

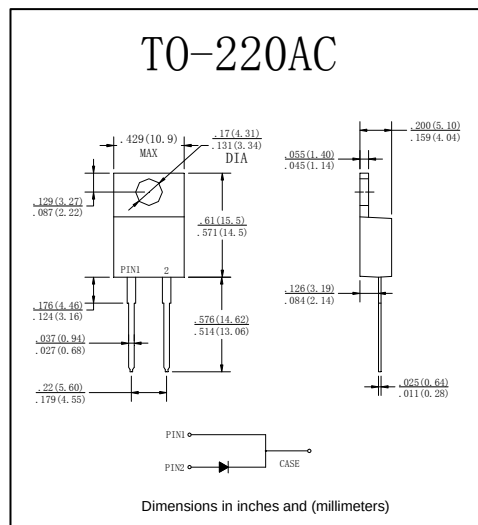


肖特基二极管 SCHOTTKY Diodes

■特征 Features

- 耐正向浪涌电流能力高
High surge forward current capability
- 低功耗，大电流
Low Power loss, High efficiency
- I_o 10.0A
- V_{RRM} 45V

■外形尺寸和印记 Outline Dimensions and Mark



■用途 Applications

- 快速整流用
High speed switching

■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	MBR1045
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		45
平均整流输出电流 Average Rectified Output Current	I_o	A	正弦半波 60Hz, 电阻负载, T_c (Fig.1) 60HZ Half-sine wave, Resistance load, T_c (Fig.1)	10
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, $T_a=25^{\circ}C$ 60Hz sine wave, 1 cycle, $T_a=25^{\circ}C$	150
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	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, 单个二极管 $1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	93
贮存温度 Storage Temperature	T_{stg}	$^{\circ}C$		-55 ~ +150
结温 Junction Temperature	T_j	$^{\circ}C$	在正向直流条件下，没有施加反向电压，通电 $\leq 1h$ （图示1）① IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1h$ (Fig. 1)①	-55 ~ +150

■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	V_{FM}	V	$I_{FM}=10.0A$	0.55
反向峰值电流 Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$ $T_a=25^{\circ}C$	0.2
	I_{RRM2}		$T_a=100^{\circ}C$	50
热阻 Thermal Resistance	$R_{\theta J-C}$	$^{\circ}C/W$	结和壳之间 Between junction and case	2.0

■ 特性曲线（典型） Characteristics(Typical)

图1: 正向电流降额曲线

FIG1: Forward Current Derating Curve

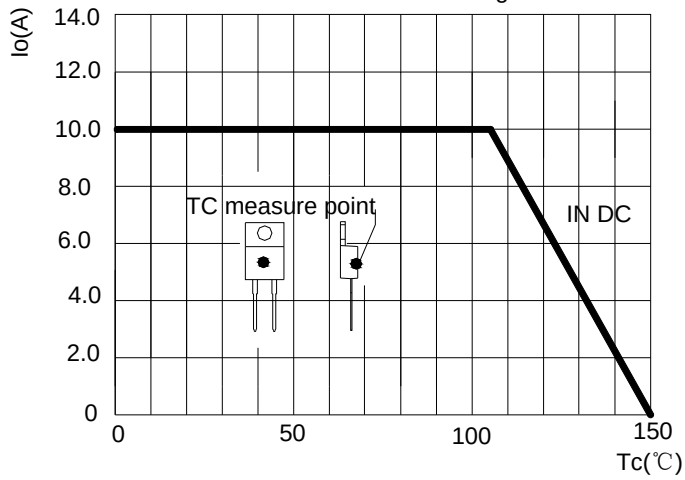


图2: 耐正向浪涌电流曲线

FIG2: Surge Forward Current Capadility

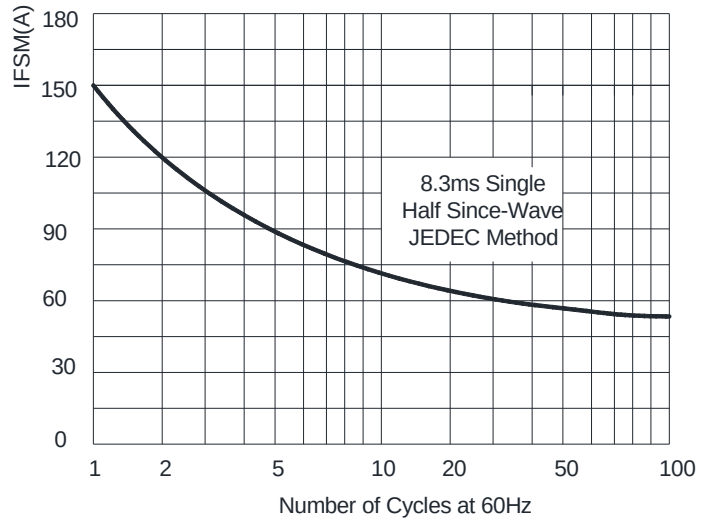


图3: 正向电压曲线

FIG3: Instantaneous Forward Voltage

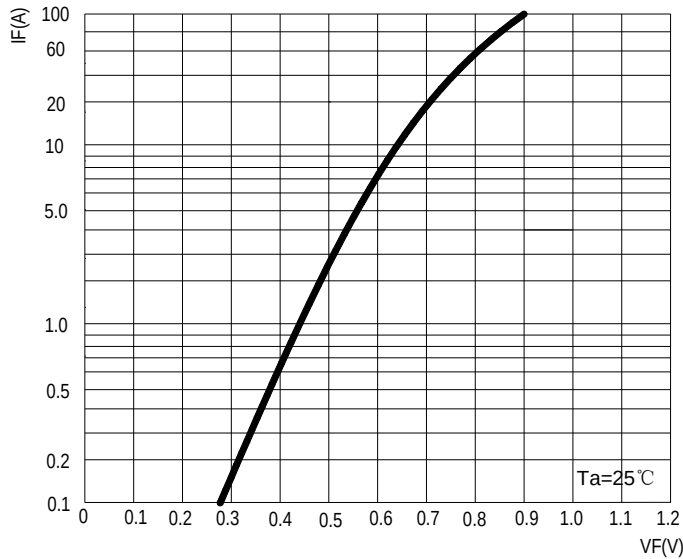


图4: 反向电流曲线

FIG4: Typical Reverse Characteristics

