GBJ10005 THRU GBJ1010

参考资料

桥式整流器 Bridge Rectifier

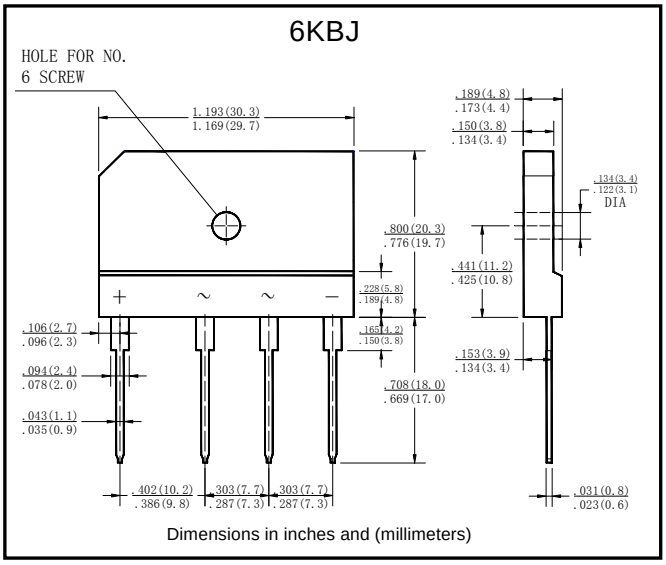
■特征 Features

- I_o 10A
  - 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 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		GBJ10						
					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 60Hz sine wave, R-load	用散热片 T_c =80℃ With heatsink T_c =80℃	10						
				无散热片 T_a =25℃ Without heatsink T_a =25℃	3.6						
正向（不重复）浪涌电流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	60H_Z正弦波，一个周期，T_j=25℃ 60H_Z sine wave, 1 cycle, T_j=25℃		170						
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 Tj=25℃，单个二极管 1ms≤t<8.3ms Tj=25℃，Rating of per diode		120						
存储温度 Storage Temperature	T_{stg}	℃			-55 ~+150						
结温 Junction Temperature	T_j	℃			-55 ~+150						
绝缘耐压 Dielectric Strength	V_{dis}	KV	端子与外壳之间外加交流电，一分钟 Terminals to case，AC 1 minute		2.5						
安装扭矩 Mounting Torque	Tor	kg・cm	推荐值：5kg・cm Recommend torque：5kg・cm		8						

■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}=5A，脉冲测试，单个二极管的额定值 I_{FM}=5A, 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 Thermal Resistance	$R_{\theta J-A}$	℃/W	结和环境之间，无散热片 Between junction and ambient, Without heatsink	25
	$R_{\theta J-C}$		结和管壳之间，用散热片 Between junction and case, With heatsink	2.3

■特性曲线（典型） Characteristics(Typical)

图1：Io-Tc曲线
FIG1:Io-Tc Curve

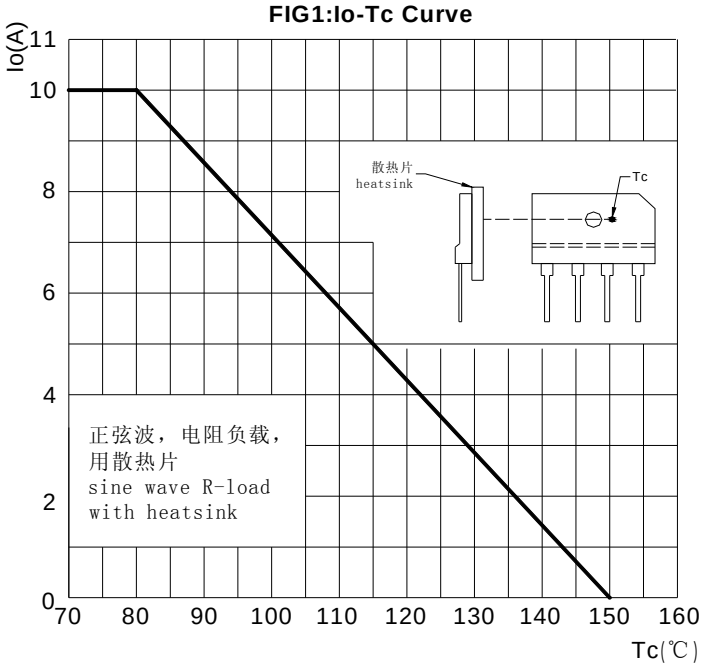


图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capadility

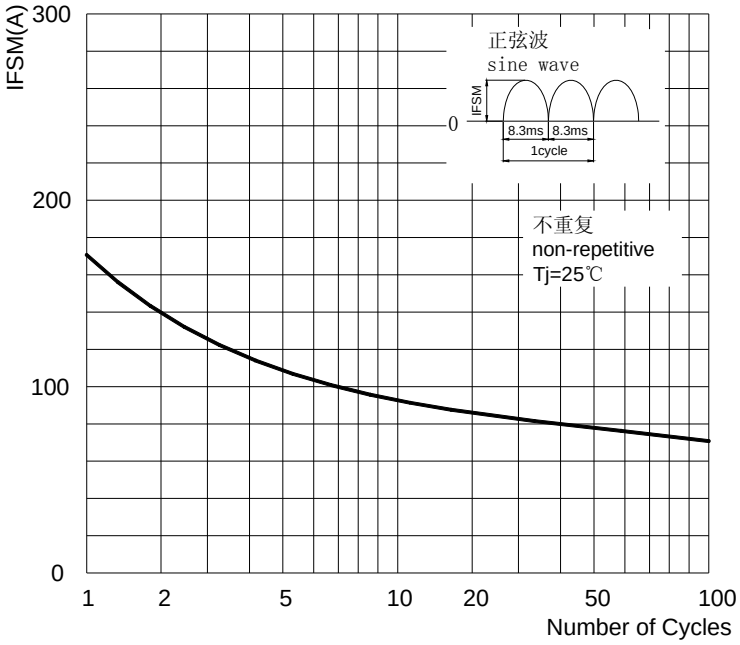


图3：正向电压曲线
FIG3: Forward Voltage

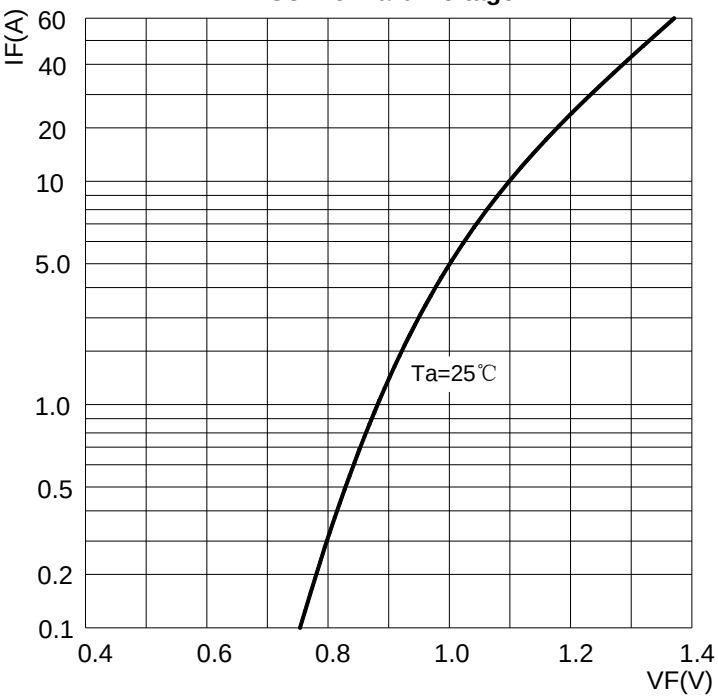
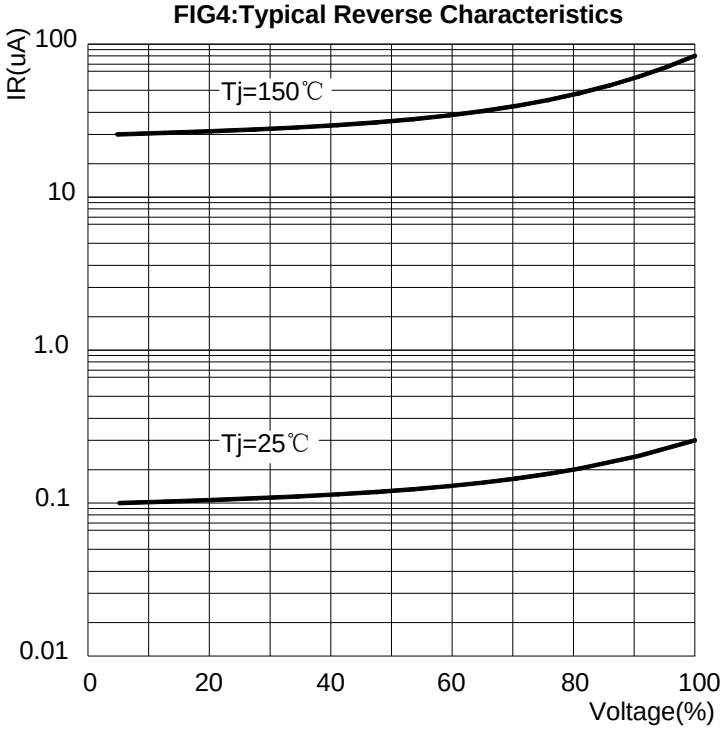



图4：反向电流曲线
FIG4:Typical Reverse Characteristics