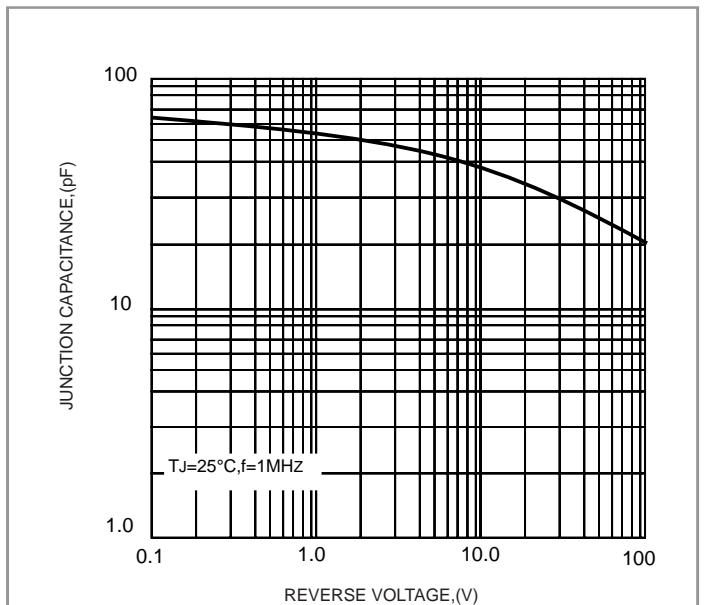


Fig. 4 TYPICAL JUNCTION CAPACITANCE

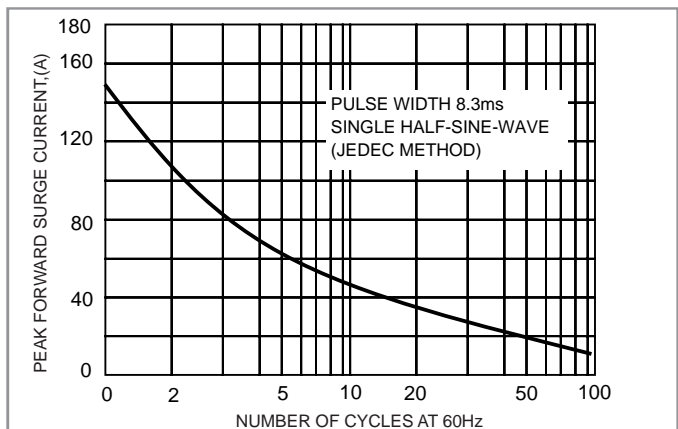


Fig. 5- MAXIMUM NON - REPETITIVE SURGE CURRENT

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Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	GBU	Unit
Typical thermal resistance ³⁾	R _{θJA}	31	°C/W
	R _{θJL}	10.9	

3). Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

ORDER INFORMATION

• Packing information

Product code	Pack	Quantity (pcs/box)	Box Size L×W×H (mm)	Carton Size L×W×H (mm)	Quantity (box/carton)
GBU6005G THRU GBU610G -GBU	B/P	250	230×45×120	360×240×190	12