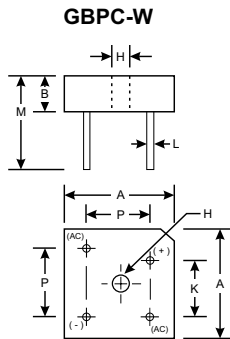


# GBPC15/25/35/50W SERIES

## GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current -15/25/35/50Amperes



GBPC / GBPC-W		
Dim	Min	Max
A	28.30	28.80
B	7.40	8.25
C	16.10	17.10
E	18.80	21.30
G	13.80	14.80
H	Hole for #10 screw	
	5.08 $\varnothing$	5.59 $\varnothing$
J	17.60	18.60
K	10.90	11.90
L	0.97 $\varnothing$	1.07 $\varnothing$
M	31.80	—
P	17.60	18.60
All Dimensions in mm		

### Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 400A Peak
- Electrically Isolated Metal Base for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- Materials used carries U/L recognition

### Mechanical Data

- Case: Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting: Through Hole for #10 Screw
- Mounting Torque: 8.0 Inch-pounds Maximum
- GBPC-W Weight: 14 grams (approx.)

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	GBPCW	GBPCW	GBPCW	GBPCW	GBPCW	GBPCW	GBPCW	UNIT	
		15005	1501	1502	1504	1506	1508	1510		
		25005	2501	2502	2504	2506	2508	2510		
		35005	3501	3502	3504	3506	3508	3510		
		50005	5001	5002	5004	5006	5008	5010		
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	30	70	140	280	420	560	700	V	
Maximum Average Forward Rectified Output Current @ T <sub>C</sub> =55°C	I <sub>(AV)</sub>	GBPC 10W	15	GBPC 15W	25	GBPC 25W	35	GBPC 35W	50	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	GBPC 10W	300	GBPC 15W	350	GBPC 25W	400	GBPC 35W	450	A
Maximum Forward Voltage Drop Per Element at 5.0/7.5/12.5/17.5/25.0 A Peak	V <sub>F</sub>	1.1							V	
Maximum Reverse Current at Rated DC Blocking Voltage Per Element @ T <sub>A</sub> =25°C	I <sub>R</sub>	10							uA	
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C	

FIG.1-MAXMUN FORWARD SURGE CURRENT

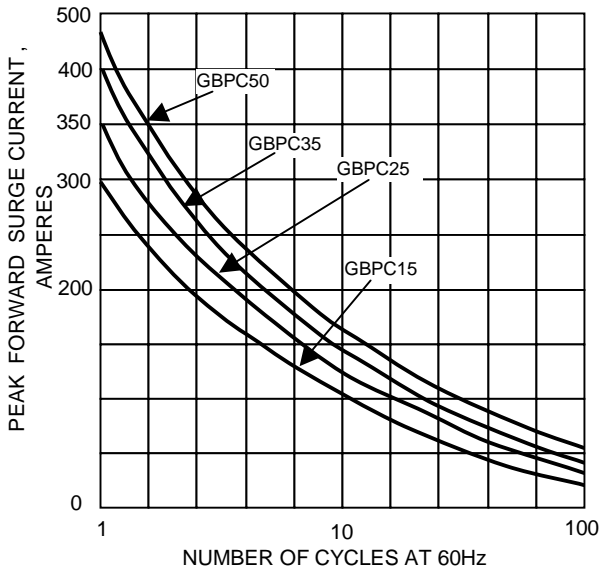


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRE

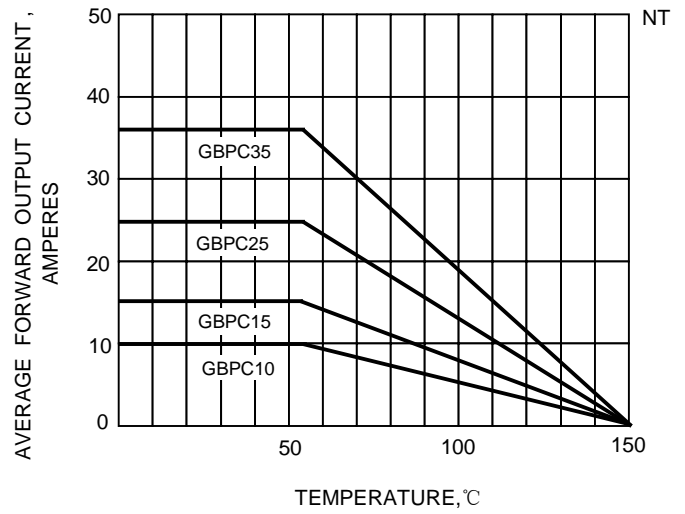


FIG.3-TYPICAL FORWARD CHARACTERISTICS

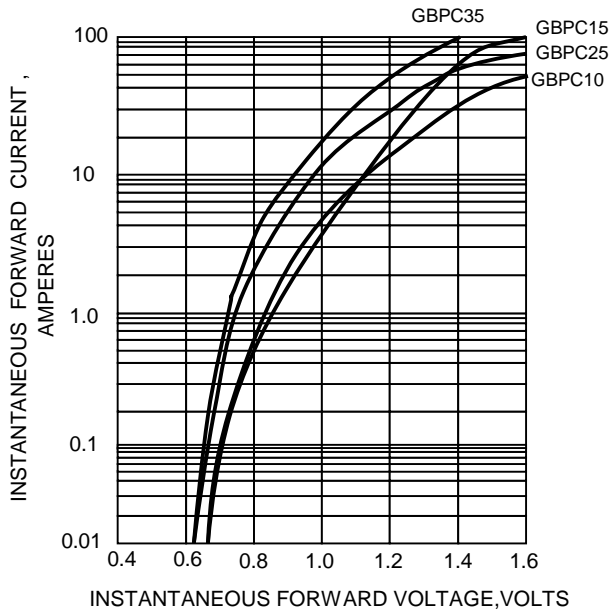


FIG.4-TYPICAL REVERSE CHARACTERISTICS

