





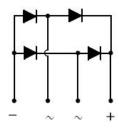
# GBPC25005 THRU GBPC2510 SINGLE PHASE 25 AMP GLASS PASSIVATED BRIDGE RECTIFIER



#### **Features**

- · Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb Free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

## **Circuit Diagram**



### **Mechanical Data**

- · Case: GBPC, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Lead Free: For RoHS / Lead Free Version

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

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

Type number	Symbol	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> =55°C	Io	25						А	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	Іғѕм	300					Α		

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

Type number	Symbol	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	Units
Forward Voltage per element @I <sub>F</sub> =12.5A	VF	1.1						V	
Peak Reverse Current @T <sub>A</sub> =25°C At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	5 500					μA		
Typical Junction Capacitance (Note 2)	CJ	300					pF		

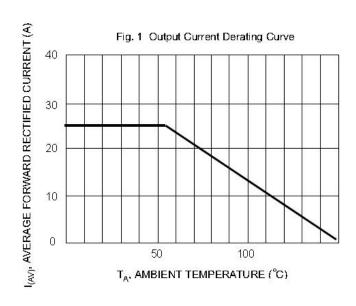
<sup>\*</sup> Pulse width < 300  $\mu$ s, duty cycle < 2%

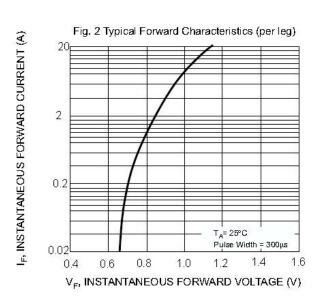
## Thermal-Mechanical Specifications:@TA=25°C unless otherwise specified

Type number	Symbol	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	Units
Typical Thermal Resistance Junction to Lead	R <sub>θJL</sub>	2.2							
Junction Temperature	TJ	-55 to +150					°C		
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C		

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad. 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

## **Ratings and Characteristics Curves**



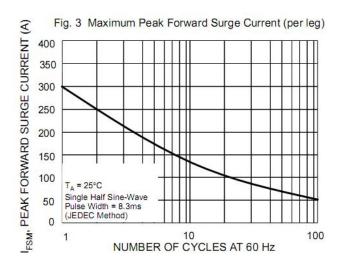


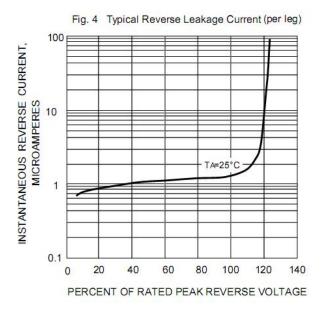
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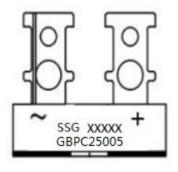


## **Ordering Information**

Device Package		Plating	Shipping		
GBPC25005-GBPC2510	GBPC(Pb-Free)	Pure Sn	50pcs / box		

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

### **Marking Diagram**



Where XXXXX is YYWWL

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

 GBPC25005
 = Type Number

**Cautions:** Molding resin Epoxy resin UL:94V-0

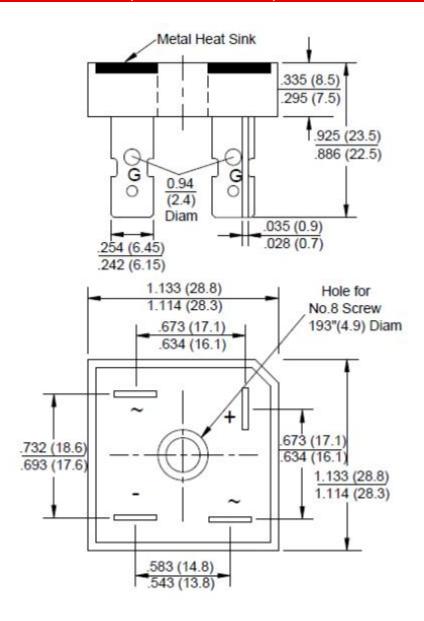
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## **Mechanical Dimensions GBPC (Inches/Millimeters)**



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