



## GBPC 15, 25, 35 SERIES

High Current 15, 25, 35 AMPS. Single Phase  
Glass Passivated Bridge Rectifiers

### GBPC, GBPC-W, GBPC-M

Dimensions in Page. 3

### Features

- ✧ UL Recognized File # E-326243
- ✧ The plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- ✧ Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- ✧ Surge overload ratings from 300 amperes to 400 amperes
- ✧ Typical IR less than 0.2 uA
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs.,(2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

### Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plate, Lead free, leads solderable per MIL-STD-202, Method 208
- ✧ Weight: 16.95 grams
- ✧ Mounting Torque : 20 in-lbs Max.

### 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	-005	-01	-02	-04	-06	-08	-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 @ $T_C=55^\circ C$ GBPC15 GBPC25 GBPC35	$I_{F(AV)}$				15 25 35				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$				300 300 400				A
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current (Note 1)	$V_F$	GBPC15 7.5A GBPC25 12.5A GBPC35 17.5A			1.1				V
Maximum Reverse Current @ Rated VR	$I_R$				5				uA
Typical Thermal Resistance	$R_{\theta JC}$				1.5				°C/W
Operating Temperature Range	$T_J$				- 55 to + 150				°C
Storage Temperature Range	$T_{STG}$				- 55 to + 150				°C

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

Note 2 : Suffix "W" - Wire Lead Structure/"M" - Terminal Location Face to Face

(GBPC15005 THRU GBPC1510)  
 RATINGS AND CHARACTERISTIC CURVES (GBPC25005 THRU GBPC2510)  
 (GBPC35005 THRU GBPC3510)

FIG. 1 FORWARD CURRENT DERATING CURVE

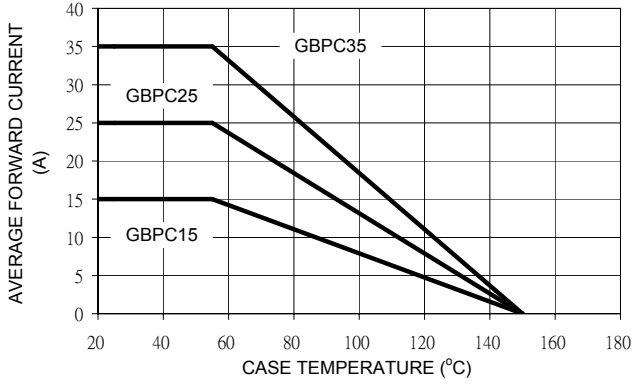


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

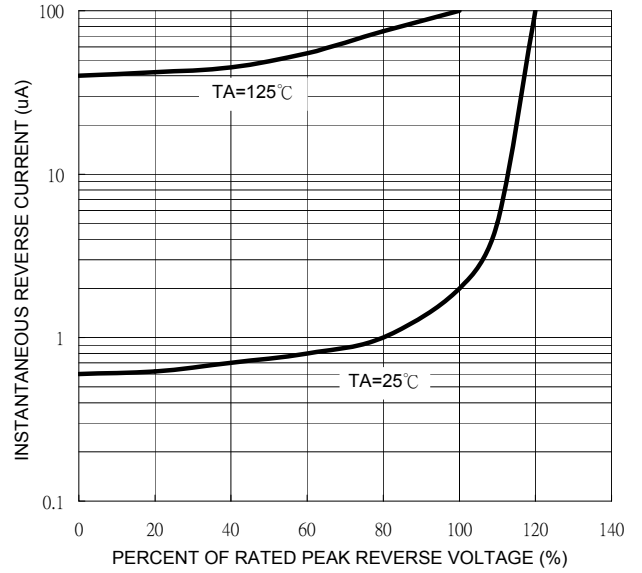


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

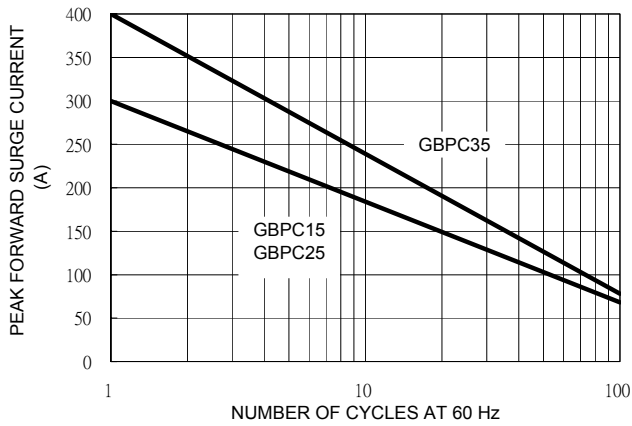


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

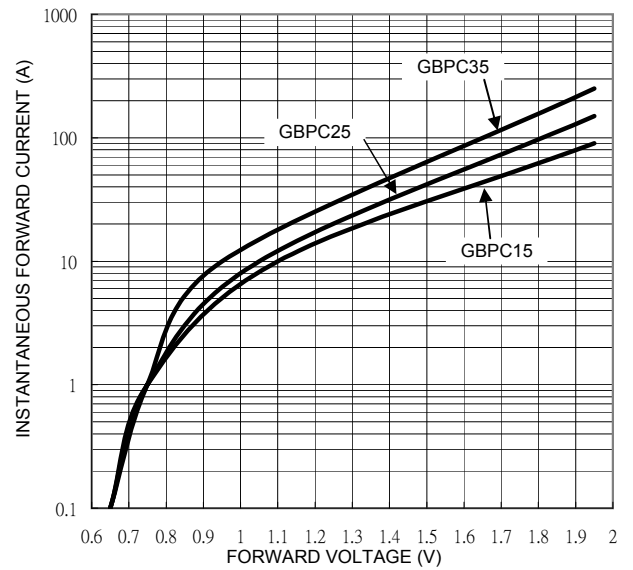
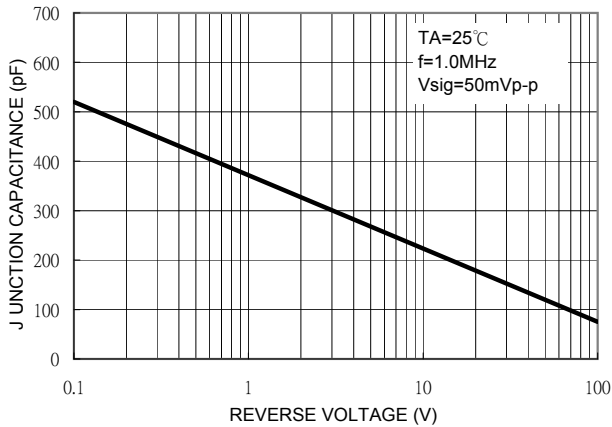


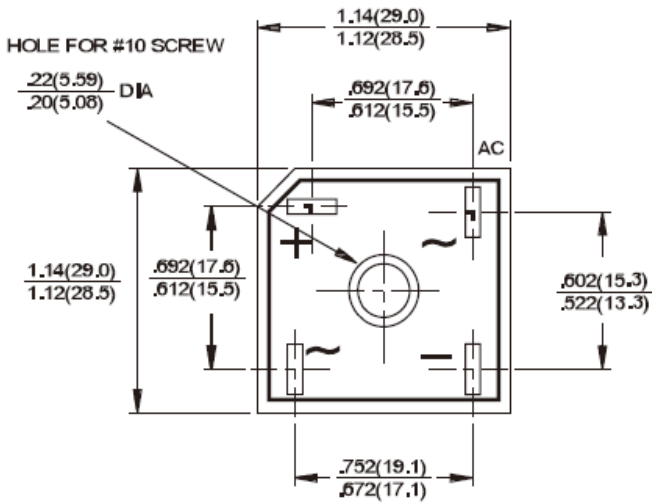
FIG. 4 TYPICAL JUNCTION CAPACITANCE



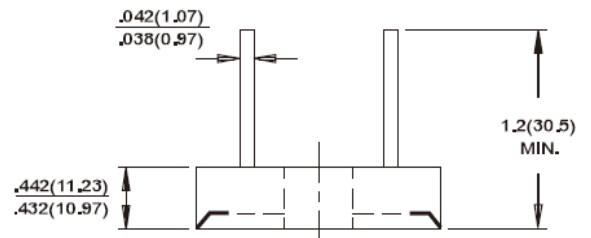
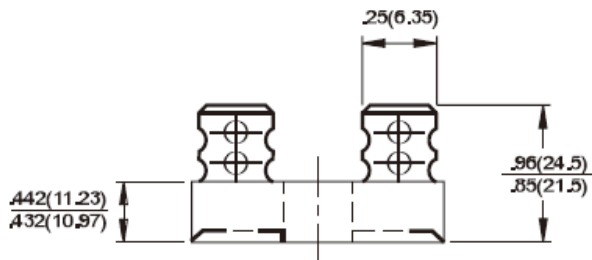
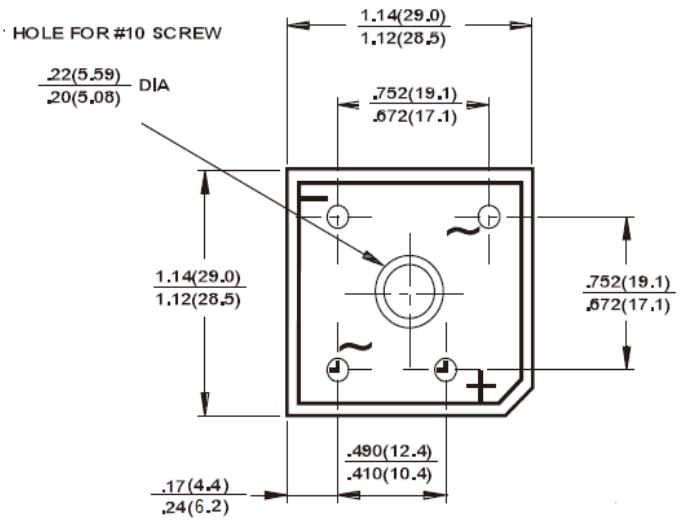
DIMENSIONS

(GBPC15005 THRU GBPC1510)  
 (GBPC25005 THRU GBPC2510)  
 (GBPC35005 THRU GBPC3510)

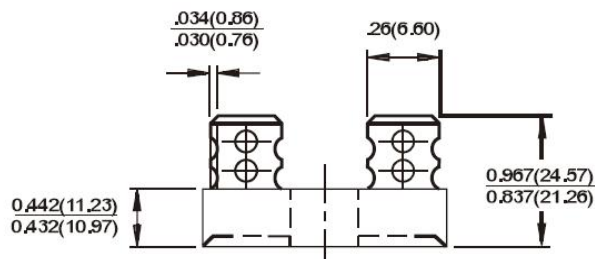
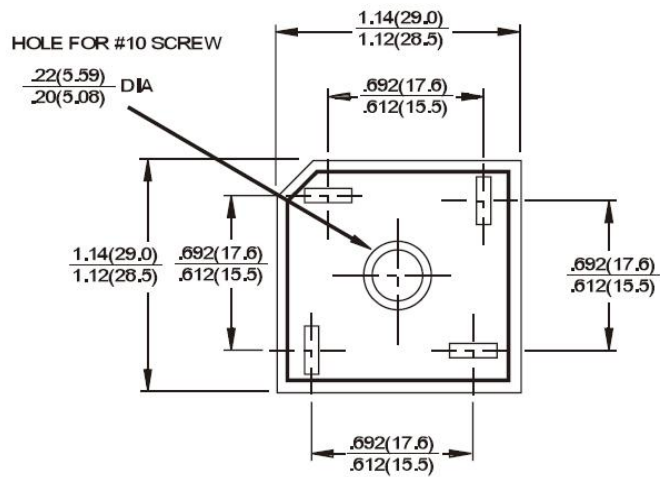
**GBPC**



**GBPC-W**



**GBPC-M**



Dimensions in inches and (millimeters)