



GBPC 15, 25, 35 SERIES

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

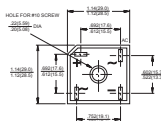


Voltage Range
50 to 1000 Volts
Current
15.0/25.0/35.0 Amperes

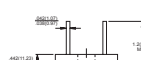
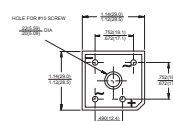
Features

- ✧ UL Recognized file # E-96005
- ✧ The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-0
- ✧ Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- ✧ Surge overload ratings from 300 amperes to 400 amperes
- ✧ Terminals solderable per MIL-STD-202, Method 208 (For wire type)
- ✧ Typical I_R less than 0.2 μA
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths (For wire type)
- ✧ Isolated voltage from case to lead over 2500 volts

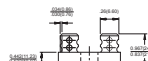
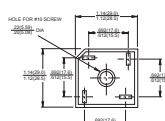
GBPC



GBPC-W



GBPC-M



Dimensions in inches and (millimeters)

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	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 Current @ $T_c = 55^\circ C$	$I_{(AV)}$	15.0 25.0 35.0							A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300 300 400							A
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	V_F	GBPC15 7.5A GBPC25 12.5A GBPC35 17.5A 1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	I_R	5							μA
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150							$^\circ C$

Notes: 1. Thermal Resistance from Junction to Case.

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

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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

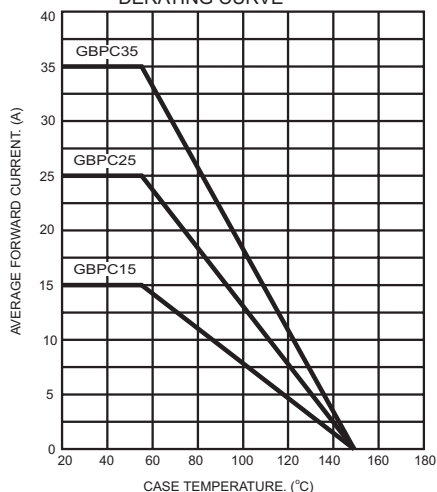


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

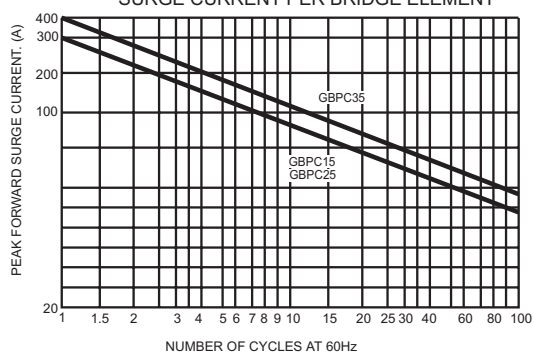


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

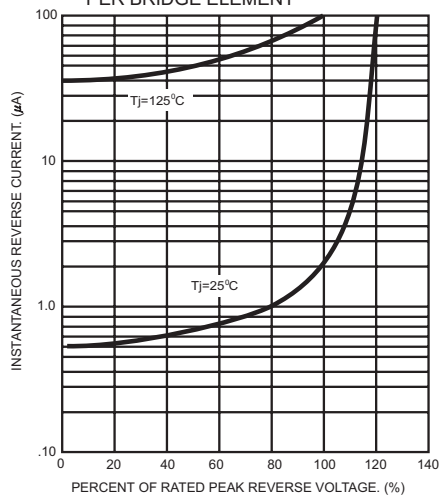


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

