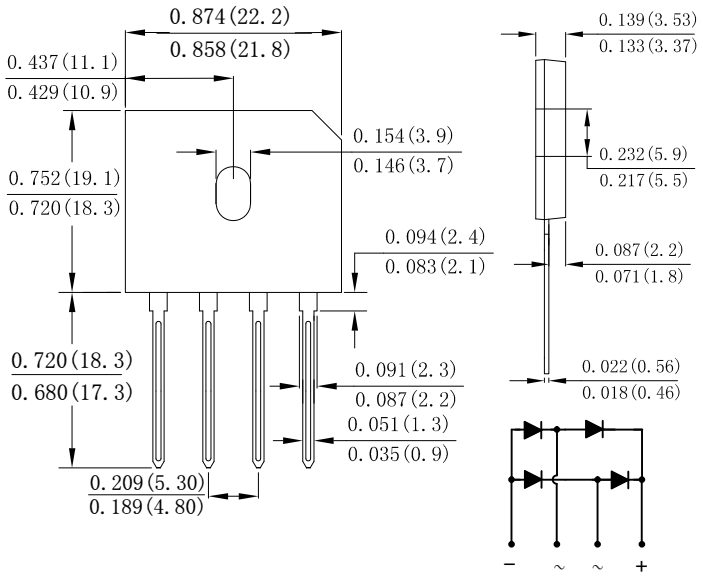
GBU4005G THRU GBU410G

Single Phase 4.0AMP Glass Passivated Bridge Rectifier

Features

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

Case: GBU



dimensions in inches and (millimeters)

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

Rating at 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 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=90℃	$I_{F(AV)}$	4.0							A
Non-Repetitive Peak Forward Surge Current@T_J=25℃ 8.3ms Single half sine-wave superimposed @T_J=125℃ on rated load (JEDEC Method)	I_{FSM}	130 104							A
Non-Repetitive Peak Forward Surge @T_J=25℃ Current 1 ms Single half sine-wave @T_J=125℃ superimpose on rated load (JEDEC Method)	I_{FSM}	260 208							A
Forward Voltage per element @IF=2.0A @IF=4.0A	V_{FM}	1.0 1.1							V
Peak Reverse Current @T_J=25℃ At Rated DC Blocking Voltage T_J=125℃	I_R	5.0 200							uA
I^2t Rating for fusing (t <8.3ms)	I^2t	70.135							A^2s
Dielectric Strength	Vids	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 2)	C_J	30							pF
Typical Thermal Resistance	$R_{\theta JA}$	22							℃/W
	$R_{\theta JC}$	3.4							
	$R_{\theta JL}$	2.1							
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

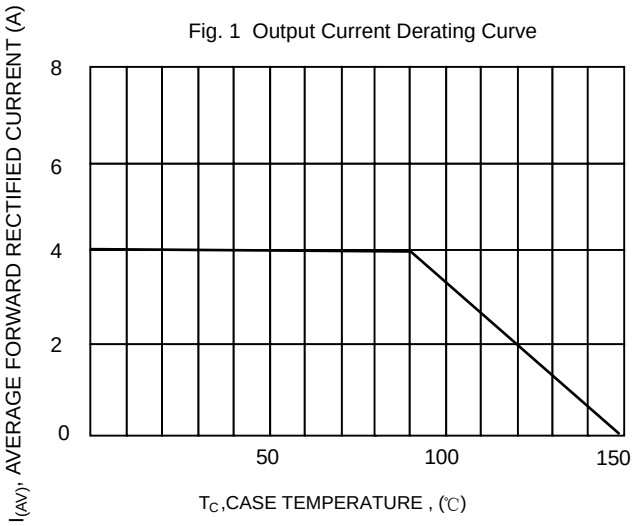


Fig. 2 Typical Forward Characteristics

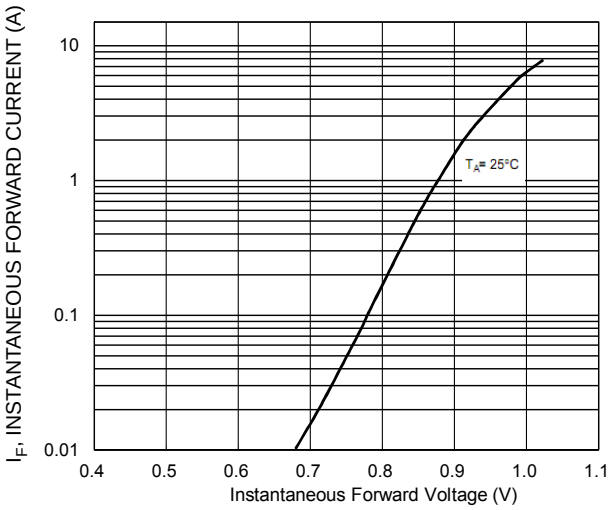


Fig. 3 Maximum Peak Forward Surge Current

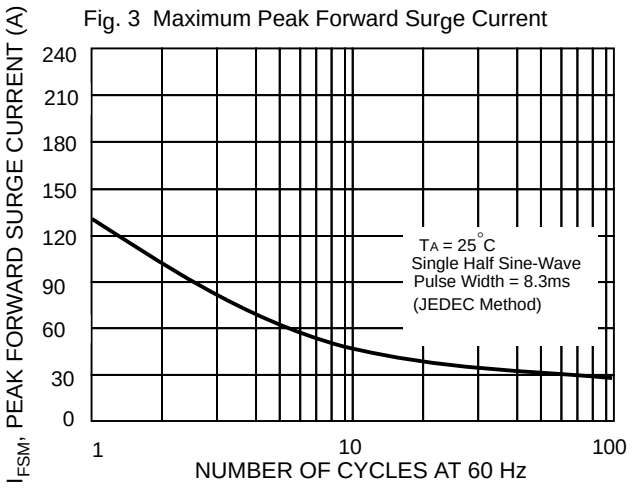


Fig. 4 Typical Junction Capacitance

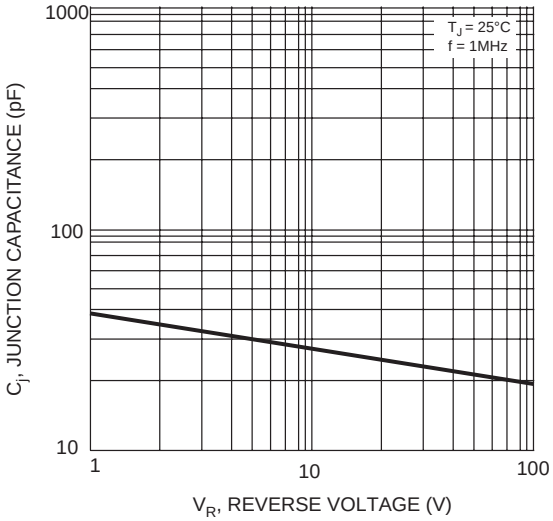
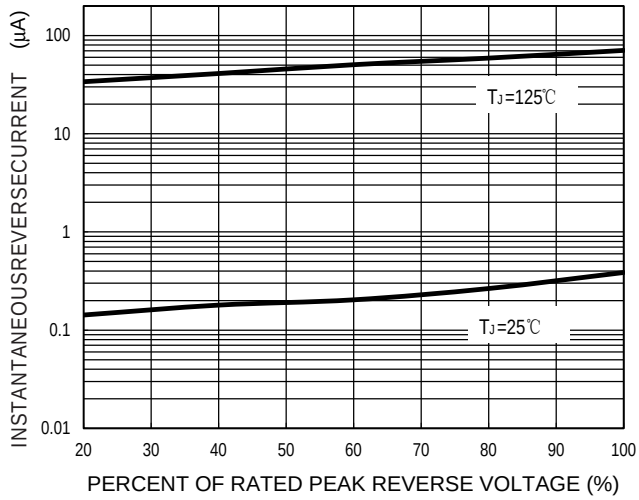


Fig. 5 Typical Reverse Characteristics



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