

## GBP207

### 2.0 A Single-Phase Silicon Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

#### GBP

#### Features

- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E484648
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C /5 seconds at 5 lbs (2.3kg) tension

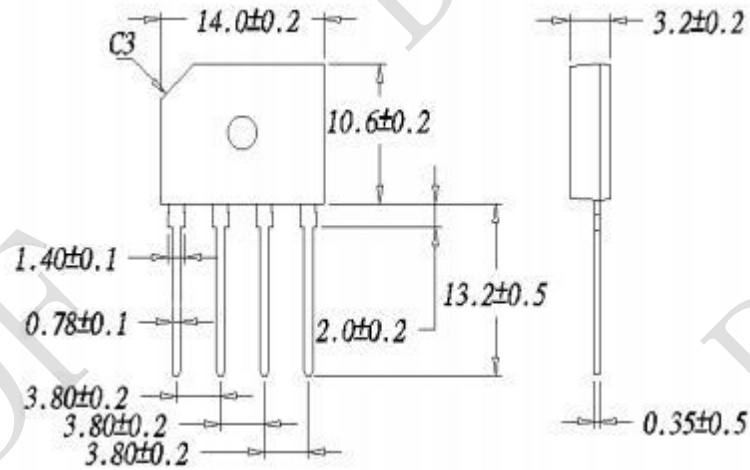
#### Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Plated leads solderable per MIL-STD-202, Method 208

Mounting Position: Any

Weight: 1.35 grams (approx)



Dimensions in inches and (millimeters)

#### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.

For Capacitive load derate current by 20%.

Parameter	Symbol					GBP 207			unit
Maximum repetitive peak reverse voltage	VRRM					700			V
Maximum RMS bridge input voltage	VRMS					420			V
Maximum DC blocking voltage	VDC					700			V
Maximum average forward rectified output current at TC=100°C (with heatsink)	IF(AV)				2.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				60				A
Rating for fusing (t<8.3ms)	I <sup>2</sup> t				14.91				A <sup>2</sup> sec
Typical thermal resistance per element (with heatsink) (1)	ReJA				55				°C / W
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				°C

#### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.

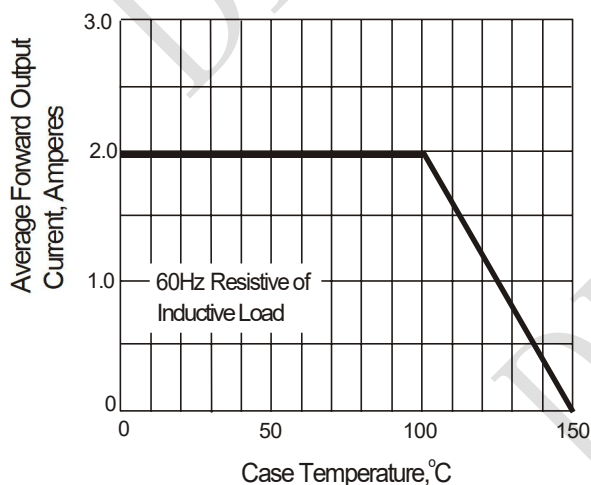
For Capacitive load derate by 20 %.

Parameter	Symbol					GBP 207			Unit
Maximum instantaneous forward voltage drop per leg at 2.0A	VF				1.1				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR				10 1000				μA

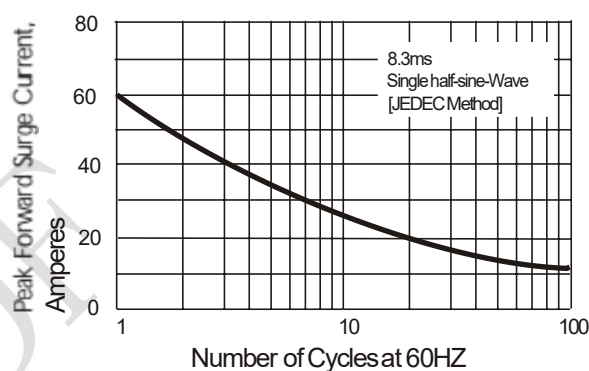
Notes: (1) Thermal resistance from Junction to Ambient on P.C. board mounting.

## Rating and Characteristic Curves ( $T_A=25^{\circ}\text{C}$ Unless otherwise noted ) GBP2005 thru GBP210

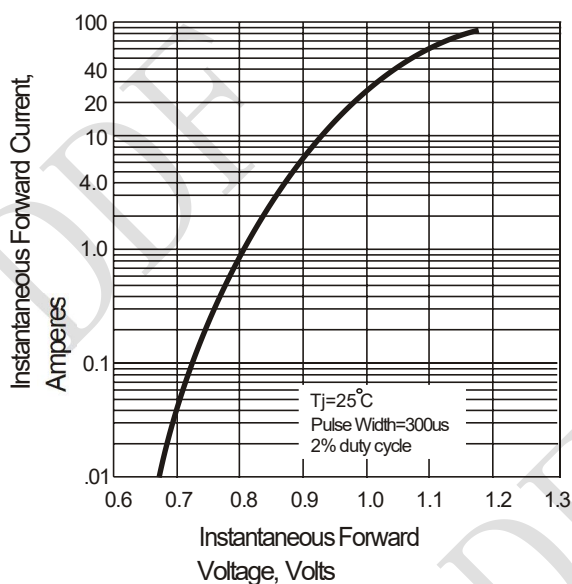
**Fig. 1 Derating Curve for Output Rectified Current**



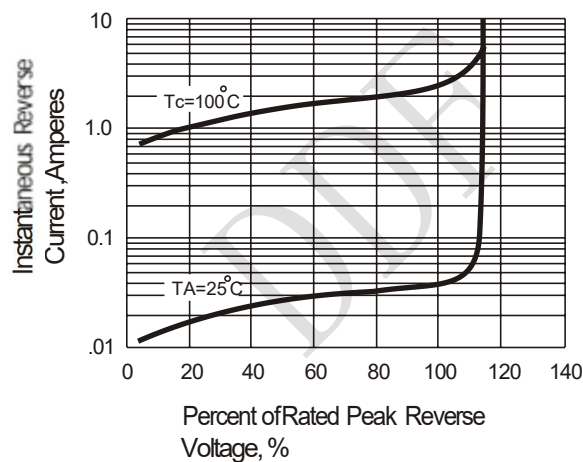
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 5 Typical Junction Capacitance**

