

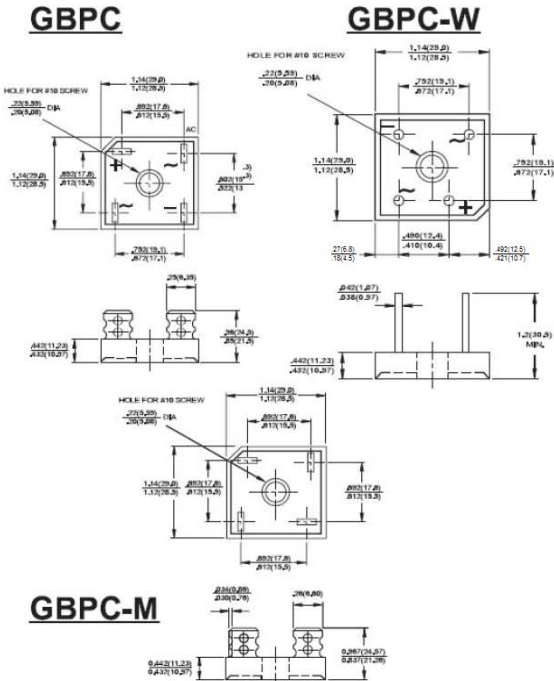
# GBPC 15, 25, 35 SERIES

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



## 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  $\mu$ A
- ✦ 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



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%

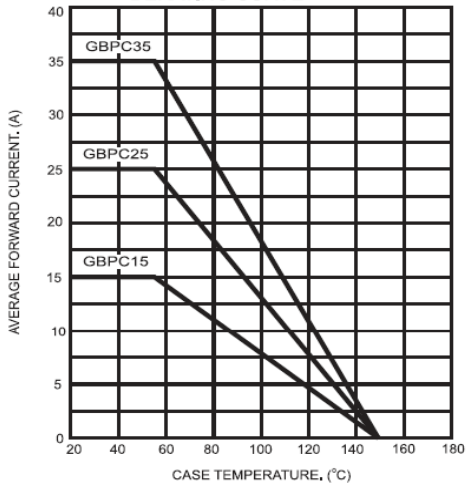
Type Number	Symbol	-005	-01	-02	-04	-06	-08	-10	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C = 55^\circ C$	$I_{(AV)}$				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	$V_F$				1.1				V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	$I_R$				5				$\mu$ A
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.

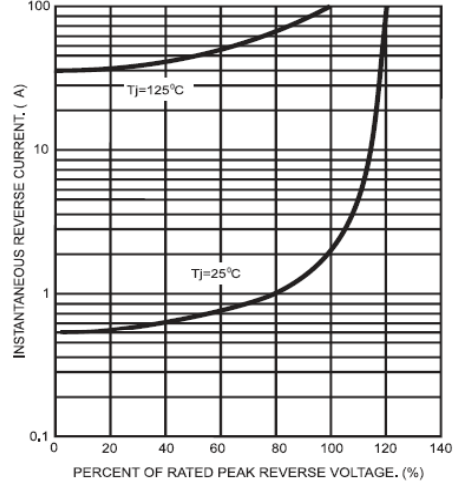
Version: D09

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

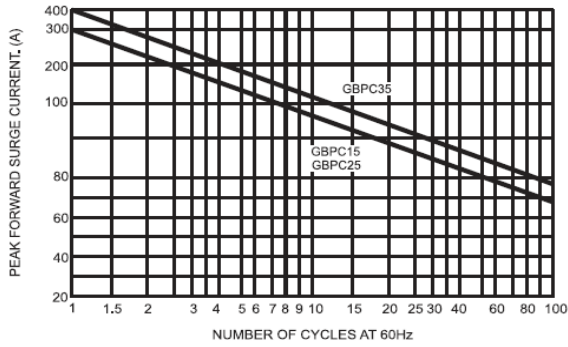
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



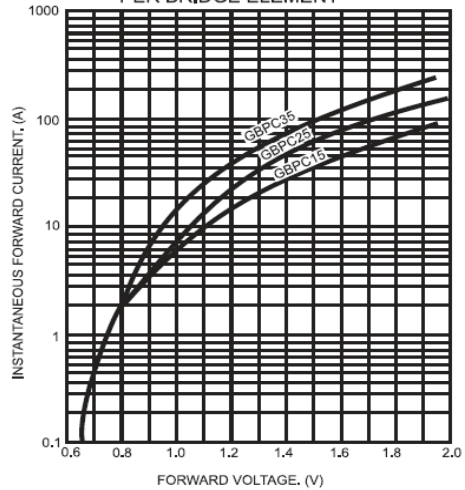
**FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



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



**FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG.5- TYPICAL JUNCTION CAPACITANCE**

