

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 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

Voltage Range

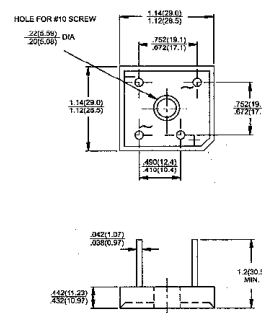
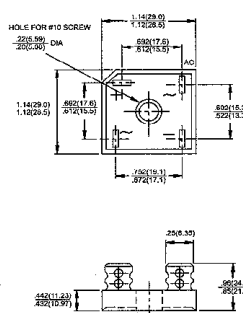
50 to 1000 Volts

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°C	GBPC15 GBPC25 GBPC35			15.0 25.0 35.0				A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	GBPC15 GBPC25 GBPC35			300 300 400				A
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				μA
Typical Thermal Resistance (Note 1) R θ 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.

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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

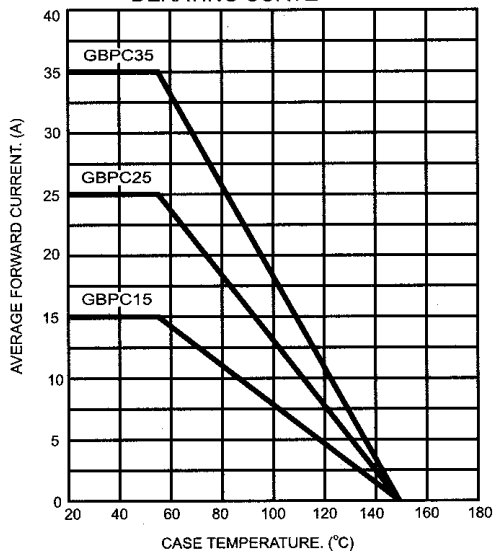


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

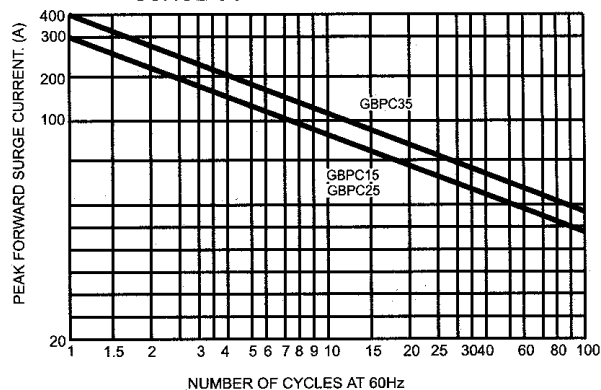


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

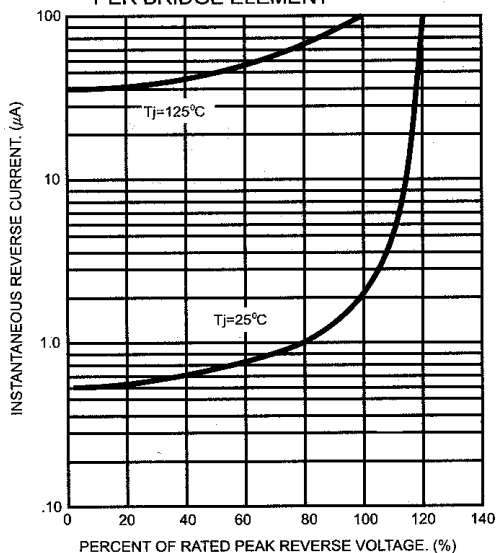


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

