

## GBPC 15, 25, 35 SERIES

**HIGH CURRENT 15, 25, 35 AMPS. SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS**

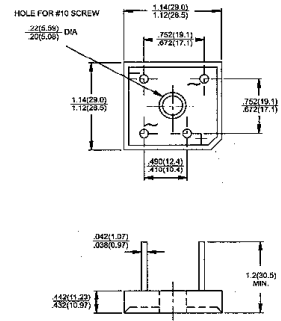
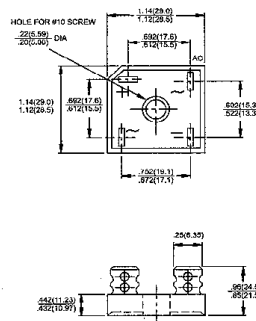
### Features

- The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-O
- 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 uA
- 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

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

#### GBPC

#### GBPC-W



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%

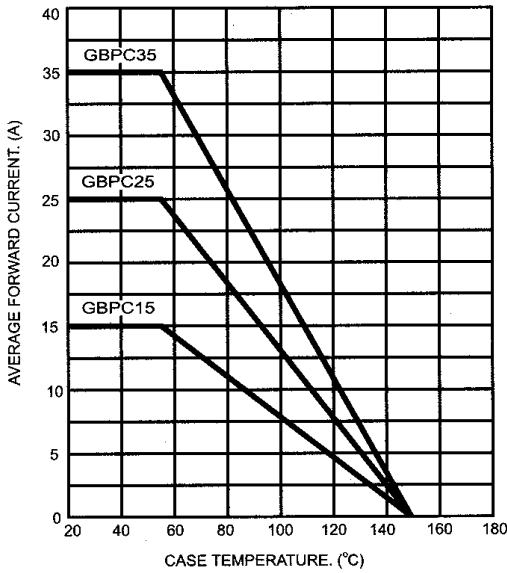
SYMBOLS	-005	-01	-02	-04	-06	-08	-10	Units	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ $T_C = 55^\circ\text{C}$	GBPC15			15.0	GBPC25			25.0	A
	GBPC35			35.0					
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	GBPC15			300	GBPC25			300	A
	GBPC35			400					
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	GBPC15 7.5A	GBPC25 12.5A	GBPC35 17.5A	1.1				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element				5				uA	
Typical Thermal Resistance (Note 1) $R_{\theta JC}$				1.5				°C/W	
Operating and Storage Temperature Range $T_J, T_{STG}$				-50 to +150				°C	

Notes: 1. Thermal Resistance from Junction to Case.

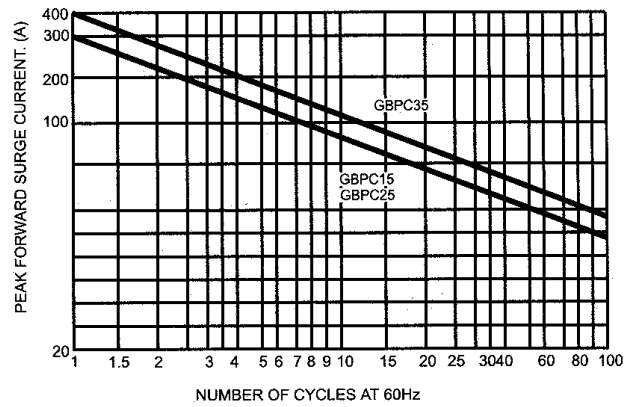
2. Suffix "W" - Wire Lead Structure/"M" - Terminal Location Face to Face.

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

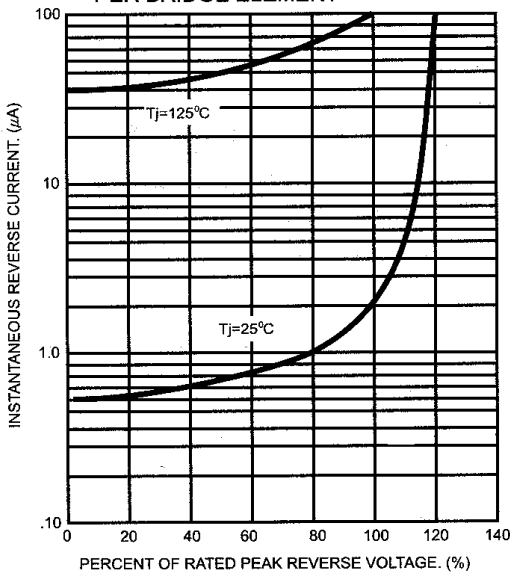
**FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE**



**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**

