

**Silicon Bridge Rectifiers****Reverse Voltage - 50 to 1000 Volts****Forward Current - 10 Amperes****Features**

- Low forward voltage drop
- Electrically isolated base -2000 Volts
- High surge forward current capability
- Meet UL flammability classification 94V-0

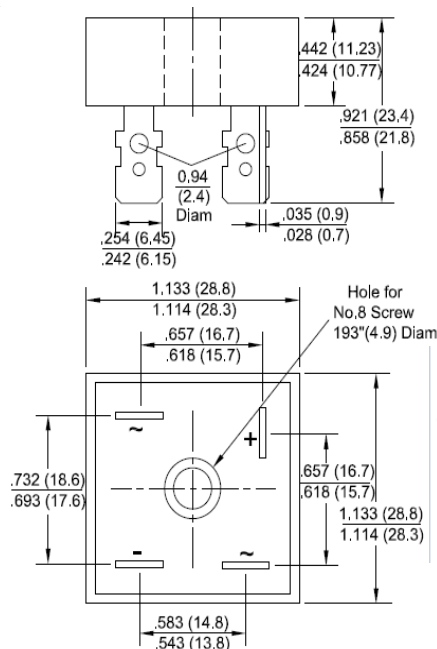
**Mechanical Data**

- 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 power supply, industrial automation applications, etc.

**KBPC**

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	KBPC10005	KBPC1001	KBPC1002	KBPC1004	KBPC1006	KBPC1008	KBPC1010	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 Average Forward Rectified Current @T <sub>c</sub> =55 °C	$I_{(AV)}$	10							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	240							A
$I^2t$ Rating for Fusing (t<8.3mS)	$I^2t$	240							A <sup>2</sup> s
Peak Forward Voltage per Diode at 5A DC	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @T <sub>J</sub> =25°C	$I_R$	10							μA
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C



Fig. 1 - Forward Current Derating Curve

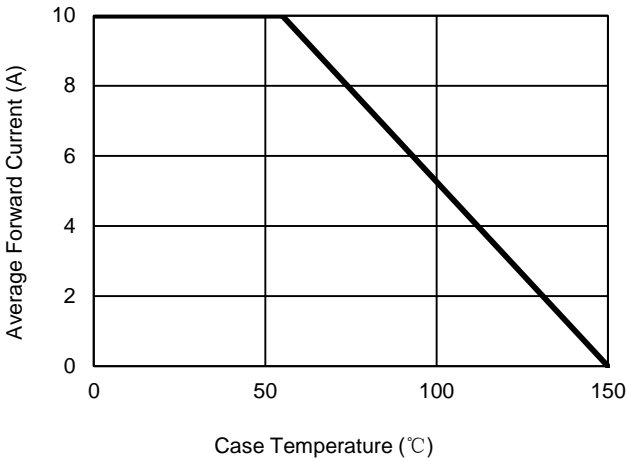


Fig. 2 - Maximum Non-Repetitive Surge Current

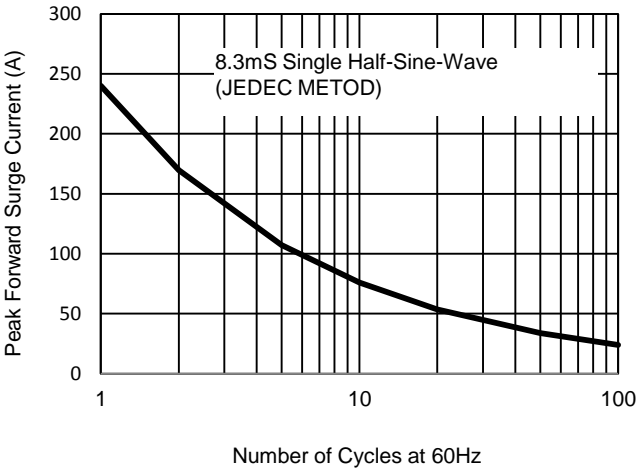


Fig. 3 - Typical Reverse Characteristics

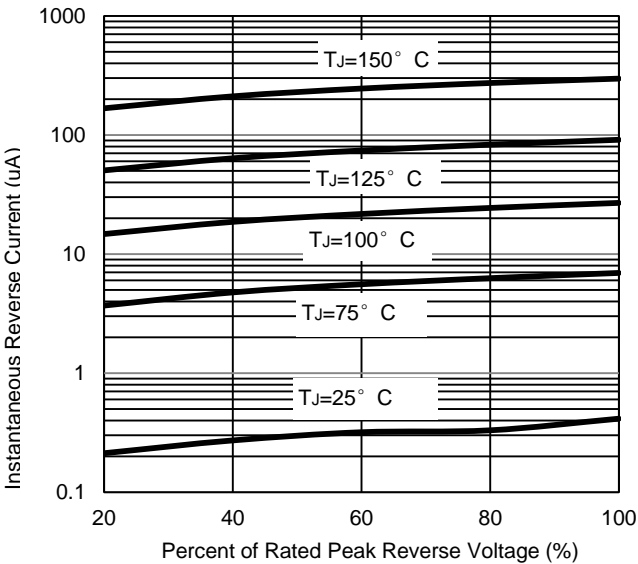
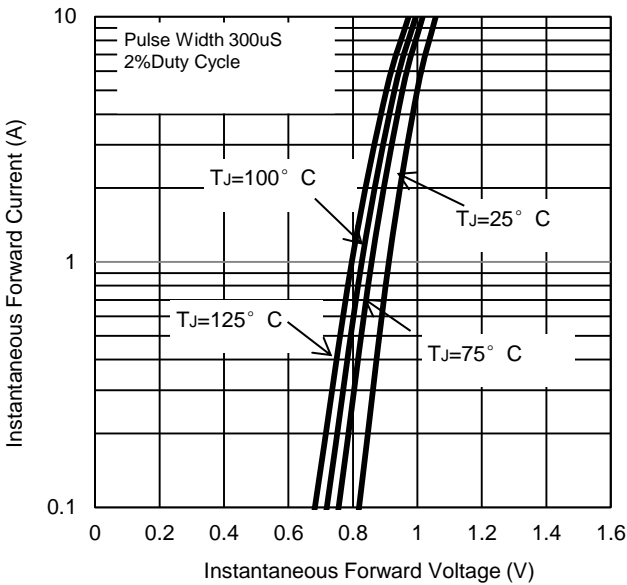


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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