

## GBPC2501 THRU GBPC2512 GBPC

### 25 A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1200 V

Forward Current - 25 A

#### **FEATURES**

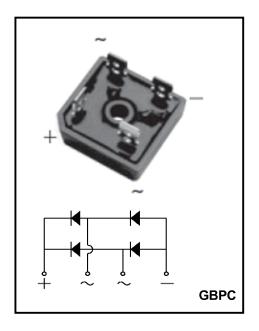
- ♦High current capability
- ♦Low forward voltage drop
- ♦Glass Passivated Chip Junction
- **♦Low power loss, high efficiency**
- ♦Lead free in comply with EU RoHS 2011/65/EU directives

### **MECHANICAL DATA**

♦Case: GBPC

♦Polarity: Symbol marked on body

♦ Mounting position: Any



### **Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	GBPC 2512	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	1200	v
Maximum RMS voltage	V <sub>RMS</sub>	70	140	280	420	560	700	1140	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	1200	v
Maximum Average Forward Rectified Current @Tc=55 ℃	I <sub>(AV)</sub>	25					A		
Peak Forward Surge Current 8,3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	350					Α		
Forward Voltage per element @I <sub>F</sub> =12.5A and 25°C	V <sub>F</sub>	1.1					v		
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=125°C	I <sub>R</sub>	5 500				μΑ			
I²t Rating for Fusing(3ms≤t≤8.3ms)	l <sup>2</sup> t	508.4					A <sup>2</sup> S		
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ +150					°C		

<sup>(1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C

<sup>(2)</sup> Thermal Resistance Junction to Case, Lead and Ambient.



### **Ratings And Characteristic Curves**

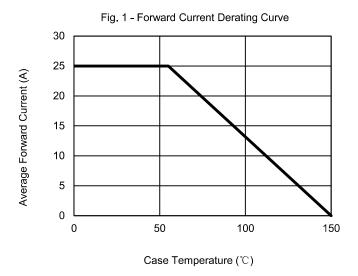
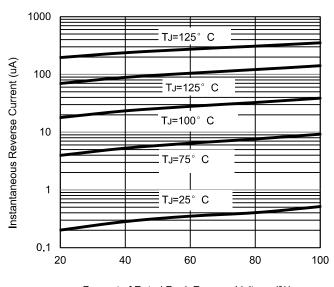


Fig. 2 - Maximum Non-Repetitive Surge Current 400 350 Peak Forward Surge Current (A) 8.3mS Single Half-Sine-Wave 300 (JEDEC METOD) 250 200 150 100 50 0 10 100 Number of Cycles at 60Hz

Fig. 3 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

20 Pulse Width 300uS 2%Duty Cycle 10 Instantaneous Forward Current (A) TJ=100° T<sub>J</sub>=25° C T<sub>J</sub>=125° C

Fig. 4 - Typical Forward Characteristics

Instantaneous Forward Voltage (V)

0.8

T<sub>J</sub>=75° C

1.2

1.4

1.6

0.1

0

0.2

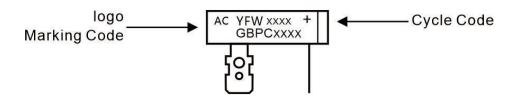
0.4

0.6



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## **Marking Diagram**

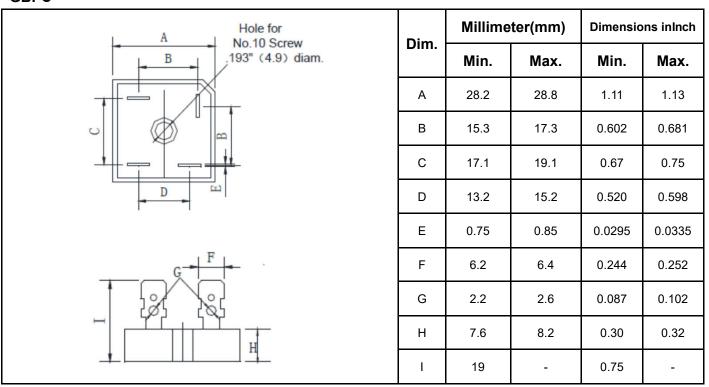


## **Ordering information**

Package	Packing Description	Packing Quantity			
GBPC	bulk	50PCS/Box 500PCS/Carton			

## **Package Dimensions**

### **GBPC**





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