

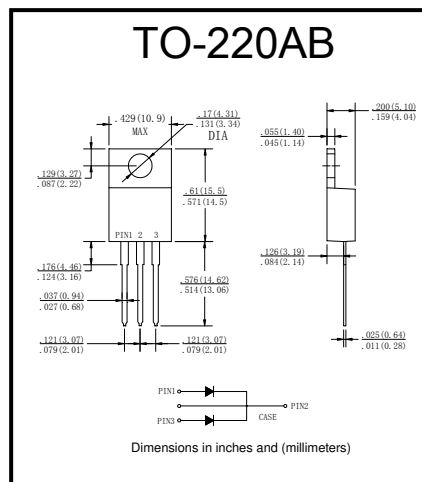


肖特基二极管SCHOTTKY Diodes

■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 30.0A
- V_{RRM} 35-200V

■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	测试条件 Test Conditions	MBR30-CT									
				35	40	45	50	60	80	90	100	150	200
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		35	40	45	50	60	80	90	100	150	200
平均整流输出电流 Average Rectified Output Current	I_o	A	60Hz 正弦波，电阻负载， $T_a=25^{\circ}\text{C}$ 60Hz sine wave, R- load, $T_a=25^{\circ}\text{C}$	30									
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， $T_a=25^{\circ}\text{C}$ 60Hz sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	200									
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	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, 单个二极管 $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	167									
贮存温度 Storage Temperature	T_{stg}	$^{\circ}\text{C}$		-55 ~ +150									
结温 Junction Temperature	T_j	$^{\circ}\text{C}$	在正向直流条件下，没有施加反向电压，通电 $\leq 1\text{h}$ （图示1）① IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1\text{h}$ (Fig. 1)①	-55 ~ +150									

■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		MBR30-CT									
					35	40	45	50	60	80	90	100	150	200
正向峰值电压 Peak Forward Voltage	V _{FM}	V	I _{FM} =15A		0.7			0.8		0.85			0.90	0.95
反向峰值电流 Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	0.2									
	T _a =100℃			20			15		10					
热阻 Thermal Resistance	R _{θ J-C}	℃/W	结和壳之间 Between junction and case		2.0									

备注: Notes:

- ¹⁾ 热电阻从结到本体,每管脚到散热片的尺寸为 2"×3"×0.25 的铝板
Thermal resistance from junction to case per leg with heat-sink size of 2"×3"×0.25" AL-plate

■ 特性曲线（典型） Characteristics(Typical)

图1：正向电流降额曲线

FIG1: IF (AV) --Tc Derating

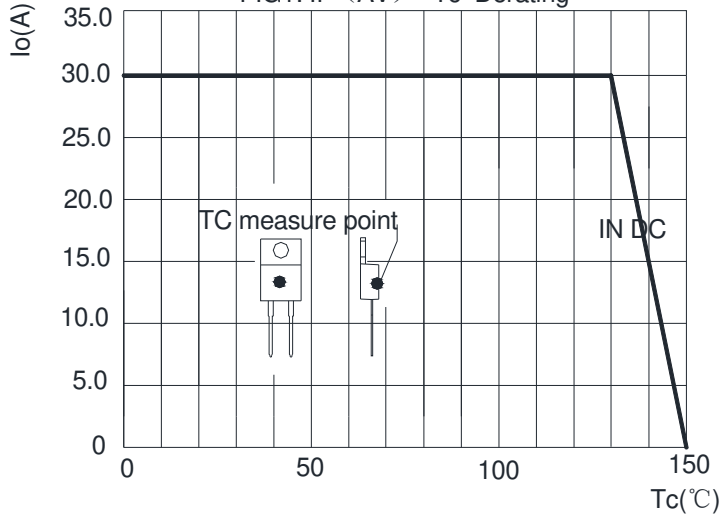


图2：耐正向浪涌电流曲线

FIG2: Surge Forward Current Capability

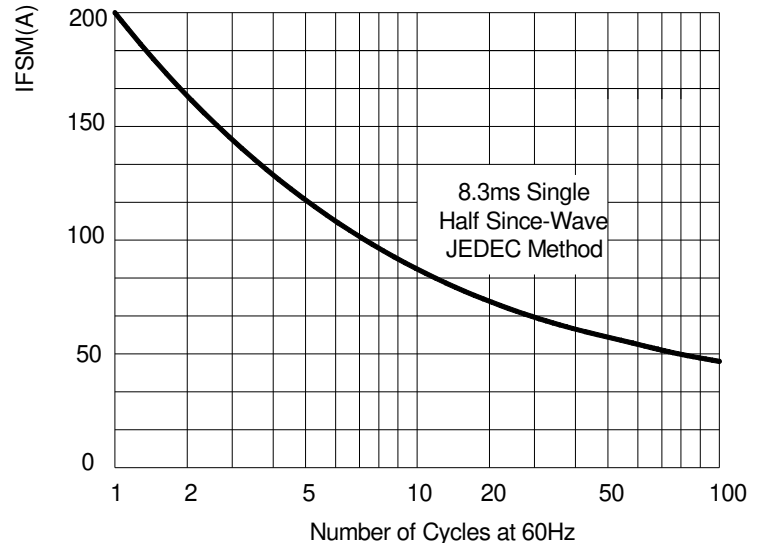


图3：正向电压曲线

FIG3: Instantaneous Forward Voltage

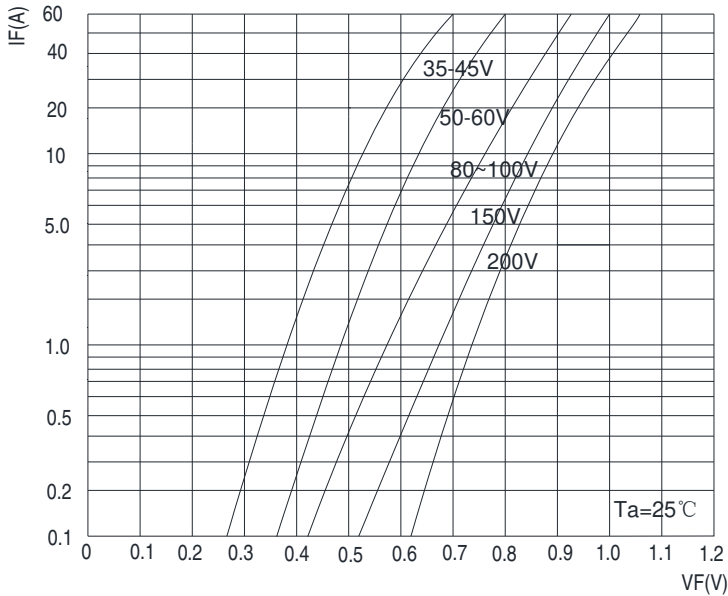


图4：反向电流曲线

FIG4: Typical Reverse Characteristics

