GBP2005 THRU GBP210

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 2.0 Amperes

Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- Meet UL flammability classification 94V-0

Mechanical Data

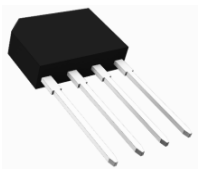
- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo HY® or hy are made by HY Electronic (Cayman) Limited.

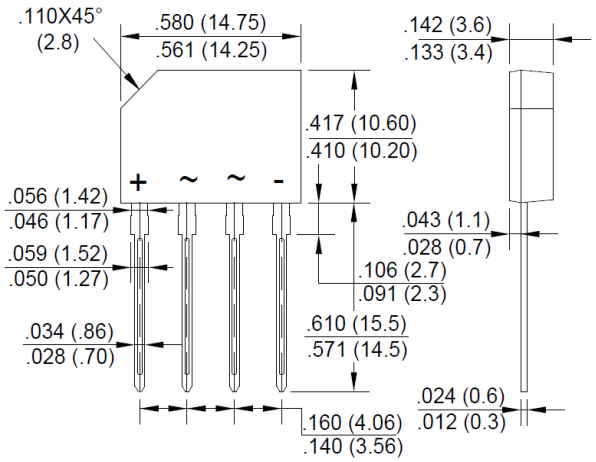
Applications

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

GBP



Pb RoHS COMPLIANT



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	GBP 2005	GBP 201	GBP 202	GBP 204	GBP 206	GBP 208	GBP 210	Unit
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 DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_C=100 ℃	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Peak Forward Surge Current, 1mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	120							A
I^2t Rating for Fusing(1ms≤t≤8.3ms)	I^2t	14.9							A^2s
Peak Forward Voltage per Diode at 2.0A DC	V_F	1.05							V
Maximum DC Reverse Current at Rated @T_J=25℃	I_R	5							μA
DC Blocking Voltage per Diode @T_J=125℃		500							
Typical Thermal Resistance to Ambient （without heatsink）	$R_{\theta JA}$	40							℃/W
Typical Thermal Resistance to case （with heatsink ）	$R_{\theta JC}$	10							℃/W
Typical Thermal Resistance to lead （without heatsink）	$R_{\theta JL}$	5							℃/W
Operating Junction Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note:The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

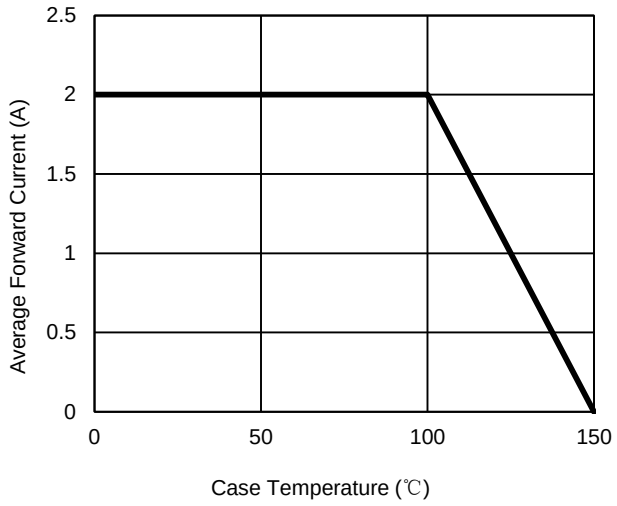


Fig. 2 - Maximum Non-Repetitive Surge Current

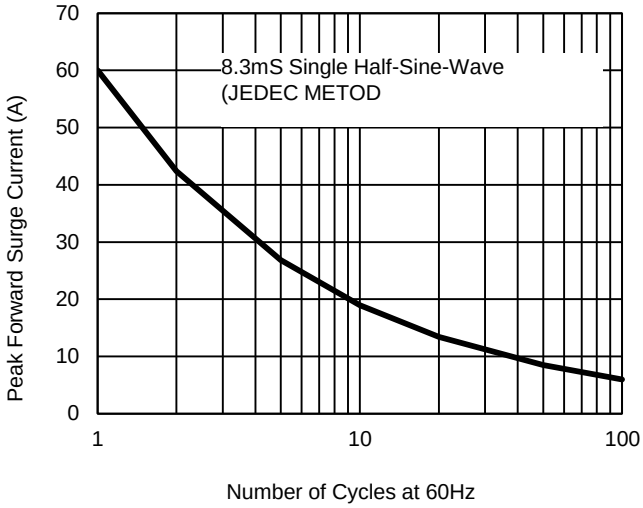


Fig. 3 - Typical Reverse Characteristics

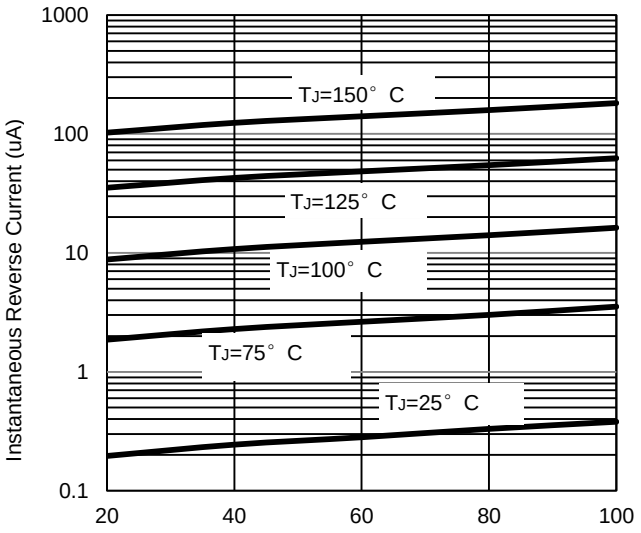
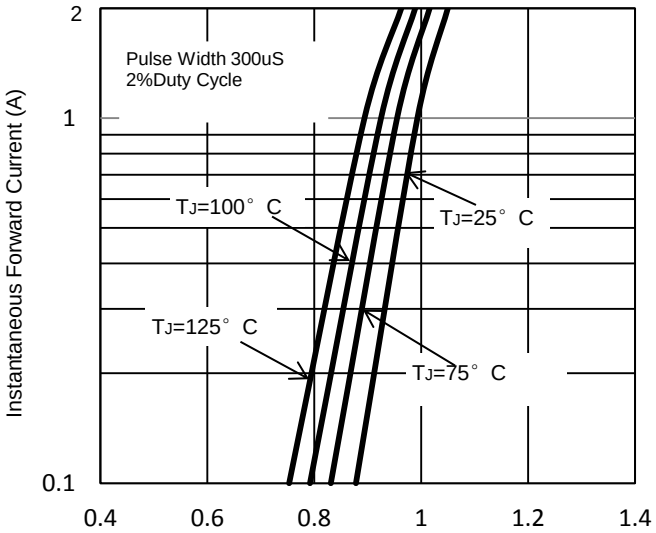


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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