



KBPC25005GW THRU KBPC2516GW

Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1600 Volts

Forward Current - 25 Amperes

Features

- Glass passivated chip
- Low forward voltage drop

Mechanical Data

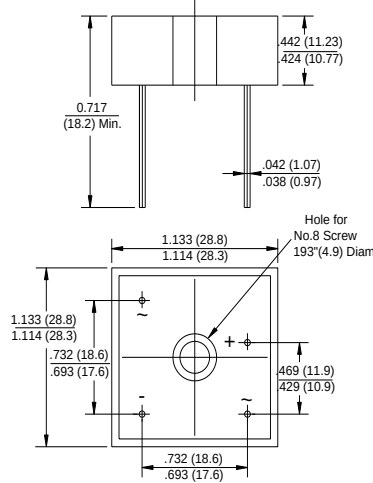
- Polarity: Symbol marked on body
- Mounting position: Any

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.

KBPCGW



Package Outline Dimensions in Inches (Millimeters)

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
		25005GW	2501GW	2502GW	2504GW	2506GW	2508GW	2510GW	2512GW	2514GW	2516GW	
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	I(AV)	25										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	350										A
I²t Rating for Fusing (t<8.3mS)	I²t	508.4										A²s
Peak Forward Voltage per Diode at 12.5A 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	5										°C/W
Typical Thermal Resistance to case (Note1)	RθJC	2										
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

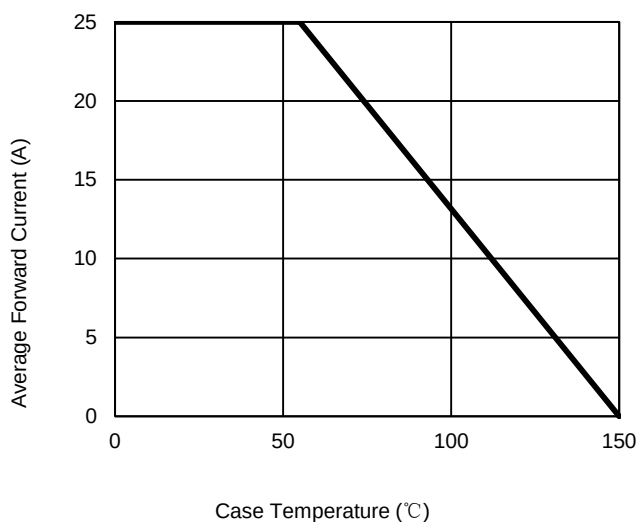


Fig. 2 - Maximum Non-Repetitive Surge Current

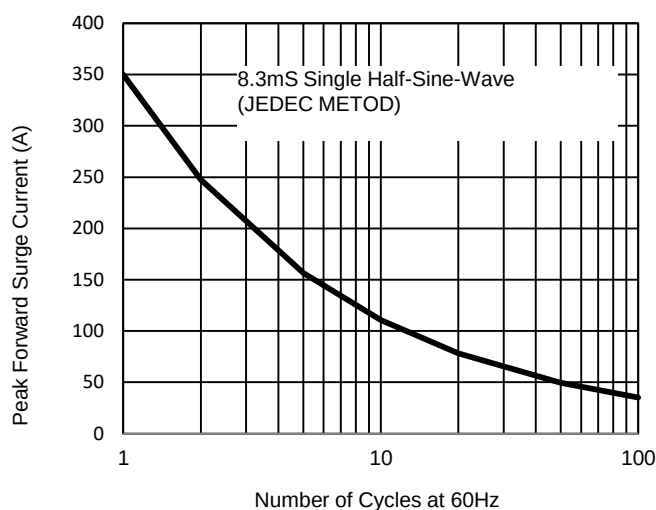


Fig. 3 - Typical Reverse Characteristics

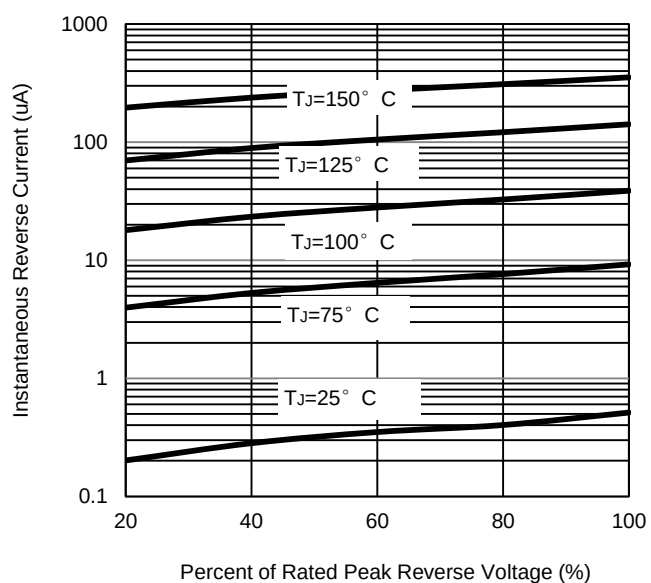
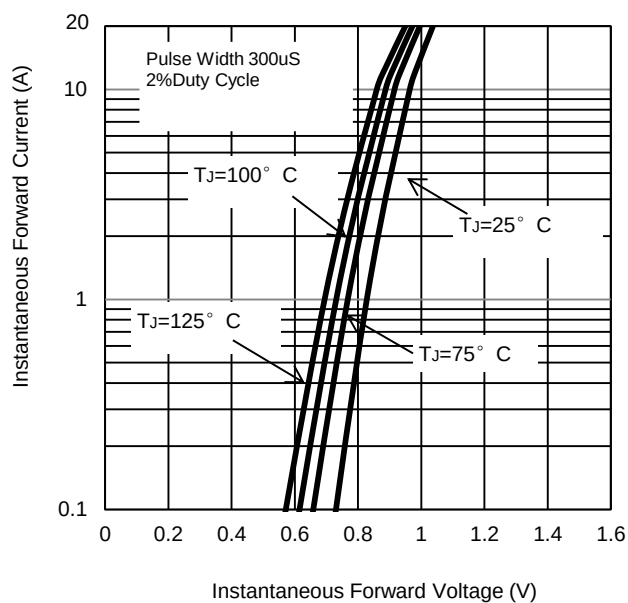


Fig. 4 - Typical Forward Characteristics





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