GBPC25005 THRU GBPC2516

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1600 Volts

Forward Current - 25 Amperes

Features

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

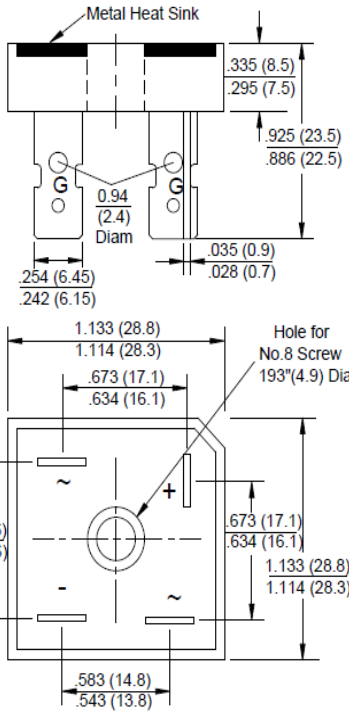
Mechanical Data

- 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



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristics	Symbol	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	GBPC 2512	GBPC 2514	GBPC 2516	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	840	980	1120	V
Maximum Average Forward Rectified Current @T_C=55 ℃	$I_{(AV)}$	25										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	350										A
I^2t Rating for Fusing (t<8.3mS)	I^2t	508.4										A^2s
Peak Forward Voltage per Diode at 12.5A DC	V_F	1.1										V
Maximum DC Reverse Current at Rated @T_J=25℃ DC Blocking Voltage per Diode @T_J=125℃	I_R	5 500										μA
Operating Junction Temperature Range	T_J	-55 to +150										℃
Storage Temperature Range	T_{STG}	-55 to +150										℃

Rating and Characteristic Curves

GBPC25005 THRU GBPC2516

Fig. 1 - Forward Current Derating Curve

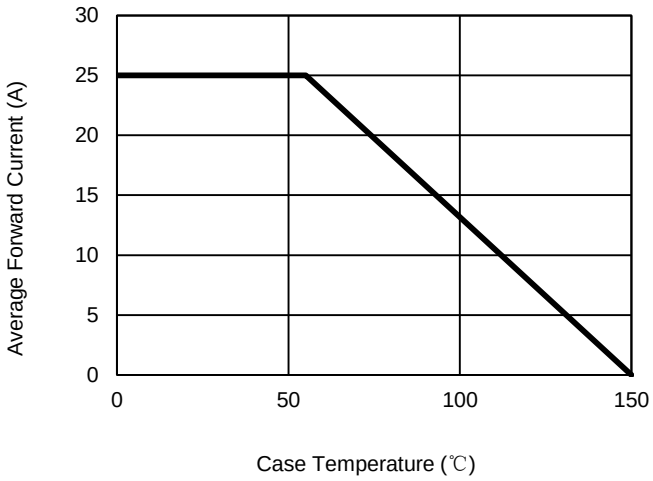


Fig. 2 - Maximum Non-Repetitive Surge Current

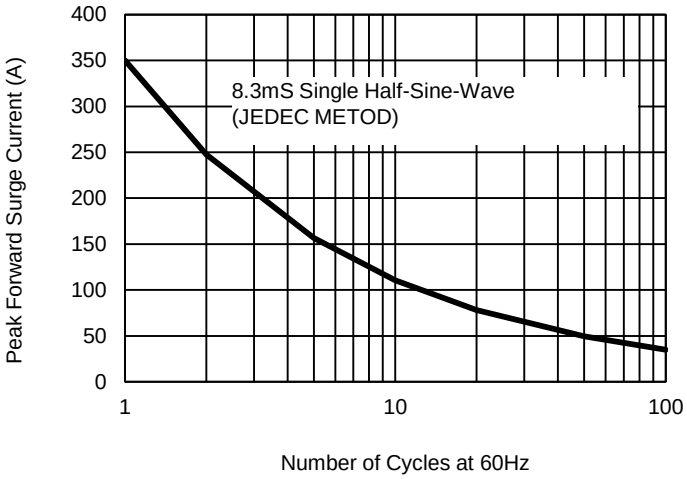


Fig. 3 - Typical Reverse Characteristics

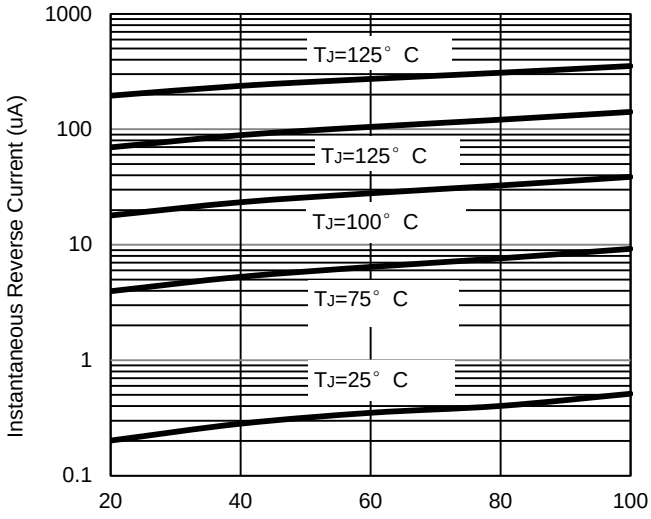
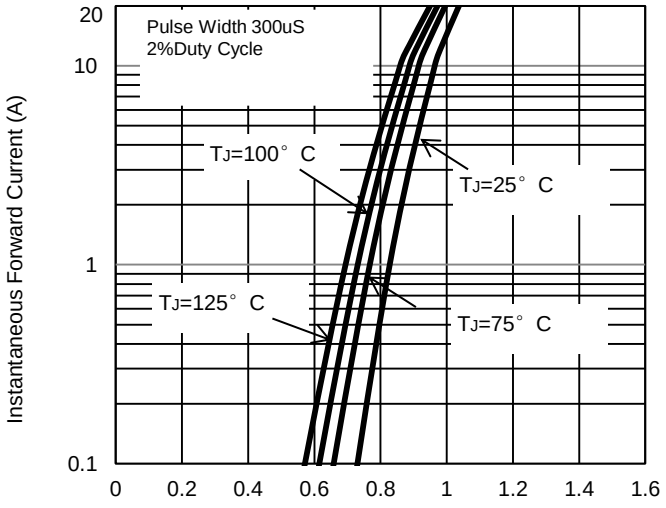


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.