

桥式整流器 Bridge Rectifier

■特征 Features

- I_o 50A
- 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

■极限值 (绝对最大额定值)

Limiting Values (Absolute Maximum Rating)

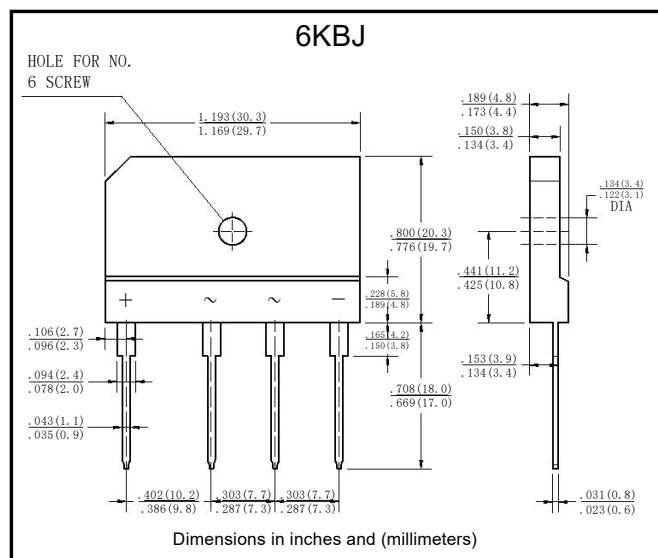
参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	GBJ50						
				005	01	02	04	06	08	10
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
平均整流输出电流 Average Rectified Output Current	I_o	A	60Hz正弦波, 电阻负载 60Hz sine wave, R-load	50						
			用散热片 $T_c=98^\circ\text{C}$ With heatsink $T_c=98^\circ\text{C}$ 无散热片 $T_a=25^\circ\text{C}$ Without heatsink $T_a=25^\circ\text{C}$	4.9						
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, $T_j=25^\circ\text{C}$ 60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$	500/400						
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	$I^2 t$	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, 单个二极管 $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	800						
存储温度 Storage Temperature	T_{stg}	$^\circ\text{C}$		-55 ~ +150						
结温 Junction Temperature	T_j	$^\circ\text{C}$		-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 ($T_a=25^\circ\text{C}$ 除非另有规定)

Electrical Characteristics ($T_a=25^\circ\text{C}$ 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	$I_{FM}=25\text{A}$, 脉冲测试, 单个二极管的额定值 $I_{FM}=25\text{A}$, 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	$R_{\theta J-A}$	$^\circ\text{C/W}$	结和环境之间, 无散热片 Between junction and ambient, Without heatsink	22
	$R_{\theta J-C}$		结和管壳之间, 用散热片 Between junction and case, With heatsink	1.0

■外形尺寸和印记 Outline Dimensions and Mark



■ 特性曲线 (典型) Characteristics(Typical)

图1: I_o - T_c 曲线
FIG1: I_o - T_c Curve

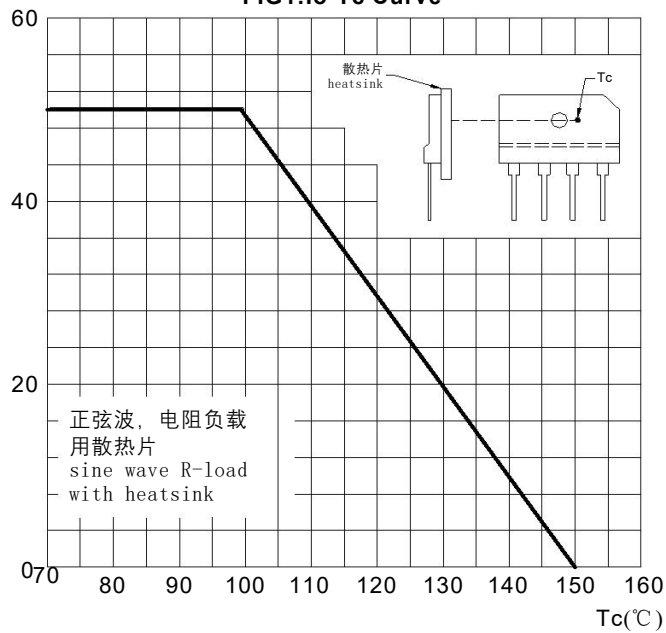


图2: 耐正向浪涌电流曲线
FIG2: Surge Forward Current Capability

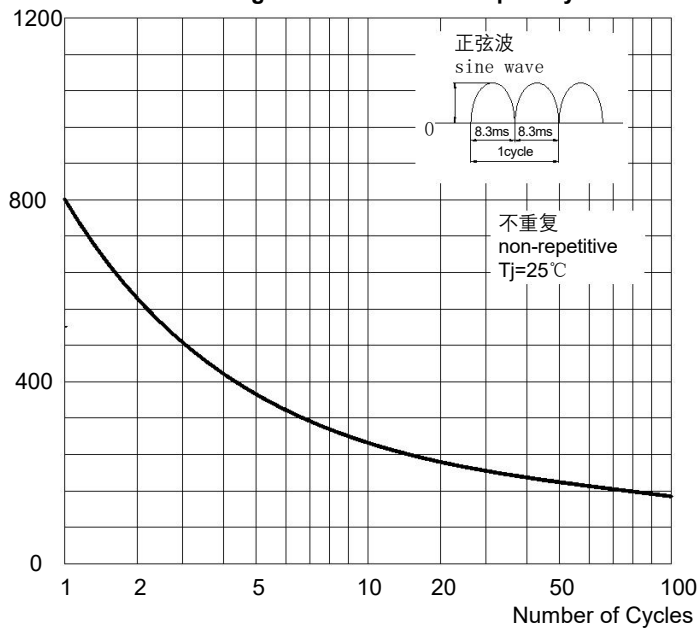


图3: 正向电压曲线
FIG3: Forward Voltage

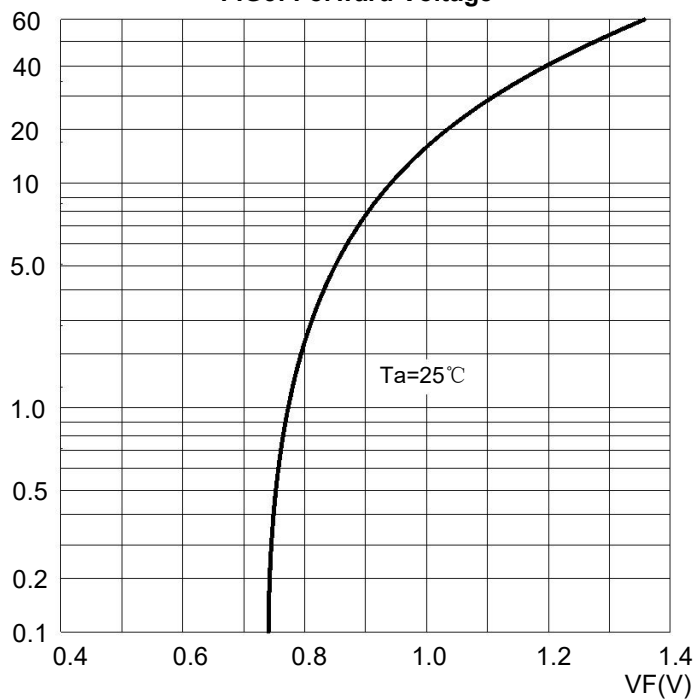


图4: 反向电流曲线
FIG4: Typical Reverse Characteristics

