

Glass Passivated Bridge Rectifiers

Features

- Glass passivated chip
- Low forward voltage drop

Mechanical Data

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

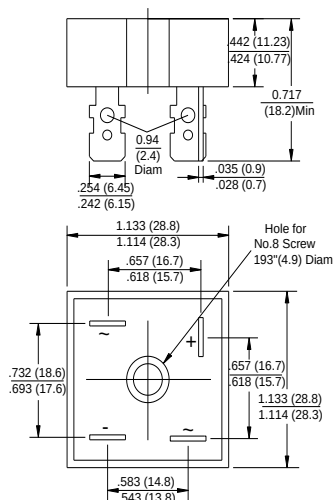
Note: Products with logo or are made by HY Electronic (Cayman) Limited.

Applications

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

Reverse Voltage - 50 to 1600 Volts

Forward Current - 50 Amperes

KBPCG

Package Outline Dimensions in Inches (Millimeters)



RoHS
COMPLIANT

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	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	Unit
		50005G	5001G	5002G	5004G	5006G	5008G	5010G	5012G	5014G	5016G	
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	840	980	1120	V
Maximum Average Forward Rectified Current @Tc=55 °C	IAV	50										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	450										A
I²t Rating for Fusing (t<8.3mS)	I²t	840										A²s
Peak Forward Voltage per Diode at 25A DC	VF	1.1										V
Maximum DC Reverse Current at Rated @Tj=25 °C	IR	5										µA
DC Blocking Voltage per Diode @Tj=125 °C		500										
Typical Thermal Resistance to Ambient (Note1)	RθJA	6										°C/W
Typical Thermal Resistance to case (Note1)	RθJC	4										
Typical Thermal Resistance to lead (Note1)	RθJL	1.5										
Operating Junction Temperature Range	TJ	-55 to +150										°C
Storage Temperature Range	TSTG	-55 to +150										°C

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

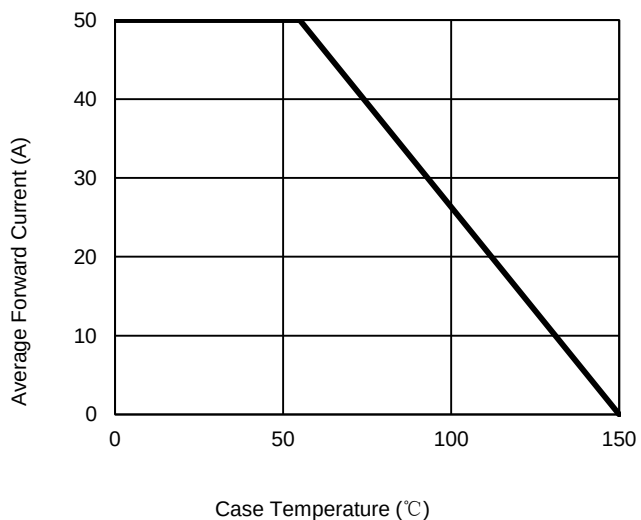


Fig. 2 - Maximum Non-Repetitive Surge Current

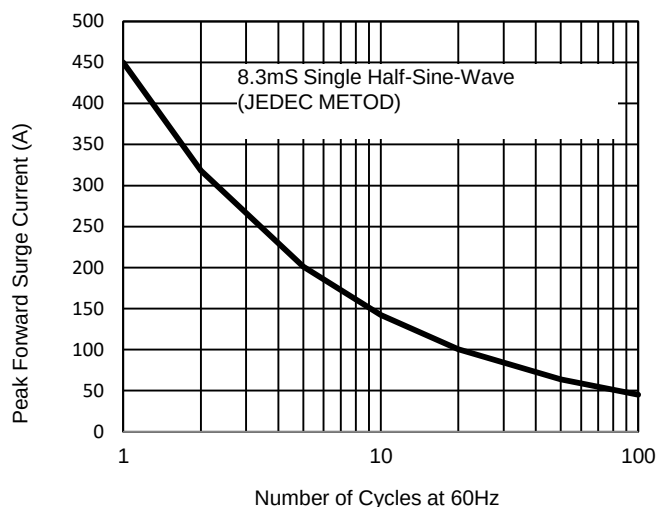


Fig. 3 - Typical Reverse Characteristics

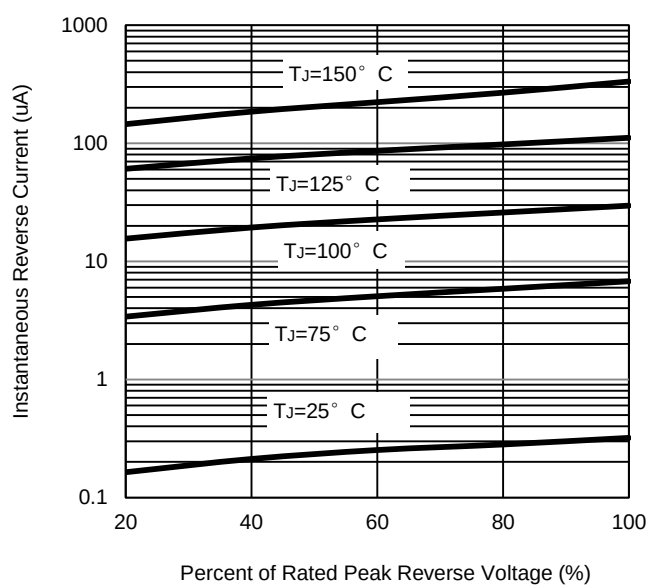
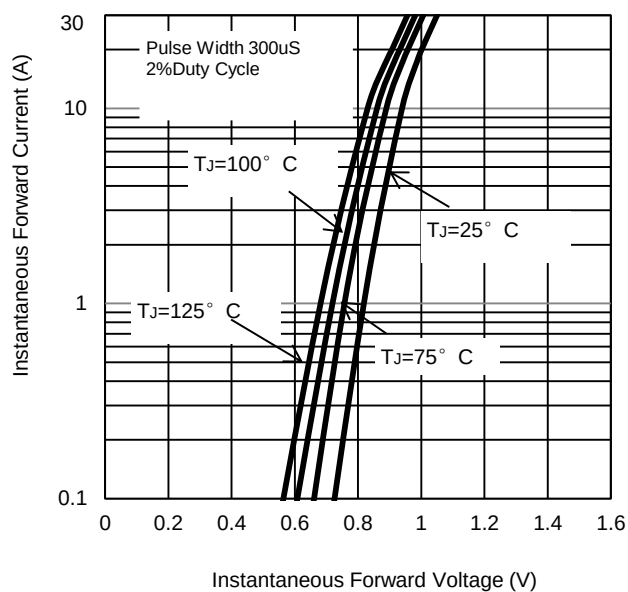


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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