

4A Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage - 50 to 1000 V

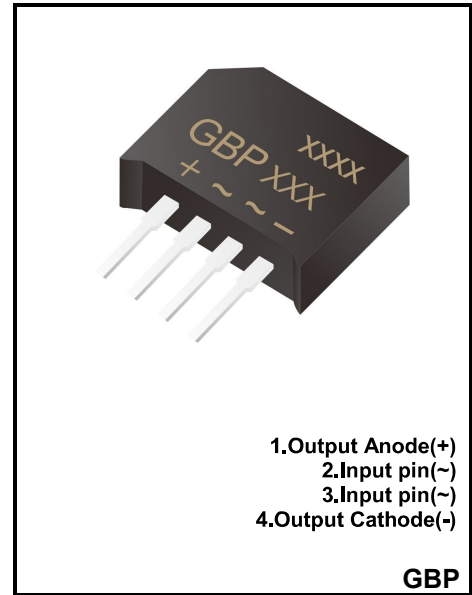
Forward Current – 4.0A

FEATURES

- ◆Glass passivated chip
- ◆Low Reverse Leakage Current
- ◆High surge current capability
- ◆Case to Terminal Isolation Voltage 2500V

MECHANICAL DATA

- ◆Case: GBP
- ◆Marking / Polarity: Marked on Body
- ◆Weight: About 1.2grams



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	GBP4005H DJ	GBP401H DJ	GBP402H DJ	GBP404H DJ	GBP406H DJ	GBP408H DJ	GBP410H DJ	Units
Maximum Repetitive 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
Average Forward Output Rectified Current@Ta =120°C	$I_{(AV)}$	4							A
Forward Voltage Per Leg @IFM =4.0A	V_F	0.98							V
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	160							A
Maximum DC Reverse Current @Ta =25°C at Rated DC Blocking Voltage @Ta=25°C	I_R	5 500							μA
I ² t Rating for Fusing(3ms≤t≤8.3ms)	I^2t	106							A ² S
Rms isolation voltage from case to leads	V_{isol}	2500							V
Typical Junction Capacitance	C_j	42							PF
Maximum thermal resistance per leg	$R_{θJC}$	4.2							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

Note:

- (1) Junction to case with heatsink
- (2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw .

Fig 1-forwardCurrent derating Curve

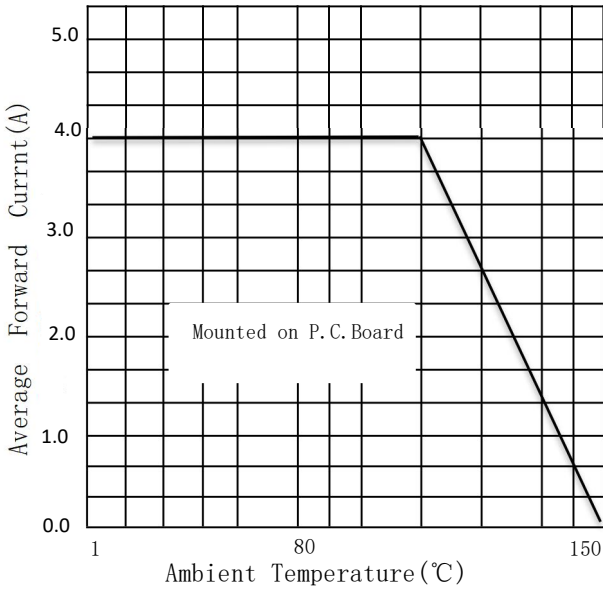


Fig.2-Maximum Non-Repetitive Surge Curr

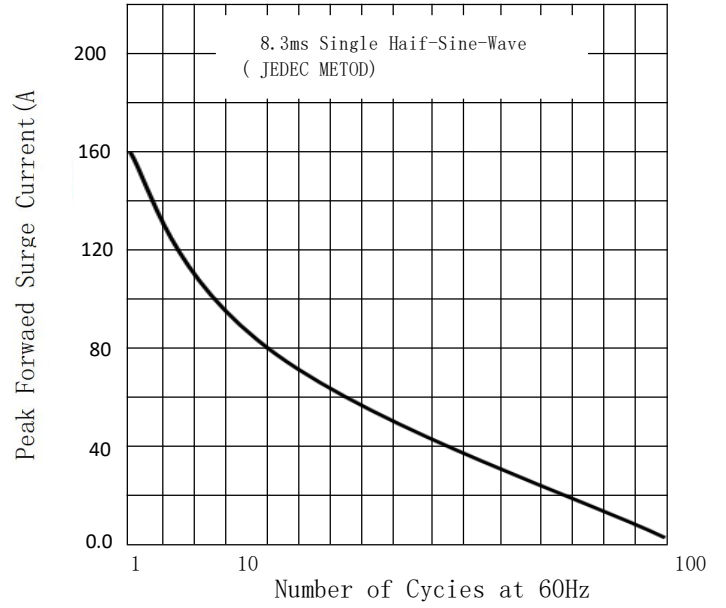


Fig.3-Typical Reverse Characteristics

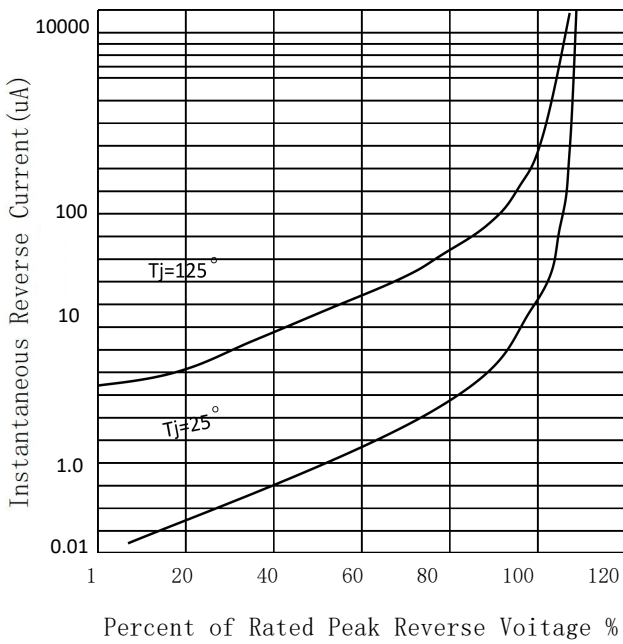
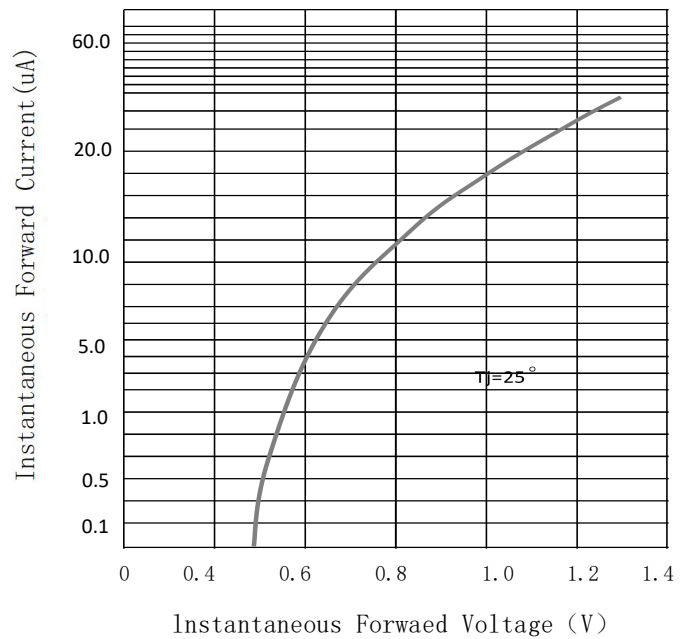


Fig.4-Typical Forward Characteristics



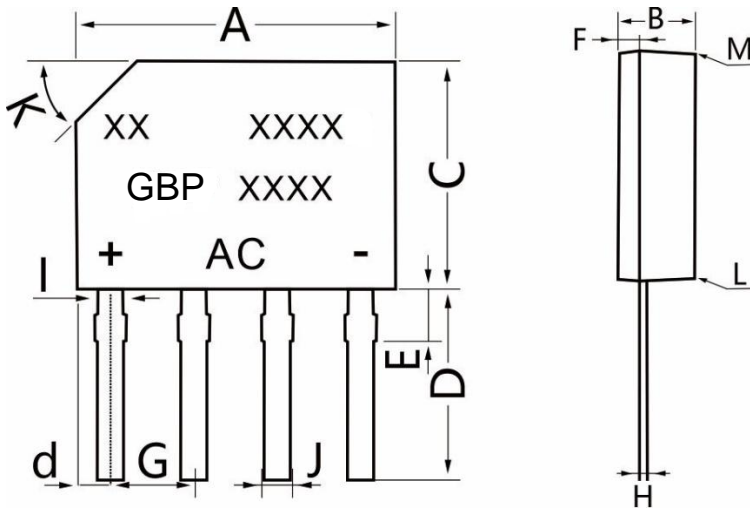
Ordering information

Package	Packing Description	Packing Quantity
GBP	bulk	500PCS/Box 5000PCS/Carton

Package Dimensions

GBP

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	14.3	14.60	0.56	0.57
B	3.0	3.3	0.12	0.13
C	10.45	10.75	0.41	0.42
D	5.0	5.5	0.197	0.217
d	1.40	1.70	0.06	0.07
E	2.0	2.30	0.09	0.09
F	0.90	1.20	0.04	0.05
G	3.50	3.80	0.14	0.15
H	0.35	0.37	0.01	0.01
I	1.43	1.45	0.06	0.06
J	0.8	0.83	0.03	0.03
K	2.7×45° (Typ)		0.11×45° (Typ)	
L	#	3°	#	3°
M	#	2°	#	2°



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