

<b>Single Phase Glass Passivated Bridge Rectifiers</b>	<b>Reverse Voltage: 50V to 1000V</b> <b>Forward Current: 4 Amp</b>
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**Features**

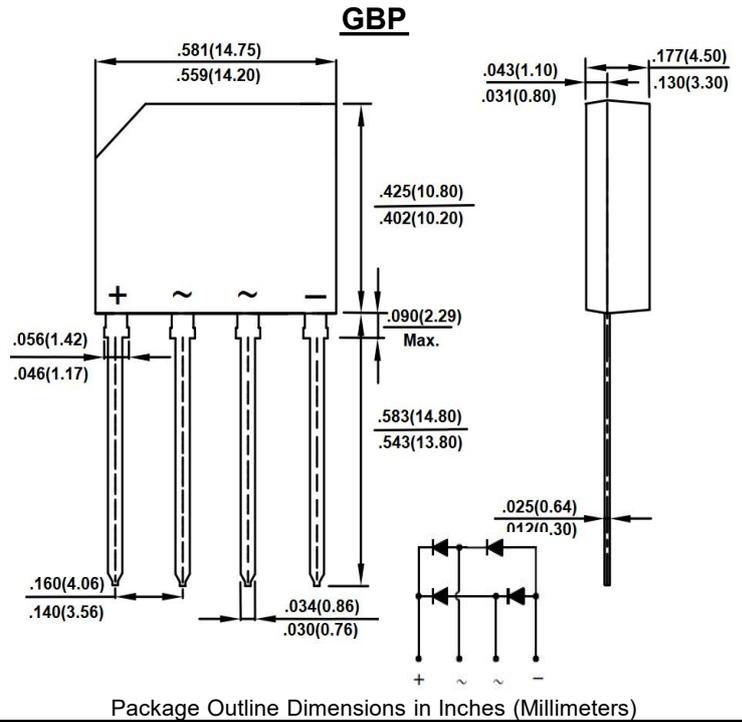
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- Solder dip 260°C max. 10 s, per JESD 22-B106

**Mechanical Data**

- **Package:** GBP  
Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750, Method 2026
- **Polarity:** Symbol marking on body

**Typical Applications**

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, switching mode power supply, adapter, audio equipment, and home appliances applications.


**Maximum Ratings and Electrical Characteristics** (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions	SYM.	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	Unit
Device marking code		GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current (FIG.1)	I <sub>O(AV)</sub>	4.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed On Rated Load	I <sub>FSM</sub>	120							A
Operating junction range	T <sub>j</sub>	-55 to+150							°C
Storage temperature range	T <sub>STG</sub>	-55 to+150							°C

**Thermal Characteristics** (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions	SYM.	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	Unit
Maximum Thermal Resistance per Leg, Junction To Lead (Note 1)	R <sub>θJL</sub>	22							°C/W
Maximum Thermal Resistance per Leg, Junction To Ambient (Note 1)	R <sub>θJA</sub>	56							°C/W
Maximum Thermal Resistance per Leg, Junction To Case (Note 1)	R <sub>θJC</sub>	13							°C/W

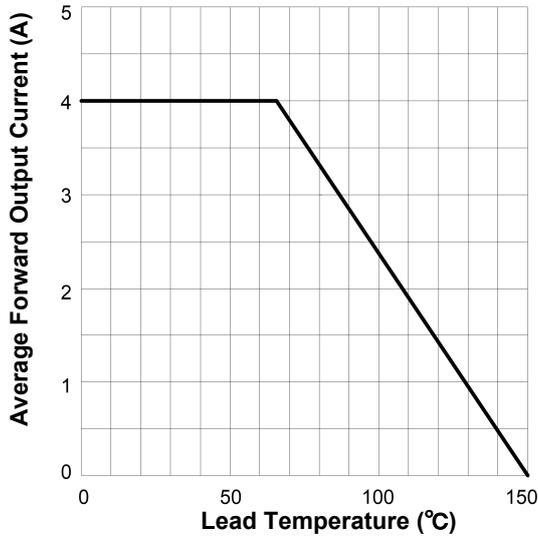
**Electrical Characteristics** (Ta=25°C Unless otherwise specified)

Parameter&Test Conditions	SYM.	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GBP 410	Unit
Maximum Instantaneous Forward Voltage per diode	IF= 2A	1.0							V
	IF= 4A	1.1							
Maximum DC reverse current at rated DC blocking voltage per diode	TA = 25°C	5							µA
	TA = 125°C	200							

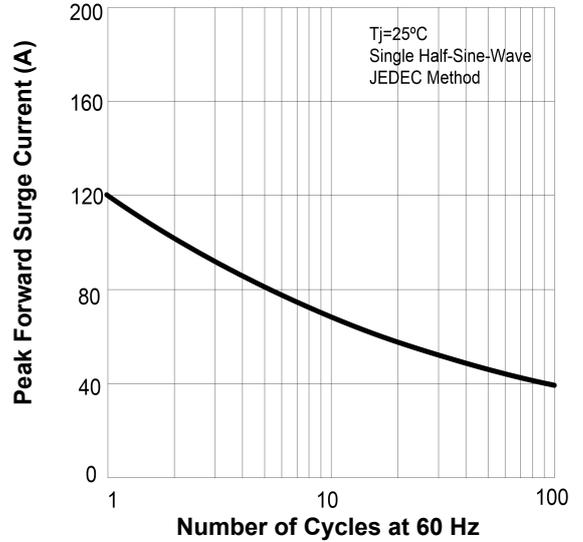
Notes:  
1. Units mounted on PCB (10mm x 10mm Cu pad test board).

**Rating and Characteristic Curves**

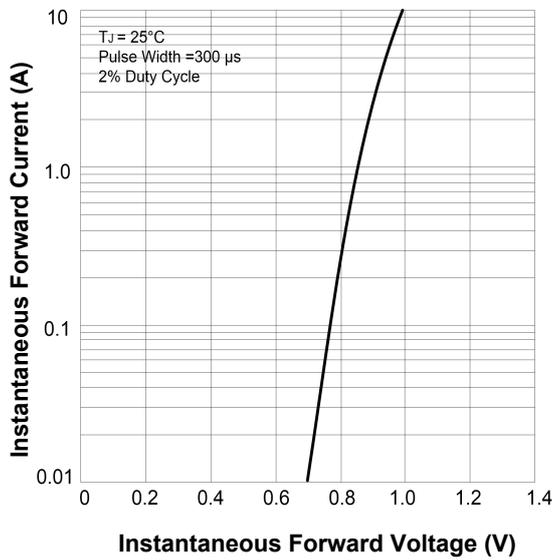
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED**



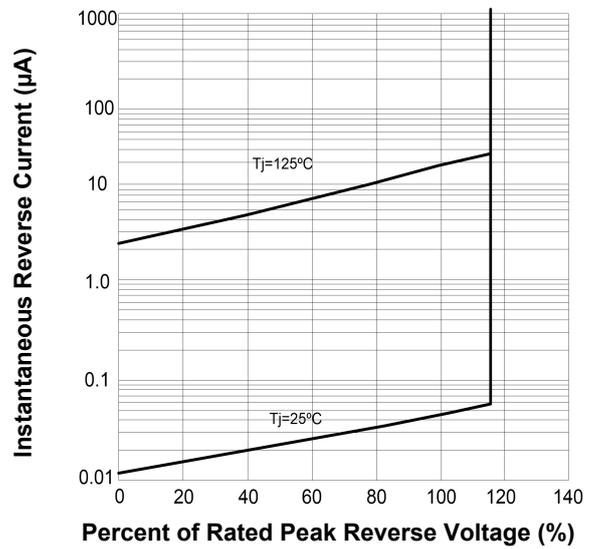
**FIG. 2- -MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT Per Diode**



**FIG. 3- TYPICAL FORWARD VOLTAGE**



**FIG. 4- TYPICAL REVERSE LEAKAGE**



The curve above is for reference only.



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