



# GBL4005 THRU GBL410

PINGWEI ENTERPRISE

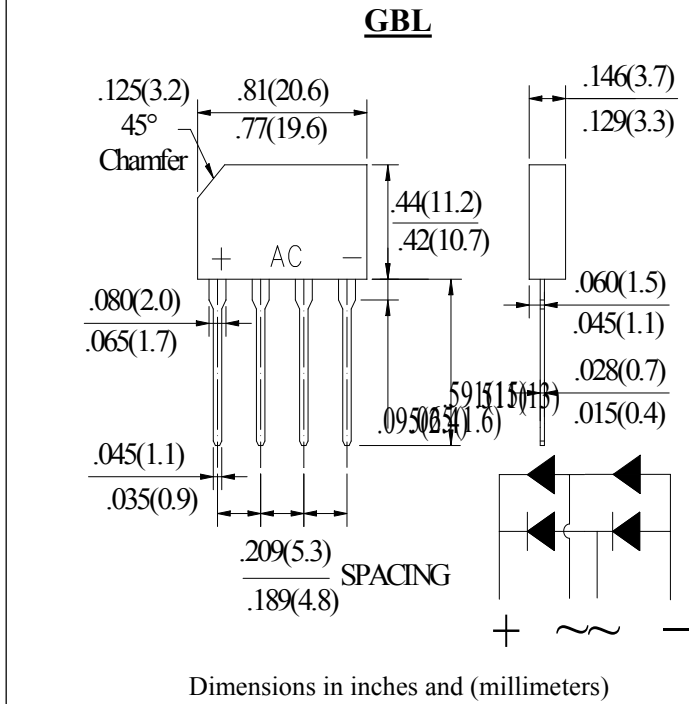
## SINGLE PHASE 4.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

### FEATURE

- . Ideal for printed circuit board
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low leakage
- . Low forward voltage
- . High surge current capability
- . High temperature soldering guaranteed:  
260°C/10seconds/.375", (9.5mm) lead lengths.

### MECHANICAL DATA

- . Case: Molded plastic body
- . Epoxy: UL 94V-0 rate flame retardant
- . Terminals: Pure tin plated, Lead free. Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Symbols molded or marked on body
- . Mounting position: Any
- . Weight: 2.0 grams



### 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, derate current by 20%

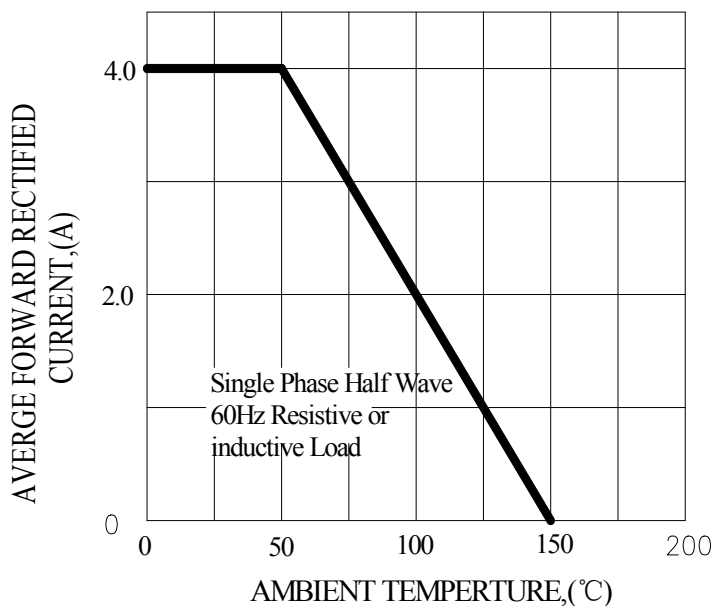
Type Number	SYM BOL	GBL 4005	GBL 401	GBL 402	GBL 404	GBL 406	GBL 408	GBL 410	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward rectified Output Current at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	120							A
Maximum Forward Voltage Drop per element at 4.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 500.0							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	59.7							$\text{A}^2\text{Sec}$
Typical Junction Capacitance (Note 1)	$C_J$	40							pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	2.2							$^\circ\text{C/W}$
Storage Temperature	$T_{STG}$	-55 to +150							$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150							$^\circ\text{C}$

#### Note:

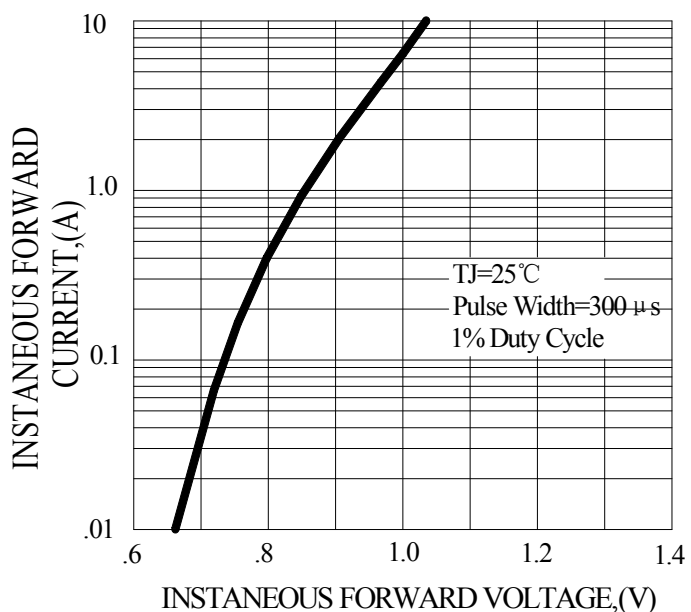
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Case Mounted on P.C.B with 0.47×0.47" (12×12mm) Copper Pads.

**RATING AND CHARACTERISTIC CURVES (GBL4005 THRU GBL410)**

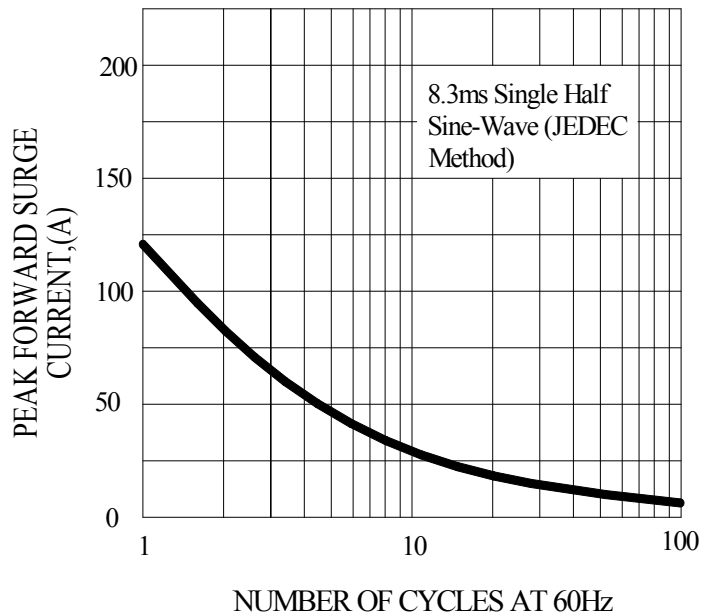
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

