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KBPC50005 THRU KBPC5010

Silicon Bridge Rectifiers
硅桥式整流桥

Reverse Voltage - 50 to 1000 Volts
反向电压 50-1000V
Forward Current - 50 Amperes
正向电流 50A

Features 特征

- Low forward voltage drop 正向压降低
- Electrically isolated base -2000 Volts 绝缘耐压最低2000V
- High surge forward current capability 耐正向浪涌电流能力高
- Materials used carries U/L recognition 材料符合UL认证

Mechanical Data 外观信息

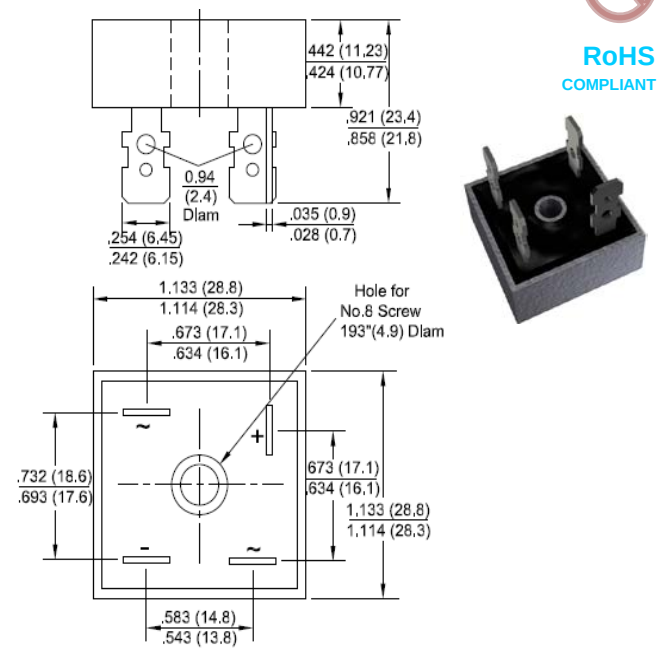
- Polarity: Symbol marked on body 极性：标志在产品的本体上
- Mounting position: Any 安装位置：任何位置

Applications 应用

- General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc.
  一般应用于交流/直流桥式全波整流，如：电源供应器，
  工业自动化应用等。

RoHS COMPLIANT

KBPC



Package Outline Dimensions in Inches (Millimeters)
封装外观尺寸单位英寸（毫米）

Maximum Ratings and Electrical Characteristics 最大额定值及电气特性

Rating at 25℃ ambient temperature unless otherwise specified. 环境温度25℃，除非特别说明。
Single phase, half wave, 60Hz, resistive or inductive load. 单相半波， 60Hz， 阻性或感性负载。
For capacitive load, derate current by 20%. 对于电容性负载，降低20%的额定电流。

Characteristics 特性	Symbol 符号	KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	Unit 单位
Maximum Repetitive Peak Reverse Voltage 最大重复峰值反向电压	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage 最大有效反向电压	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @T_C=55 ℃ 最大正向平均整流电流	$I_{(AV)}$	50							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) 8.3mS单一正弦半波叠加在额定负载上的浪涌能力（JEDEC方法）	I_{FSM}	500							A
I^2t Rating for Fusing (t<8.3mS) 熔断额定值 （t＜8.3mS)	I^2t	1037.5							A^2s
Peak Forward Voltage per Diode at 25A DC 单个二极管在25A电流下的正向峰值电压	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @T_J=25℃ 单个二极管在额定直流电压下的最大反向直流电流	I_R	10							μA
Operating Junction Temperature Range 结温工作范围	T_J	-55 to +150							℃
Storage Temperature Range 储存温度范围	T_{STG}	-55 to +150							℃

Fig. 1 - Forward Current Derating Curve
图1 正向电流降额曲线

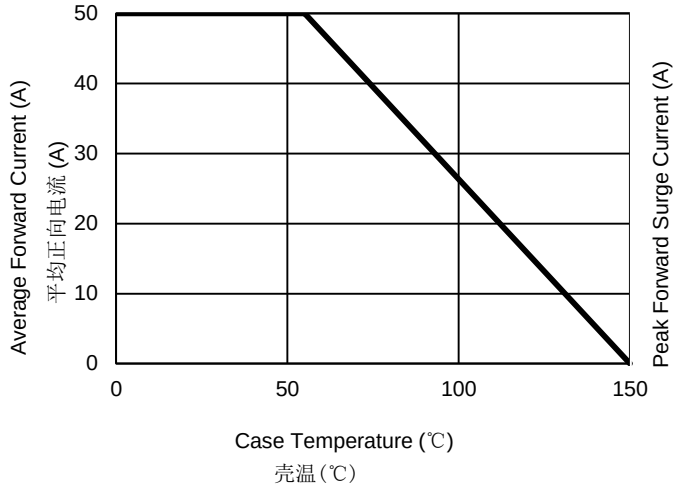


Fig. 2 - Maximum Non-Repetitive Surge Current
图2 最大不重复正向浪涌曲线

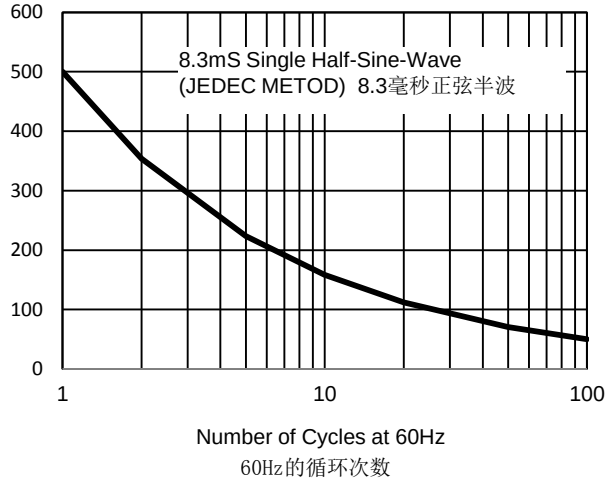


Fig. 3 - Typical Reverse Characteristics
图3 典型的反向特性

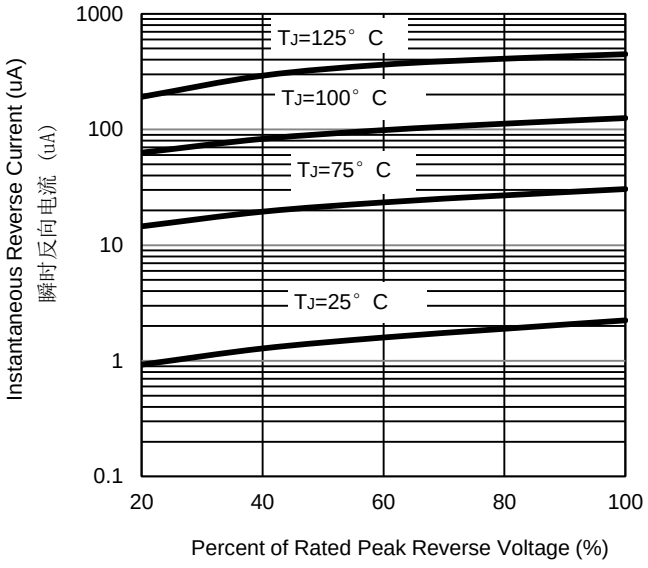
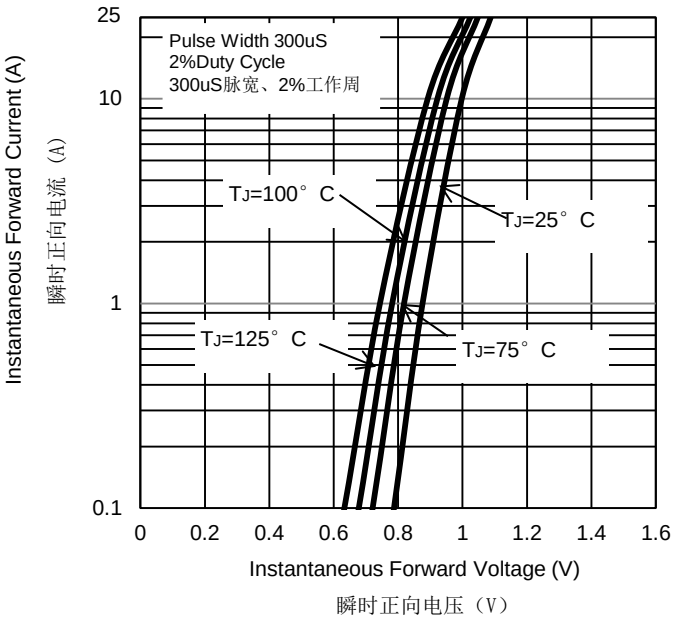


Fig. 4 - Typical Forward Characteristics
图4 典型的正向特性



The curve above is for reference only. 曲线图仅供参考。

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