GBP4005 THRU GBP410

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 4.0 Amperes

Features

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

Mechanical Data

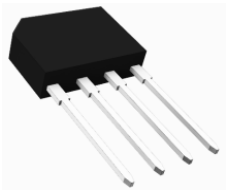
- Polarity: Symbol marked on body
- Mounting position: Any

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

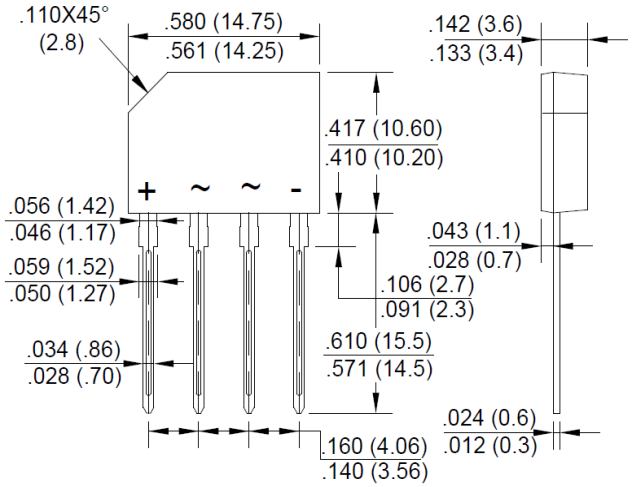
Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

GBP



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	GBP4005	GBP401	GBP402	GBP404	GBP406	GBP408	GBP410	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_A=50 ℃ (Note1)	$I_{(AV)}$	4.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	125							A
I^2t Rating for Fusing (t<8.3mS)	I^2t	64.8							A^2s
Peak Forward Voltage per Diode at 4A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated @T_J=25℃	I_R	10.0							μA
DC Blocking Voltage per Diode @T_J=100℃		1.0							mA
Operating Junction Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: Mounting conditions,0.5″ lead length maximum.

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Fig. 1 - Forward Current Derating Curve

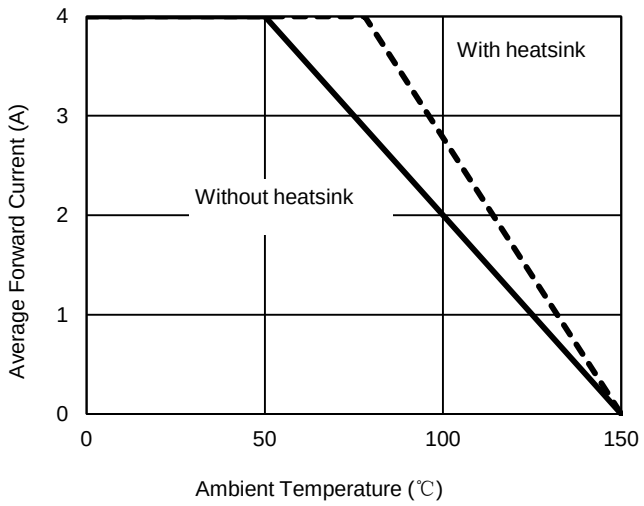


Fig. 2 - Maximum Non-Repetitive Surge Current

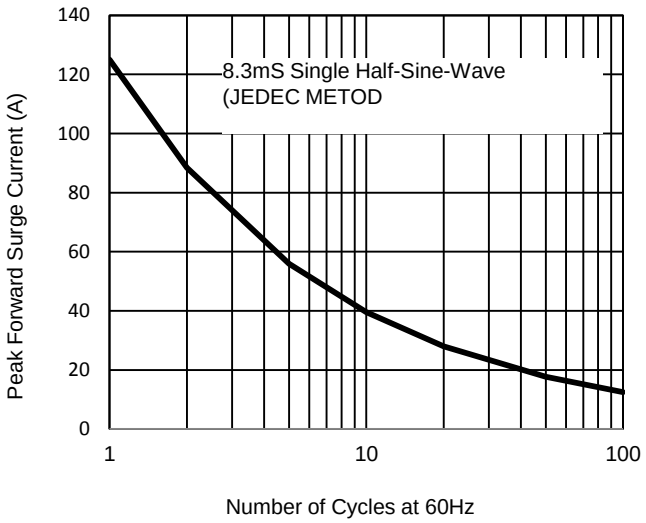


Fig. 3 - Typical Reverse Characteristics

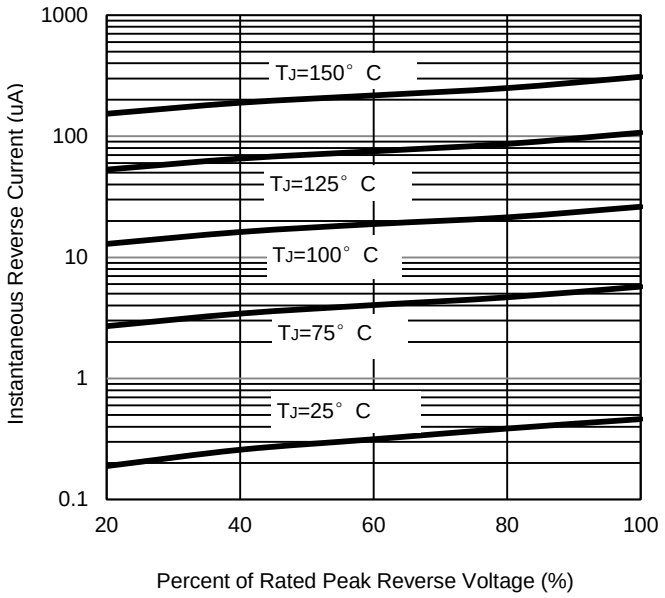
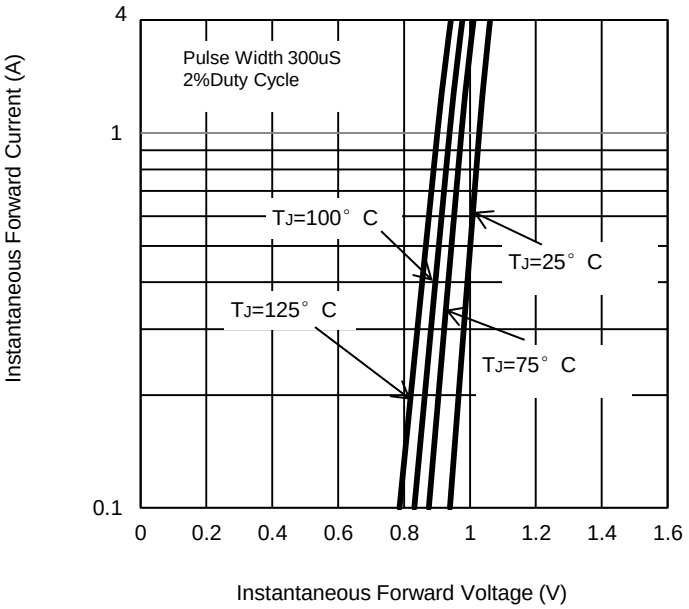


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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