

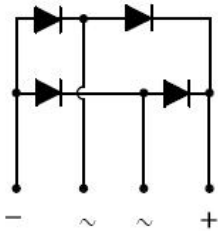
## GBPC35005 THRU GBPC3512 SINGLE PHASE 35 AMP GLASS PASSIVATED BRIDGE RECTIFIER



### 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: @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Type number	Symbol	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	GBPC 3512	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	840	V
Average Rectified Output Current (Note 1) @ $T_A=55^\circ\text{C}$	$I_o$	35								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400								A

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

Type number	Symbol	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	GBPC 3512	Units
Forward Voltage per element @I <sub>F</sub> =17.5A	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

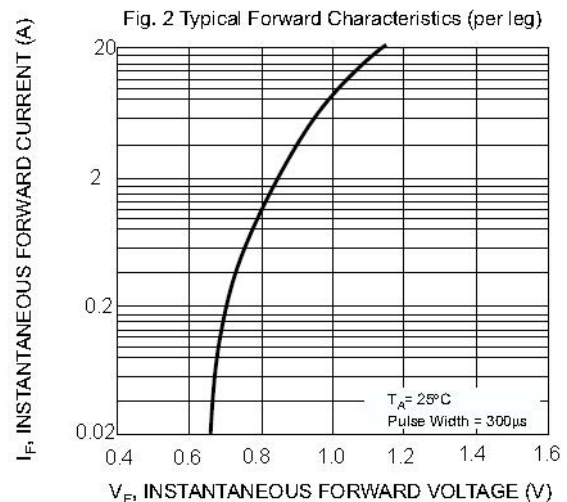
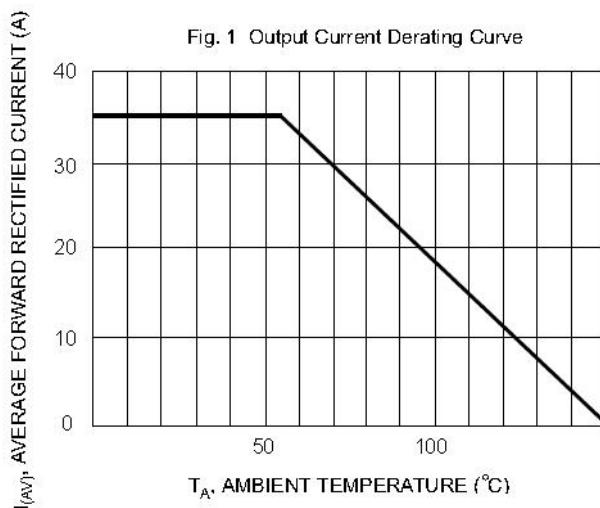
\* Pulse width < 300 μs, duty cycle < 2%

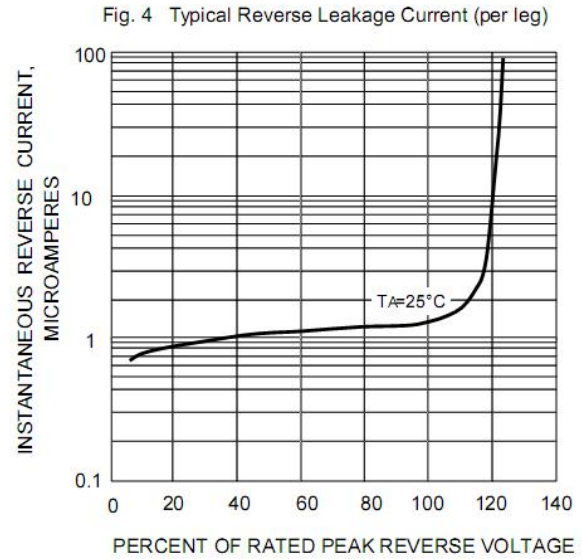
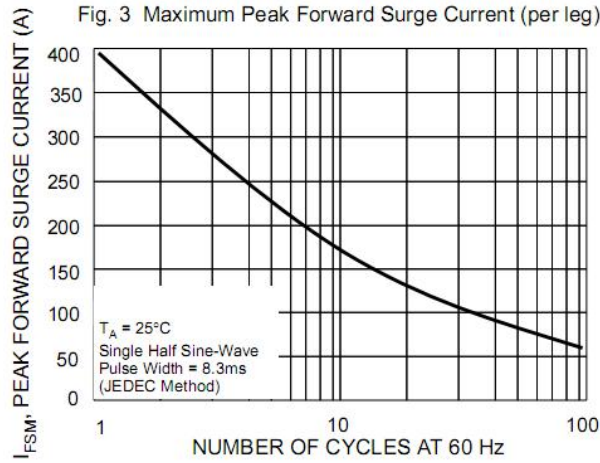
**Thermal-Mechanical Specifications: @T<sub>A</sub>=25°C unless otherwise specified**

Type number	Symbol	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	GBPC 3512	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**



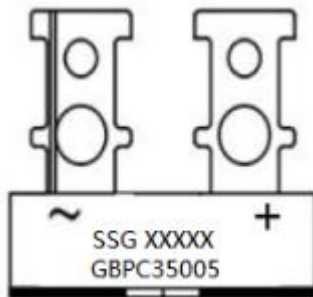


## Ordering Information

Device	Package	Plating	Shipping
GBPC35005-GBPC3512	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

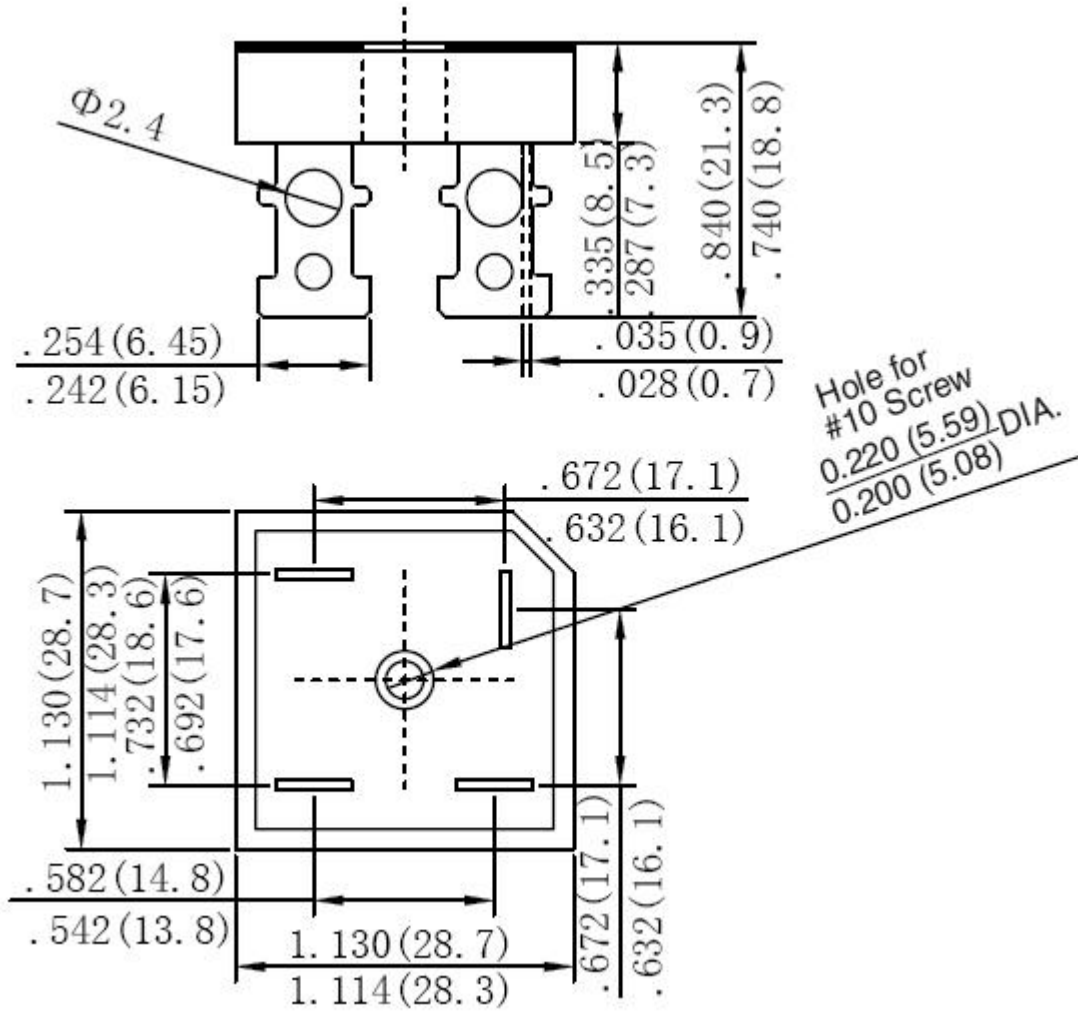


Where XXXXX is YYWWL

SSG = SSG  
 YY = Year  
 WW = Week  
 L = Lot Number  
 GBPC35005 = Type Number

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

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



**DISCLAIMER:**

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