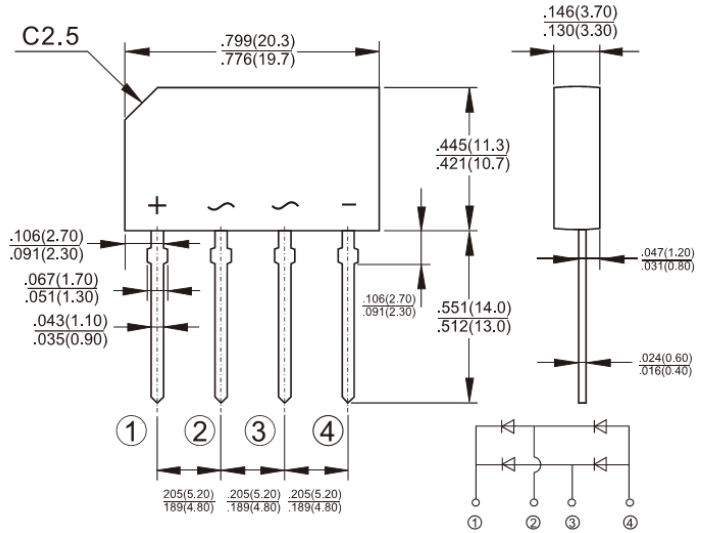




GBL005 - GBL10

Single Phase 4.0AMPS. Glass Passivated Bridge Rectifiers

GBL



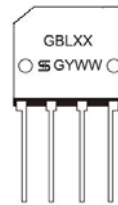
Features

- ◇ UL Recognized File # E-326243
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ High case dielectric strength
- ◇ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◇ Typical IR less than 0.1uA
- ◇ High surge current capability
- ◇ High temperature soldering guaranteed: 260°C / 10 seconds at 5lbs., (2.3kg) tension
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ◇ Case: Molded plastic body
- ◇ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- ◇ Weight: 2.0 grams
- ◇ Mounting position: Any

Dimensions in inches and (millimeters)



Marking Diagram

- GBLXX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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 005	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 10	Unit
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
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C=50^\circ C$ @ $T_A=40^\circ C$	$I_{F(AV)}$	4.0 3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150							A
Rating for fusing (t<8.3ms)	I^2T	93							A ² S
Maximum Instantaneous Forward Voltage (Note 1) @2.0A @4.0A	V_F	1.0 1.1							V
Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^\circ C$ @ $T_A=125^\circ C$	I_R	5 500							uA
Typical Junction Capacitance	C_j	95			40				pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$ $R_{\theta JC}$	32 13 8							°C/W
Operating Temperature Range	T_J	- 55 to + 150							°C
Storage Temperature Range	T_{STG}	- 55 to + 150							°C

Notes 1: Pulse Test with PW=300 usec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (GBL005 THRU GBL10)

FIG.1 FORWARD CURRENT DERATING CURVE

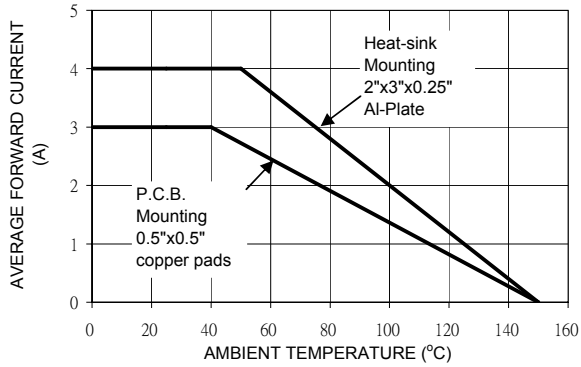


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

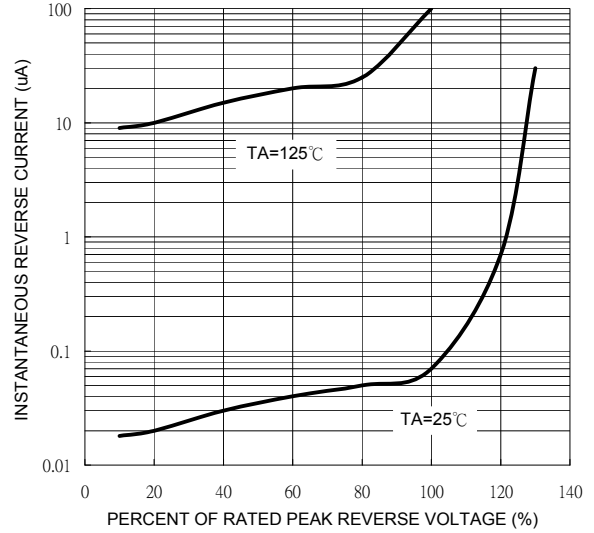


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

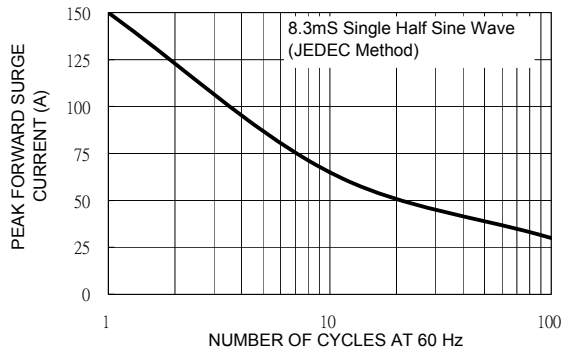


FIG. 4 TYPICAL JUNCTION CAPACITANCE

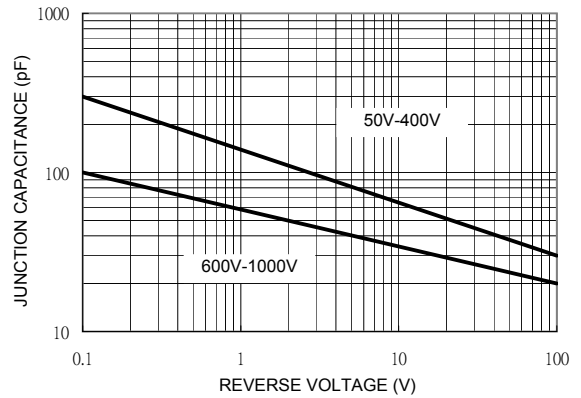


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

