

# GBL401 THRU GBL410



SINGLE PHASE 4.0 AMP BRIDGE RECTIFIERS

## Features

- ✧ Glass passivated chip junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Typical IR less than 0.1 $\mu$ A
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths.

## Mechanical Data

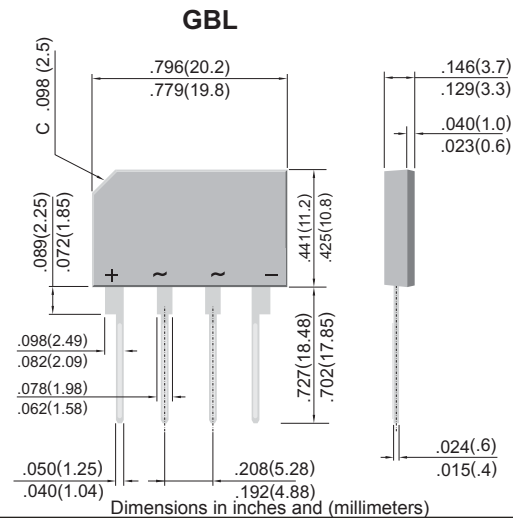
- ✧ Case: Molded plastic body.
- ✧ Terminals: Plated leads solderable per MIL-STD-750, Method 2026.
- ✧ Weight: 0.06 ounce, 1.7 grams
- ✧ Mounting position: Any

## VOLTAGE RANGE

50to1000Volts

## CURRENT

4.0Ampere



## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	GBL 401	GBL 402	GBL 403	GBL 404	GBL 406	GBL 408	GBL 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 Rectified Output Current @ 50°C Ambient	$I_{(AV)}$	4.0							A
Peak One Surge Current Overload Current	$I_{FSM}$	150							A
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.00							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance Per Leg (Note) (Note)	$R_{\theta JA}$ $R_{\theta JL}$	32 13							$^\circ\text{C/W}$
Typical Junction Capacitance Per Leg at 4.0V, 1MHz	$C_j$	25							pF
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B with 0.47 x 0.47" (12 x 12mm) Copper Pads.

# RATING AND CHARACTERISTIC CURVES (GBL401 THRU GBL410)

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

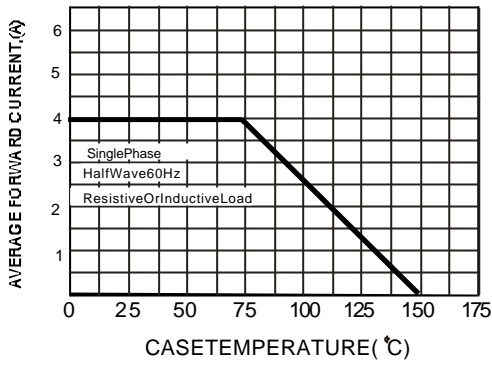


FIG. 2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

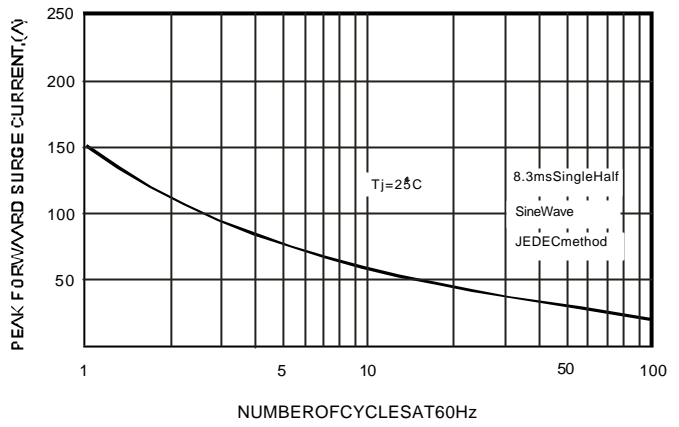


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

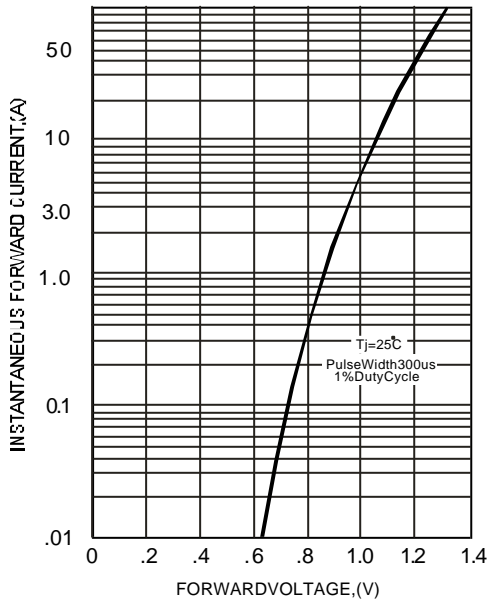


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

