



沟槽肖特基二极管 Trench SCHOTTKY Diodes

■特征 Features

- 低正向，低漏电
Low VF, low IR
- 低功耗，大电流
Low Power loss, High efficiency
- 高静电能力 (ESD≥30KV)
参考标准:IEC-61000-4-2, 接触式
High ESD (ESD≥30KV)
Reference standard: IEC - 61000-4-2, contact
- IF (AV) 30A
- VRRM 45V

■用途 Applications

- 太阳能行业
The solar industry

■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	GFMK3045
反向重复峰值电压 Repetitive Peak Reverse Voltage	VRRM	V	$I_R=0.2mA;$; $T_a=25^\circ C$	45
平均整流输出电流 Average Rectified Output Current	I_o	A	60HZ 正弦波, 电阻负载, $T_a=25^\circ C$ 60HZ sine wave, R- load, $T_a=25^\circ C$	30
正向 (不重复) 浪涌电流 Surge(Non-repetitive)Forward Current	IFSM	A	60HZ正弦波, 一个周期, $T_a=25^\circ C$ 60HZ sine wave, 1 cycle, $T_a=25^\circ C$	275
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	$1ms \leq t < 8.3ms$ $T_j=25^\circ C$	315
储存温度 Storage Temperature	T_{stg}	$^\circ C$		-55 ~ +150
结温 Junction Temperature	T_j	$^\circ C$	在正向直流条件下, 没有施加反向压降, 通电 $\leq 1h$ (图示1) ① IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1h$ (Fig. 1)①	-55~+200

■电特性 ($T_a=25^\circ C$ 除非另有规定)

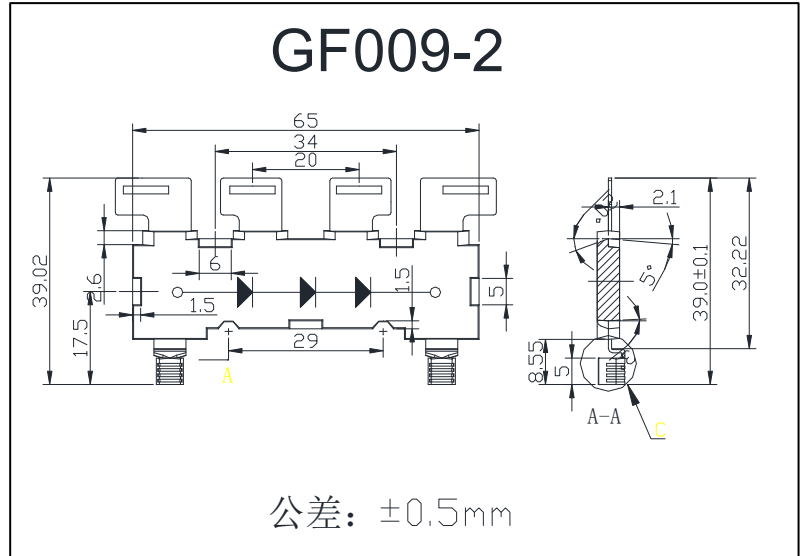
Electrical Characteristics ($T_a=25^\circ C$ Unless otherwise specified)

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	VFM	V	$I_{FM}=30.0A$ (Every Chip)	0.60	
反向峰值电流 Peak Reverse Current	I _{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^\circ C$	0.1
	I _{RRM2}			$T_a=100^\circ C/125^\circ C$	7/20
热阻 (典型) Thermal Resistance(Typical)	R _{θJ-c}	$^\circ C/W$	结和壳之间 Between junction and case	2.0	

■备注 NOTE

- ① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

■外形尺寸和印记 Outline Dimensions and Mark



■ 特性曲线 (典型) Characteristics(Typical)

图1: 正向电流降额曲线
FIG1: IF (AV) --Tc Derating

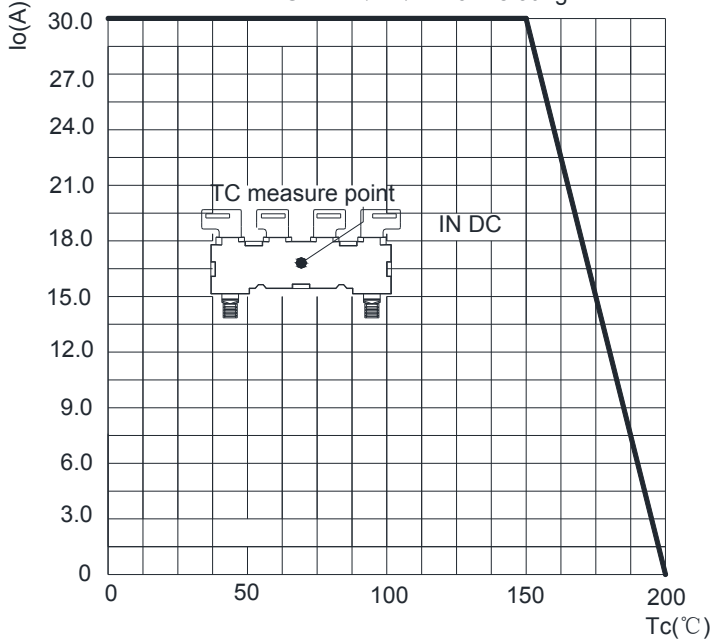


图2: 耐正向浪涌电流曲线
FIG2: Surge Forward Current Capadility

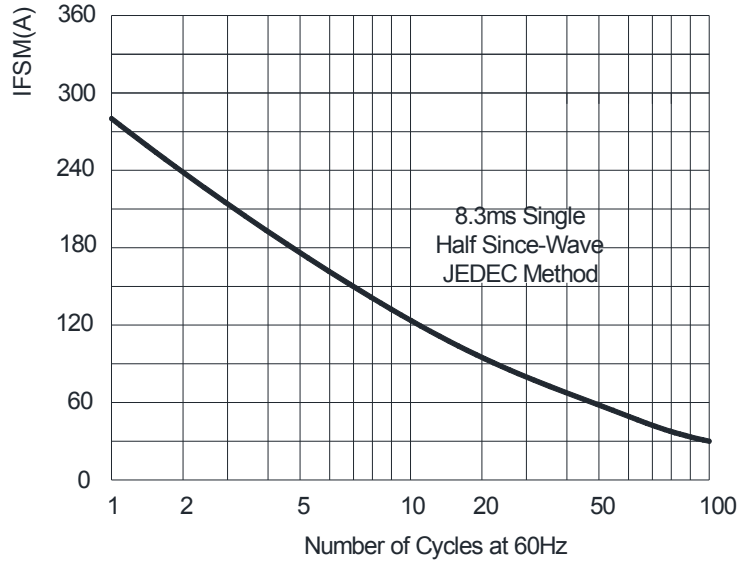


图3: 正向电压曲线
FIG3: Instantaneous Forward Voltage

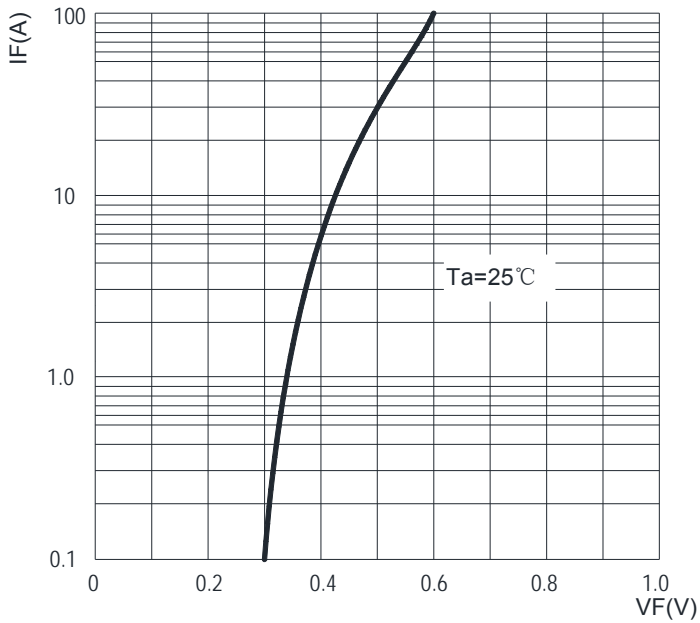


图4: 反向电流曲线
FIG4: Instantaneous Reverse Characteristics

