

GBU4005 THRU GB410

SINGLE PHASE 4.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS



JUXINTONG

GBU

Dimensions in inches and (millimeters)

FEATURES

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low reverse leakage current
- Low forward voltage drop
- High surge current capability

MECHANICAL DATA

- Case: Molded plastic, GBU
- Terminals: Terminals: Leads solderable per MIL-STD-202 method 208 guaranteed
- Epoxy: UL 94V-0 rate flame retardant
- 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 current derate by 20%.

Parameter	Symbols	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	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 Rectified Current with Heatsink at $T_C = 100^\circ C$	$I_{(AV)}$	4.0 2.4							A
Peak Forward Surge Current, 8.3 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							A
Maximum Forward Voltage at 2.0 A DC and 25 °C	V_F	1.0							V
Maximum Reverse Current at $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 125^\circ C$	I_R	10.0 500							μA
Typical Junction Capacitance ¹⁾	C_J	45							pF
Typical Thermal Resistance ²⁾	$R_{\theta JC}$	2.2							°C/W
Operating and Storage Temperature Range	T_J, T_S	-55 to +150							°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 VDC.

²⁾ Thermal resistance from junction to case with device mounted on 300 mm X 300 mm X 1.6 mm Cu plate heatsink.



RATING AND CHARACTERISTIC CURVES (GBU4005 THRU GBU410)

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FIG.1-FORWARD CURRENT DERATING CURVE

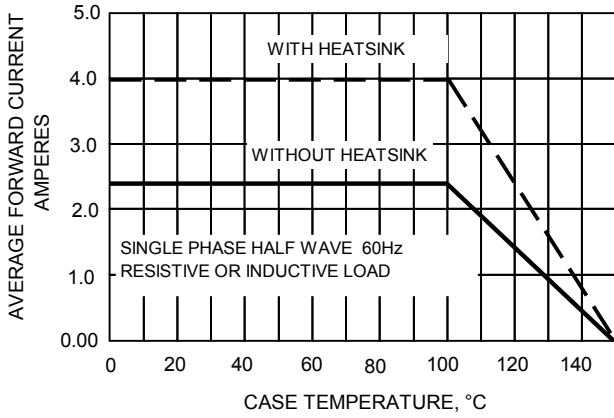


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

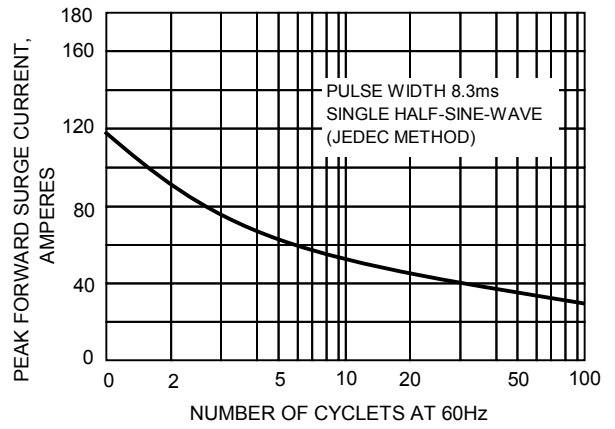


FIG.3-TYPICAL JUNCTION CAPACITANCE

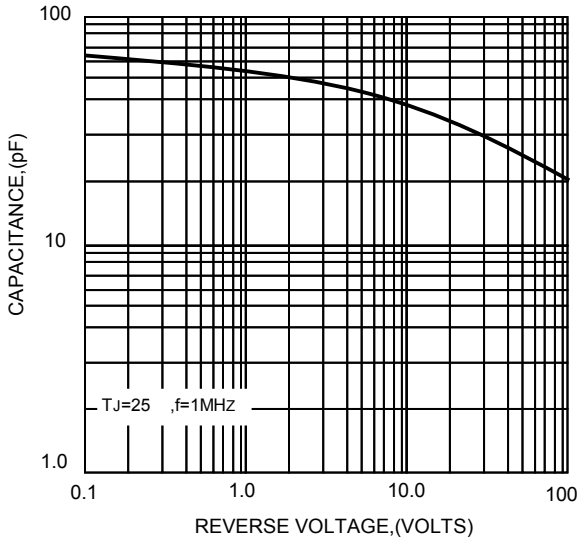


FIG.4-TYPICAL FORWARD CHARACTERISTICS

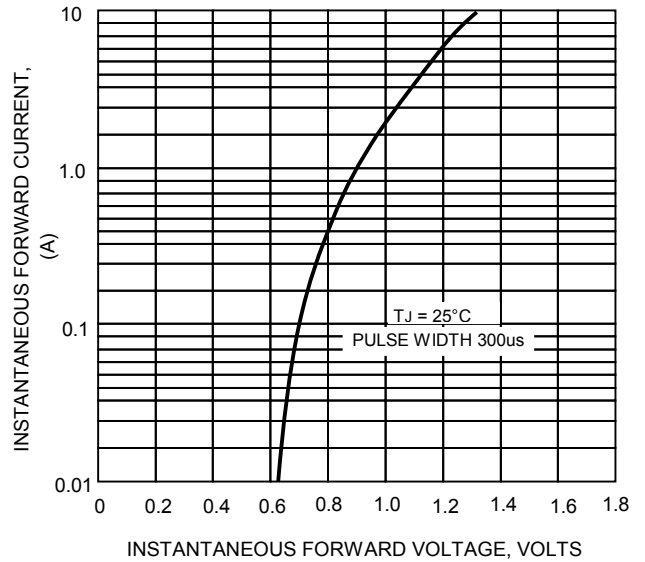


FIG.5-TYPICAL REVERSE CHARACTERISTICS

