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KBPC50005GW THRU KBPC5016GW

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1600 Volts

Forward Current - 50 Amperes

Features

- Glass passivated chip
- Low forward voltage drop

Mechanical Data

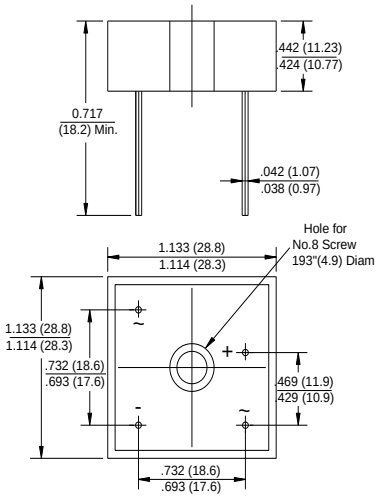
- Polarity: Symbol marked on body
- Mounting position: Any

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.

KBPCGW



Package Outline Dimensions in Inches (Millimeters)

RoHS COMPLIANT

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	KBPC 50005GW	KBPC 5001GW	KBPC 5002GW	KBPC 5004GW	KBPC 5006GW	KBPC 5008GW	KBPC 5010GW	KBPC 5012GW	KBPC 5014GW	KBPC 5016GW	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 ℃	$I_{(AV)}$	50										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	450										A
I^2t Rating for Fusing (t<8.3mS)	I^2t	840										A^2s
Peak Forward Voltage per Diode at 25A DC	V_F	1.1										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 (Note1)	$R_{\theta JA}$	6										℃/W
Typical Thermal Resistance to case (Note1)	$R_{\theta JC}$	4										
Typical Thermal Resistance to lead (Note1)	$R_{\theta JL}$	1.5										
Operating Junction Temperature Range	T_J	-55 to +150										℃
Storage Temperature Range	T_{STG}	-55 to +150										℃

Notes: 1.Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.
2.The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

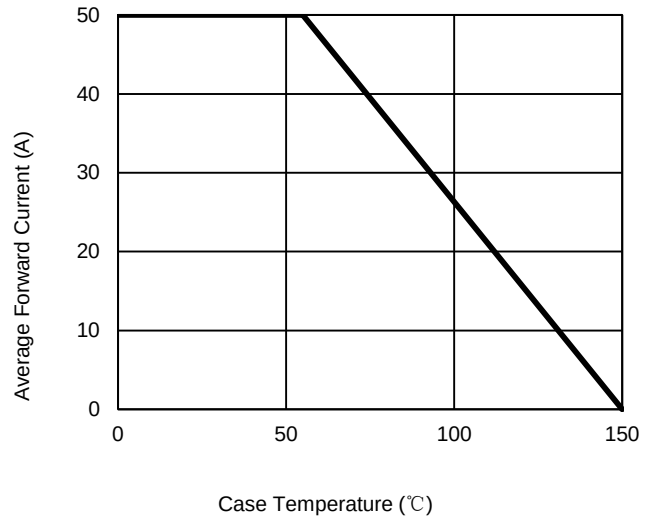


Fig. 2 - Maximum Non-Repetitive Surge Current

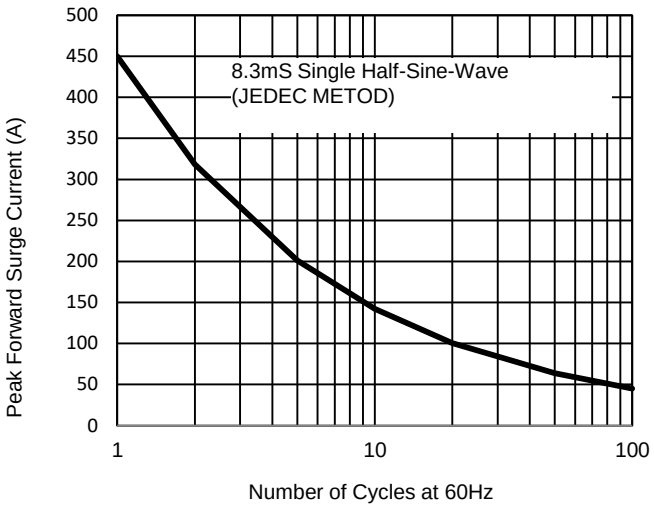


Fig. 3 - Typical Reverse Characteristics

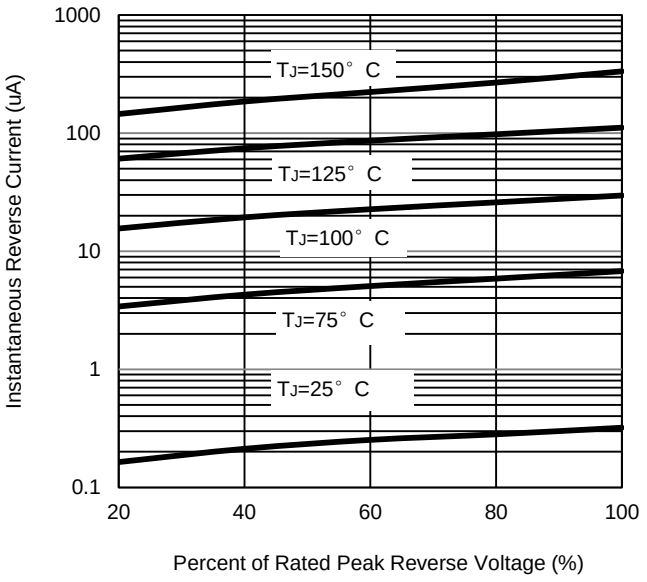
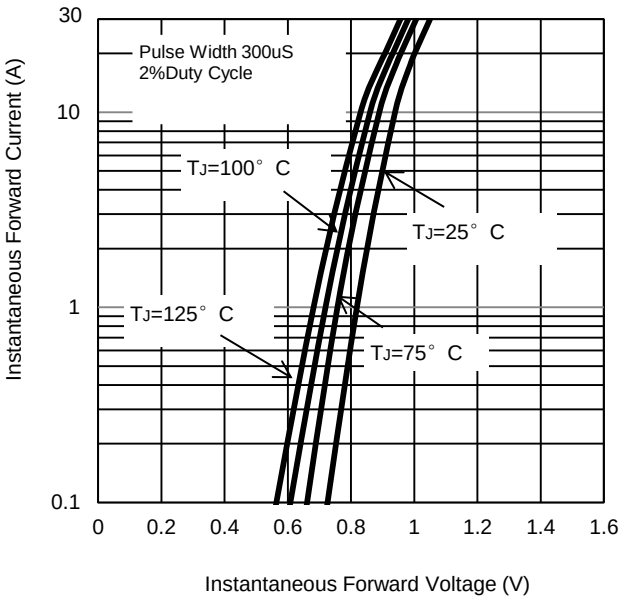


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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