



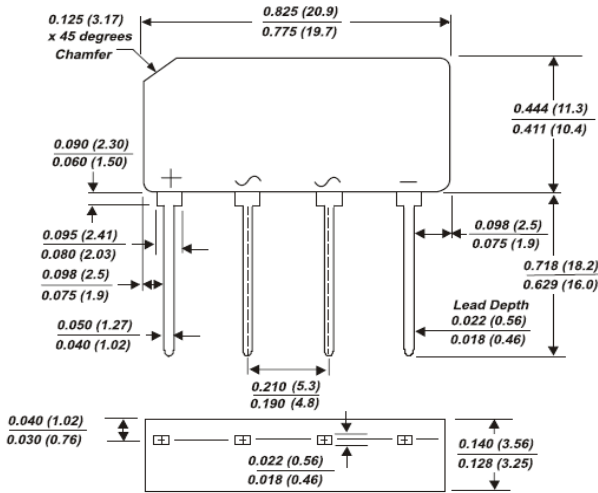
GBL4005 THRU GBL410

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Ampere

GBL

FEATURES



Dimensions in inches and (millimeters)

- ◆ Ideal for printed circuit board
- ◆ Surge overload rating-135amperes peak
- ◆ Plastic material has underwriters laboratory flammability classification 94V-0
- ◆ Mounting position:Any

MECHANICAL DATA

Case: Molded plastic
Terminals: Solderable per MIL-STD-750 · Method 2026
Lead: solder plated
Polarity: As marked

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	GBL 4005	GBL 401	GBL 402	GBL 404	GBL 406	GBL 408	GBL 410	UNITS
Maximum repetitive 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
Minimum DC Breakdown Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	135							A
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.05							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ rated DC blocking voltage per leg $T_A = 125^\circ\text{C}$	I_R	10.0 500							μA
Typical Thermal Resistance	$R_{\theta JC}$	10							$^\circ\text{C/W}$
I^2t Rating for fusing (note 1)	I^2t	75							A^2S
Operating Temperature and Storage Temperature Range	T_J & T_{STG}	-50 to +150							$^\circ\text{C}$

Note: 1. $1\text{ms} \leq t < 8.3\text{ms}$ $T_J=25^\circ\text{C}$ · Rating of per diode



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

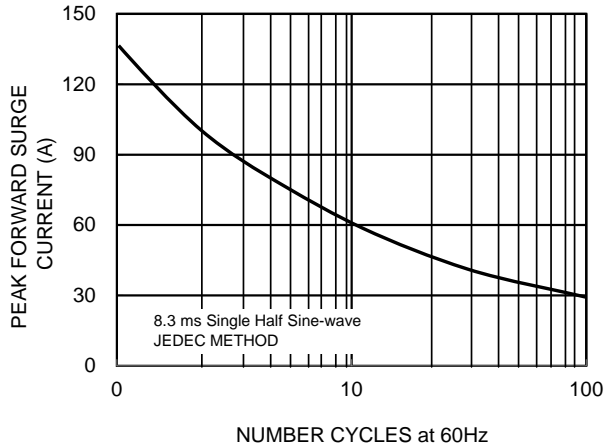


FIG. 2 MAXIMUM FORWARD CURRENT DERATING CURVE

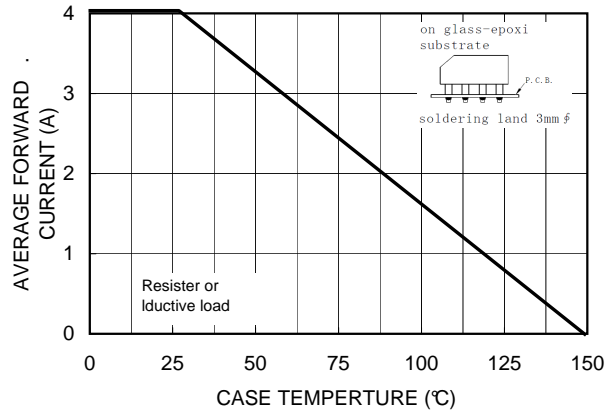


FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

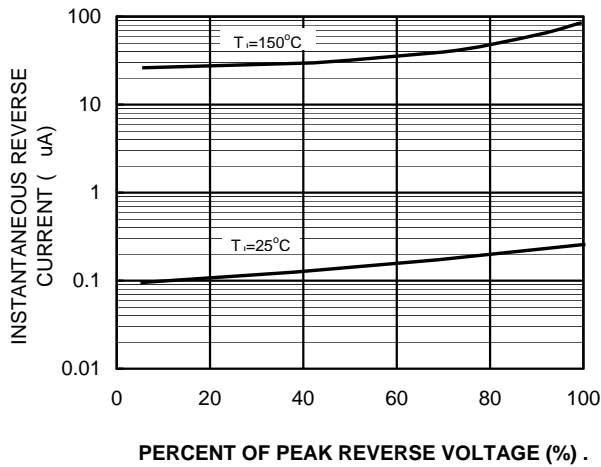


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

