



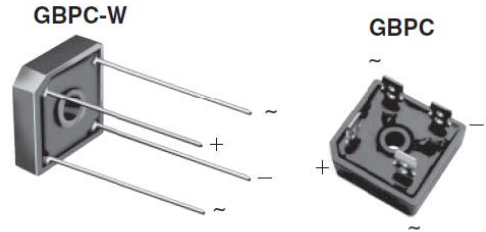
GBPC15005(W)-GBPC1510(W)

High Current 15AMP.Single Phase
Glass Passivated Bridge Rectifiers



Features

- ✧ 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
- ✧ Typical I_R less than 0.2 μ 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



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	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	Units
		15005	1501	1502	1504	1506	1508	1510	
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							A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300							A
I^2t Rating for fusing @ $T_j=25^\circ C$	I^2t	375							A ² S
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current @7.5A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	I_R	5							μ A
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3.0							°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.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

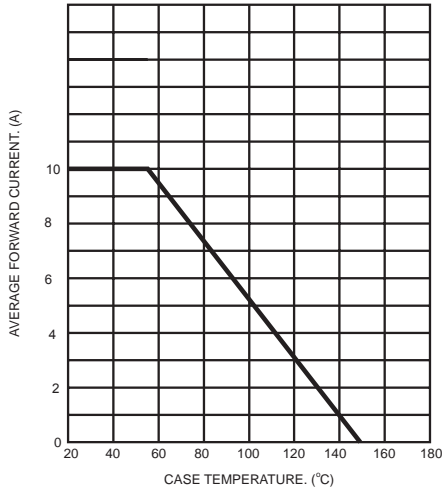


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

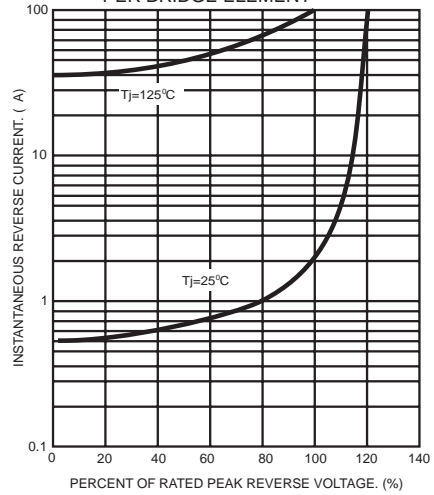


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

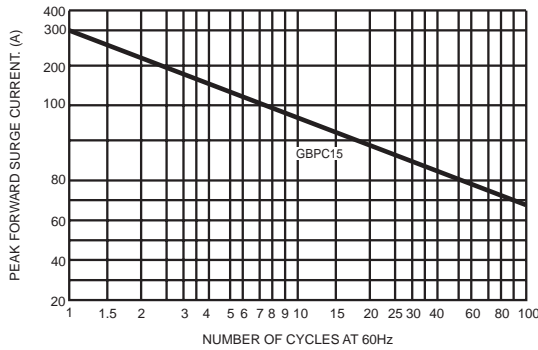


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

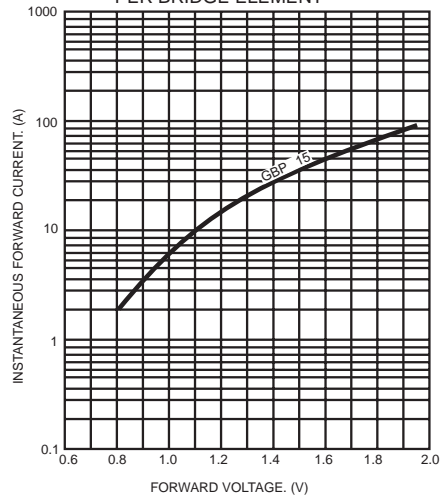
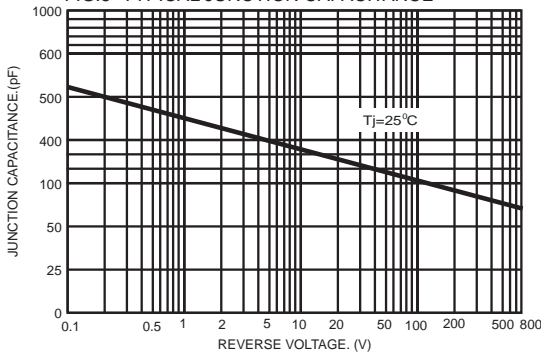


FIG.5- TYPICAL JUNCTION CAPACITANCE



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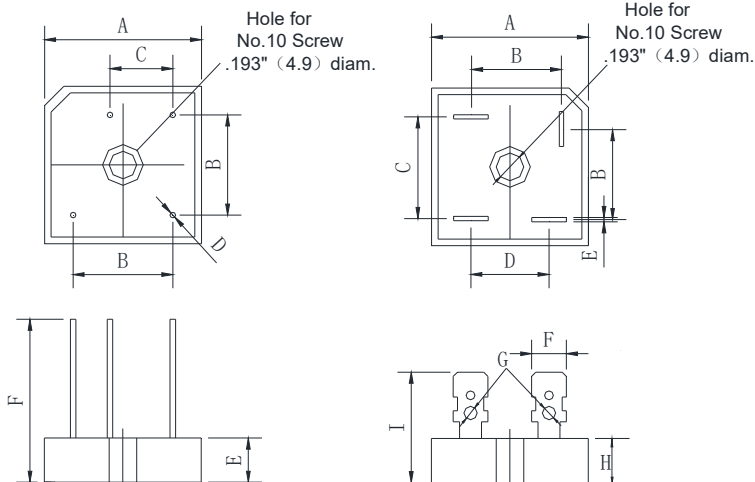
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■ Outline Dimensions

GBPC-W

GBPC



Dimensions in millimeters

GBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	7.6	8.2
F	30	

GBPC		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.2	2.6
H	7.6	8.2
I	19	/