



GBPC50005 THRU GBPC5010

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 50 Amperes

Features

- Glass passivated chip
- Low forward voltage drop
- Meet UL flammability classification 94V-0

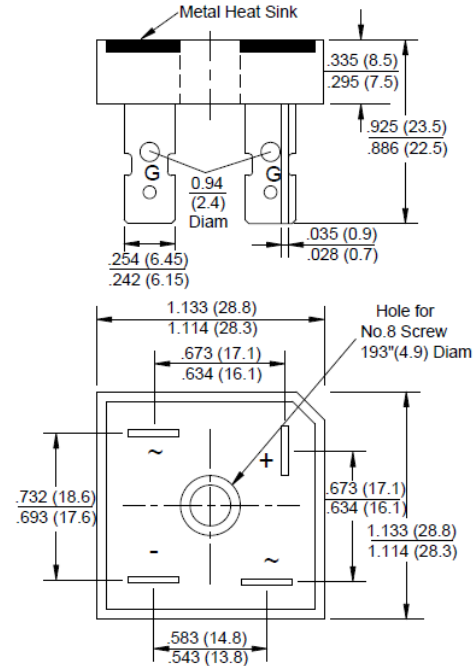
Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

Applications

- General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.

GBPC



RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	GBPC	Unit
		50005	5001	5002	5004	5006	5008	5010	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @T _c =55 °C	I <sub(av)< sub=""></sub(av)<>	50							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	450							A
I ² t Rating for Fusing (t<8.3mS) S)	I ² t	664							A ² s
Peak Forward Voltage per Diode at 25A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5							μA
DC Blocking Voltage per Diode @T _J =125°C		500							
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C



Fig. 1 - Forward Current Derating Curve

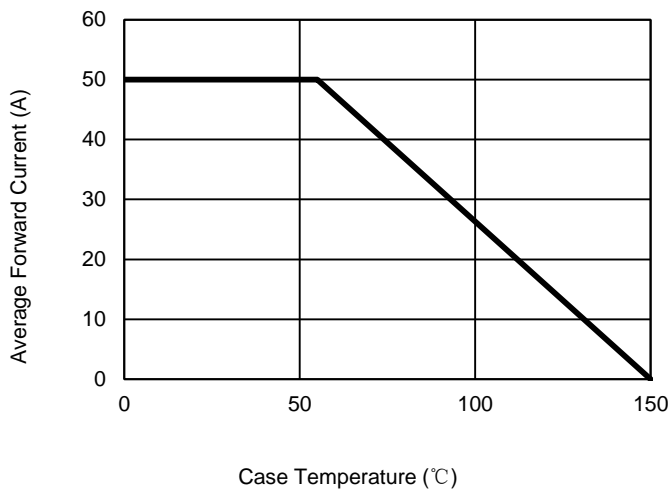


Fig. 2 - Maximum Non-Repetitive Surge Current

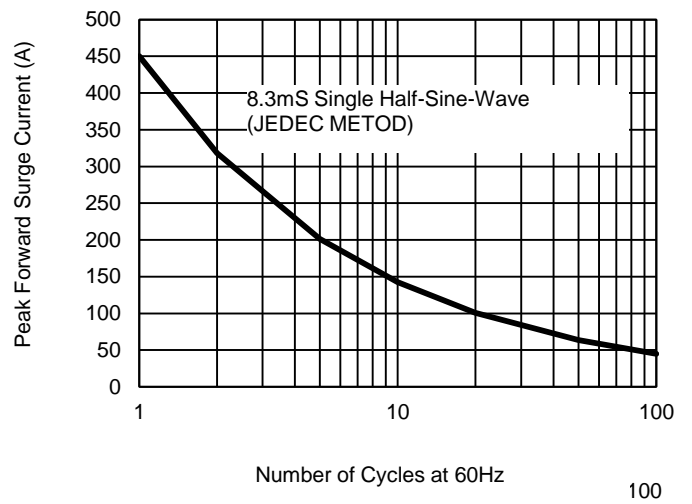


Fig. 3 - Typical Reverse Characteristics

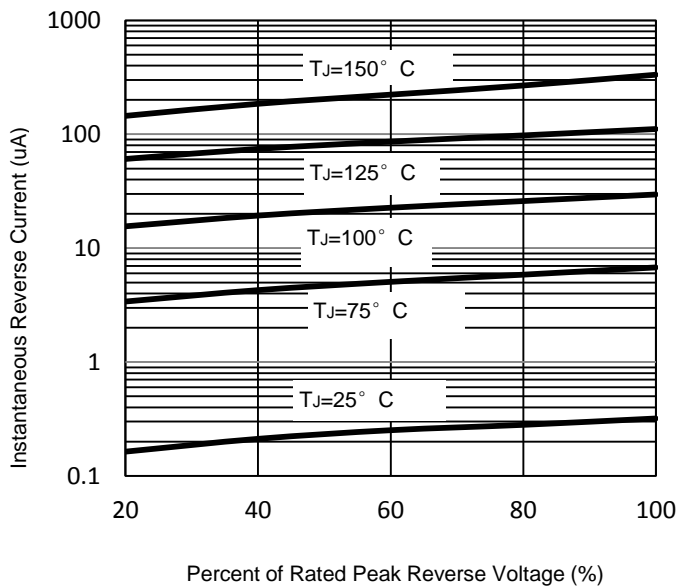
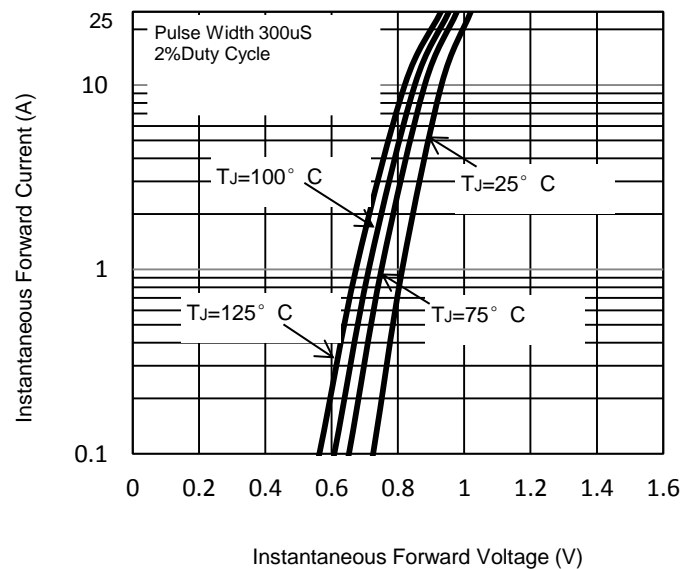


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.