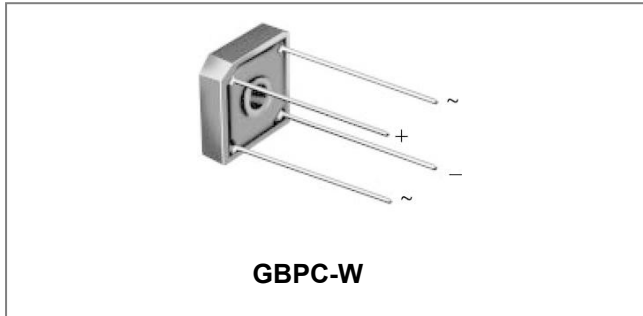


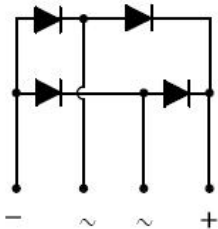
**GBPC25005W THRU GBPC2510W  
SINGLE PHASE 25 AMP GLASS PASSIVATED BRIDGE RECTIFIER**



**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-W, 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 25005W	GBPC 2501W	GBPC 2502W	GBPC 2504W	GBPC 2506W	GBPC 2508W	GBPC 2510W	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub>	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	I <sub>o</sub>	25							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300							A

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

Type number	Symbol	GBPC 25005W	GBPC 2501W	GBPC 2502W	GBPC 2504W	GBPC 2506W	GBPC 2508W	GBPC 2510W	Units
Forward Voltage per element @I <sub>F</sub> =12.5A	V <sub>F</sub>	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)	C <sub>J</sub>	300							pF

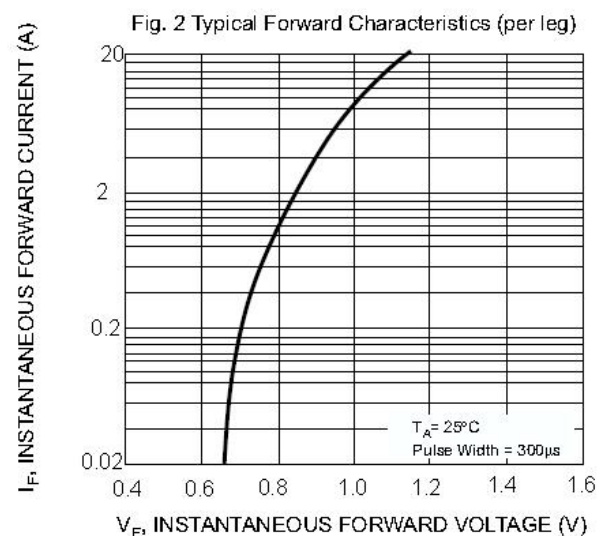
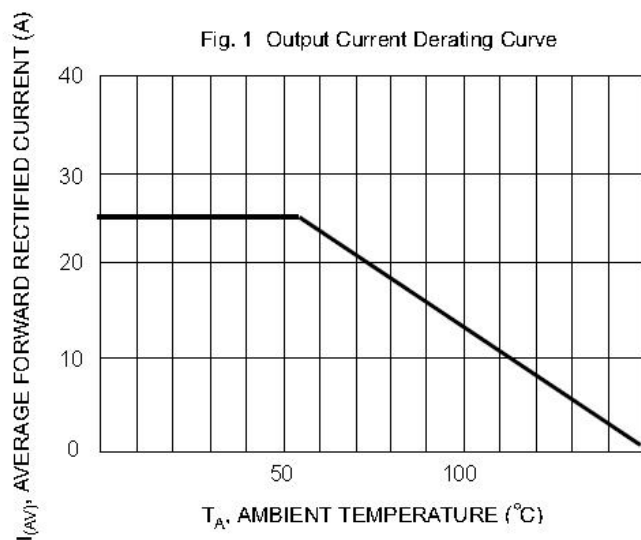
\* Pulse width < 300 μs, duty cycle < 2%

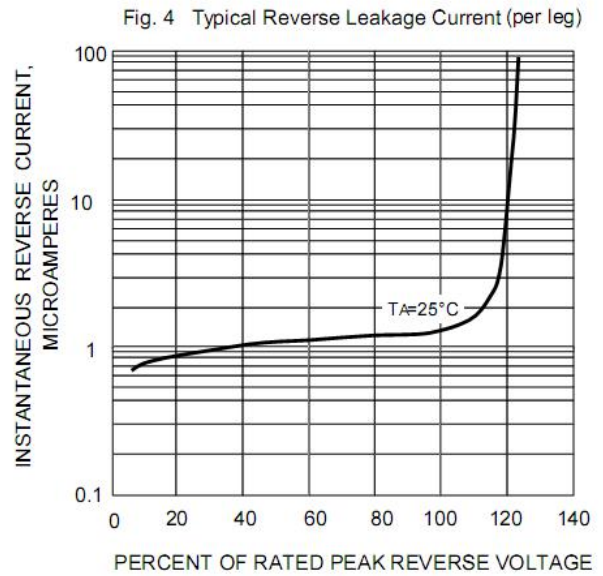
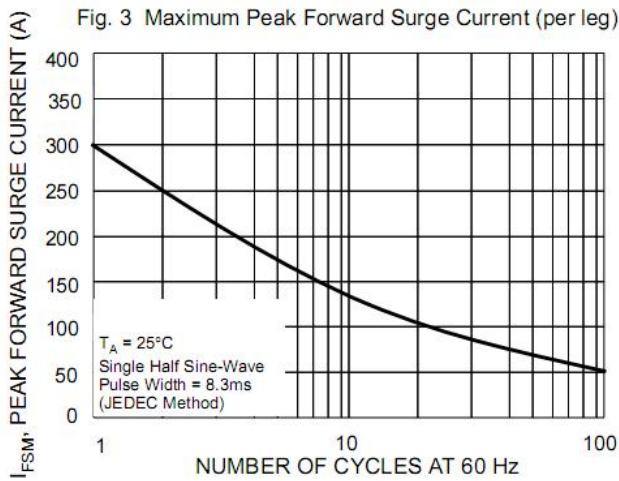
**Thermal-Mechanical Specifications: @T<sub>A</sub>=25°C unless otherwise specified**

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

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

**Ratings and Characteristics Curves**



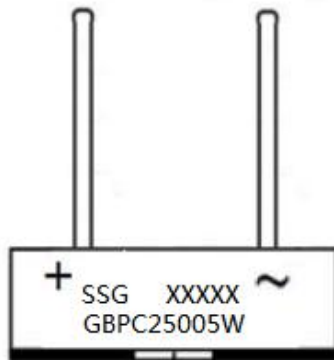


### Ordering Information

Device	Package	Plating	Shipping
GBPC25005W-GBPC2510W	GBPC-W(Pb-Free)	Pure Sn	100pcs / 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

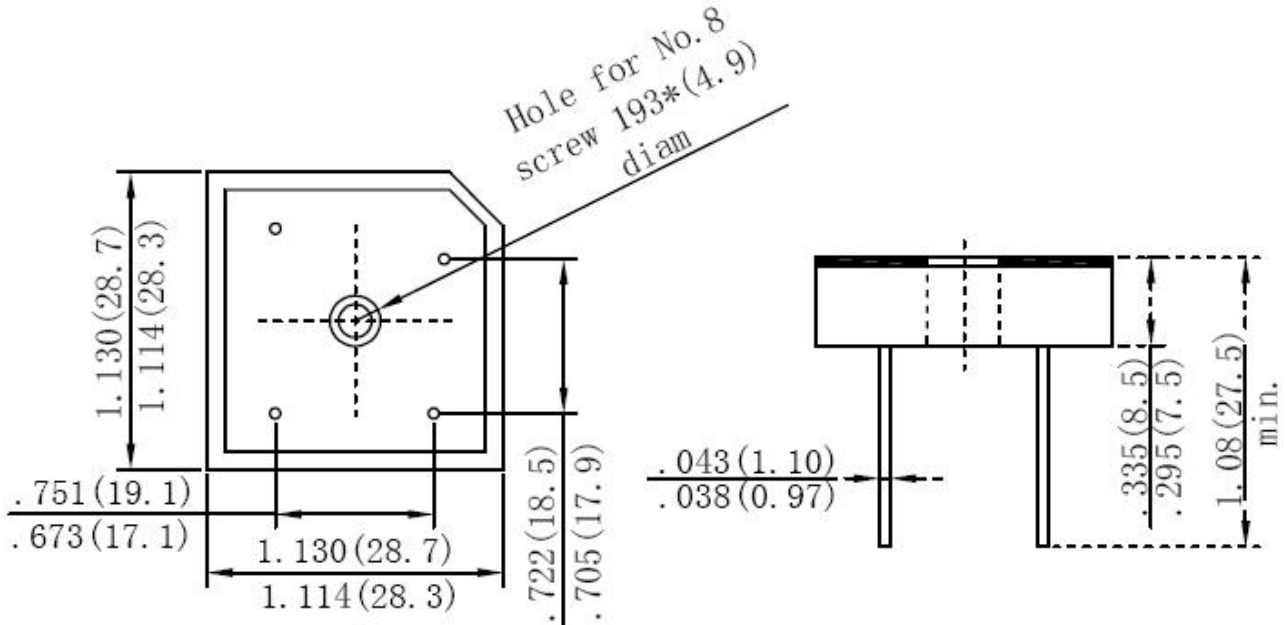


Where XXXXX is YYWWL

SSG = SSG  
 YY = Year  
 WW = Week  
 L = Lot Number  
 GBPC25005W = Type Number

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

**Mechanical Dimensions GBPC-W (Inches/Millimeters)**



**DISCLAIMER:**

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