KBP3005 THRU KBP310

RoHS COMPLIANT

桥式整流器 Bridge Rectifier

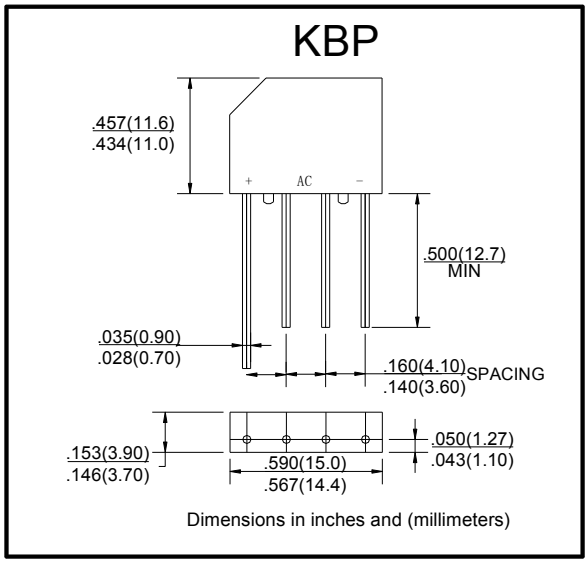
■特征 Features

- I_o 3A
- V_{RRM} 50V~1000V
- 玻璃钝化芯片
  Glass passivated chip
- 耐正向浪涌电流能力高
  High surge forward current capability

■用途 Applications

- 作一般电源单相桥式整流用
  General purpose 1 phase Bridge rectifier applications

■外形尺寸和印记 Outline Dimensions and Mark



■极限值（绝对最大额定值）
Limiting Values(Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	KBP3						
				005	01	02	04	06	08	10
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
平均整流输出电流 Average Rectified Output Current	I_O	A	60Hz 正弦波，电阻负载，T_a=30℃ 60Hz sine wave, R- load, T_a=30℃	3						
正向（不重复）浪涌电流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz正弦波，一个周期，T_a=25℃ 60Hz sine wave, 1 cycle, T_a=25℃	60						
正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time	I^2t	A^2s	1ms≤t＜8.3ms T_j=25℃,单个二极管 1ms≤t＜8.3ms T_j=25℃,Rating of per diode	26.5						
存储温度 Storage Temperature	T_{stg}	℃		-55 ~+150						
结温 Junction Temperature	T_j	℃		-55 ~+150						

■电特性 （T_a=25℃ 除非另有规定）
Electrical Characteristics（T_a=25℃ Unless otherwise specified）

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	最大值 Max
正向峰值电压 Peak Forward Voltage	V_{FM}	V	I_{FM}=3A,脉冲测试，单个二极管的额定值 I_{FM}=3A, Pulse measurement, Rating of per diode	1.1
反向峰值电流 Peak Reverse Current	I_{RRM}	μA	V_{RM}=V_{RRM} ,脉冲测试，单个二极管的额定值 V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode	10
热阻(1) Thermal Resistance(1)	$R_{\theta J-A}$	℃/W	结和环境之间 Between junction and ambient	20
	$R_{\theta J-L}$		结和引线之间 Between junction and lead	11

说明（Notes）：
（1）PN结到环境温度的热阻以及PN结到安装在PCB上的引线的热阻，铜片尺寸是0.47×0.47”(12×12mm)
（1）Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47×0.47”(12×12mm) copper pads

■特性曲线（典型） Characteristics(Typical)

图1：Io-Ta曲线
FIG1:Io-Ta Curve

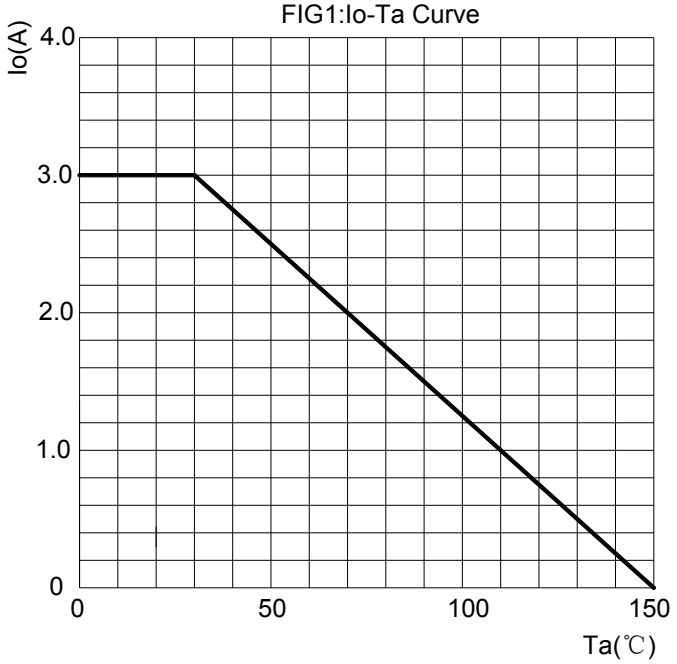


图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capadility

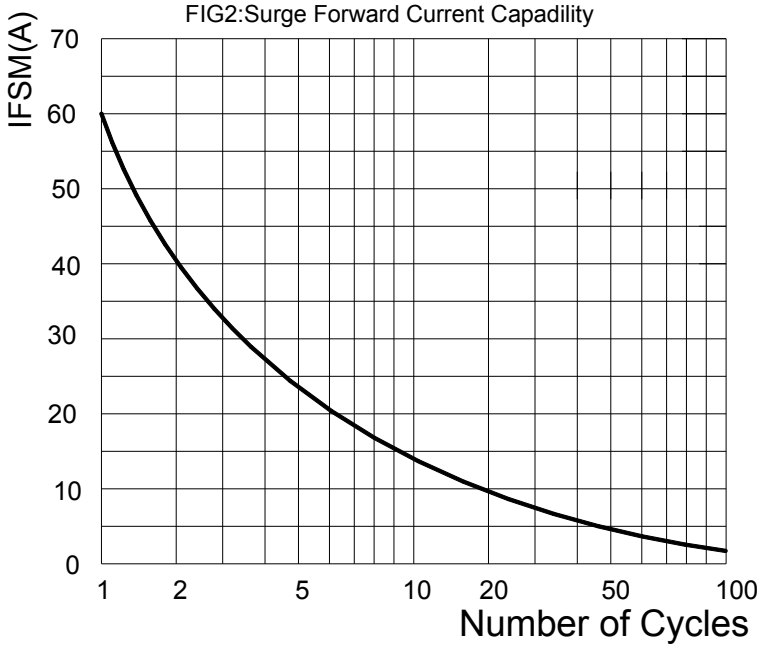


图3：正向电压曲线
FIG3:Instantaneous Forward Voltage

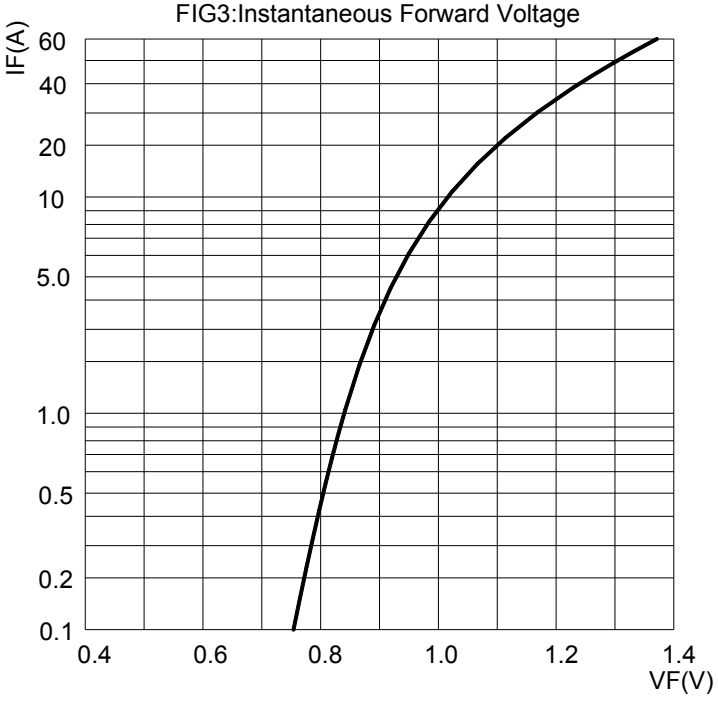


图4：反向电流曲线
FIG4:Typical Reverse Characteristics