

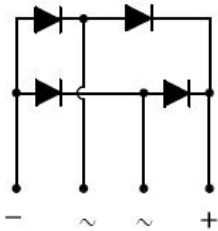
GBPC25005 THRU GBPC2510 SINGLE PHASE 25 AMP GLASS PASSIVATED BRIDGE RECTIFIER



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_A=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 _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A =55°C	I _o	25							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300							A

Electrical Characteristics: @ $T_A=25^\circ\text{C}$ 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 @ $I_F=12.5\text{A}$	V_F					1.1			V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R					5 500			μA
Typical Junction Capacitance (Note 2)	C_J					300			pF

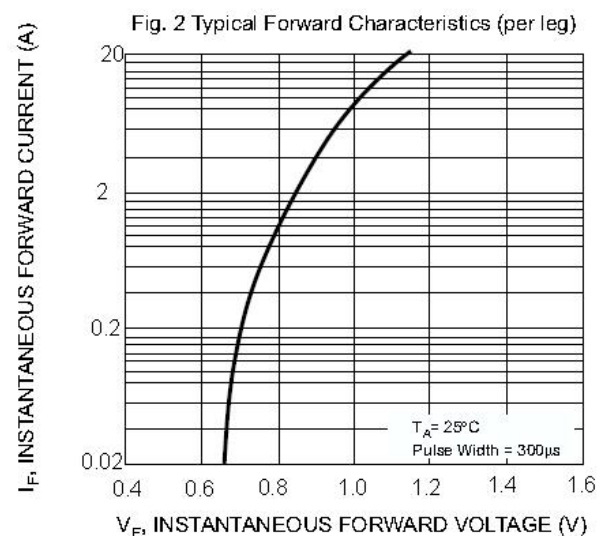
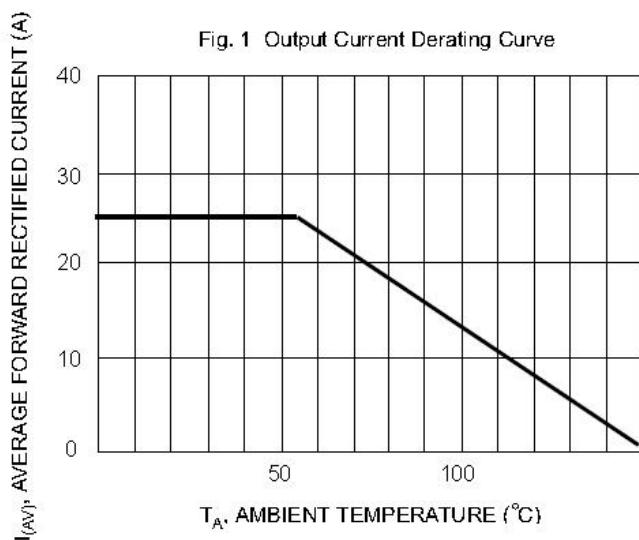
* Pulse width < 300 μs , duty cycle < 2%

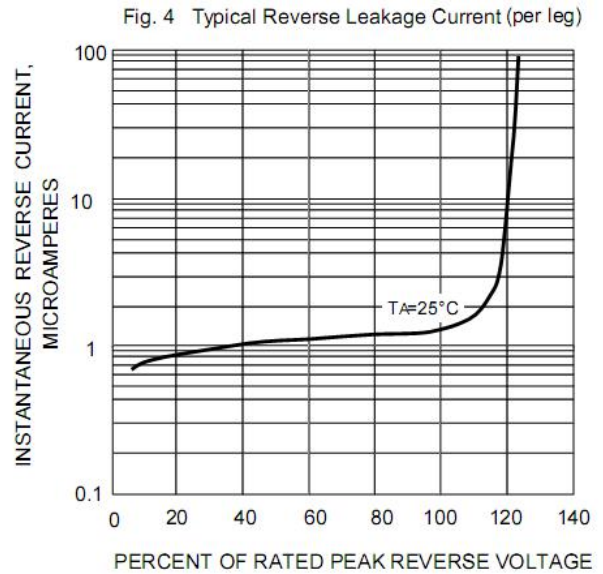
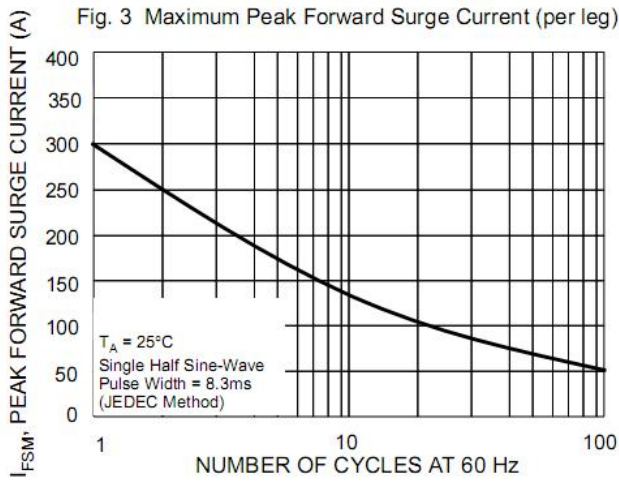
Thermal-Mechanical Specifications: @ $T_A=25^\circ\text{C}$ unless otherwise specified

Type number	Symbol	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	Units
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$					2.2			
Junction Temperature	T_J					-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}					-55 to +150			$^\circ\text{C}$

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



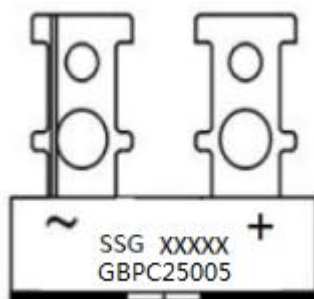


Ordering Information

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

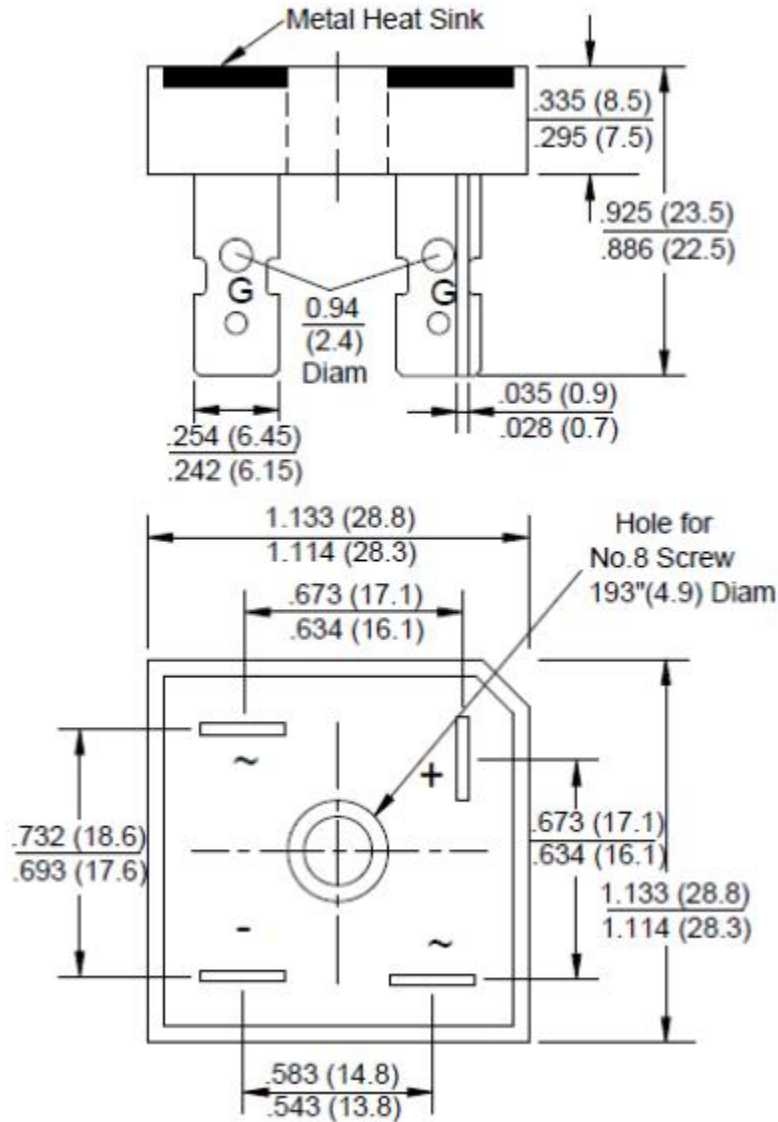


Where XXXXX is YYWWL

SSG = SSG
 YY = Year
 WW = Week
 L = Lot Number
 GBPC25005 = Type Number

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

Mechanical Dimensions GBPC (Inches/Millimeters)



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