

SCHOTTKY Diodes

■特征 Features

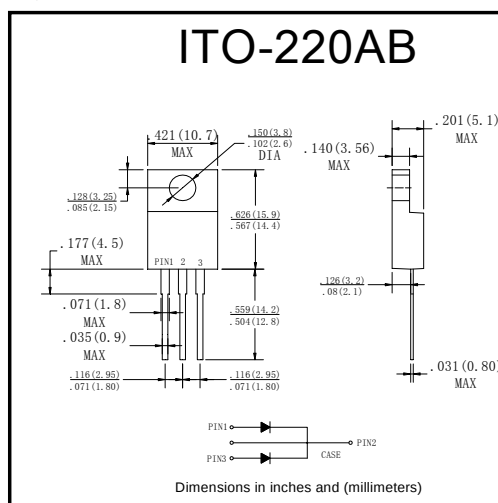
- 耐正向浪涌电流能力高
High surge forward current capability
- 低功耗，大电流
Low Power loss, High efficiency

- I_o 10.0A
- V_{RRM} 100-200V

■用途 Applications

- 快速整流用
High speed switching

■外形尺寸和印记 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	MBR		
				10100FCT	10150FCT	10200FCT
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		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, $T_a=25^{\circ}\text{C}$	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, $T_a=25^{\circ}\text{C}$ 60Hz sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	80		
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	27		
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, 没有施加反向压降, 正向平均电流 $I_{FAV} \leq 1\text{h}$ (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℃ 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		
					MBR		
					10100FCT	10150FCT	10200FCT
正向峰值电压 Peak Forward Voltage	V _{FM}	V	I _{FM} =5.0A		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℃	0.05		
	I _{RRM2}			T _a =100℃	1		
热阻 Thermal Resistance	R _{θ J-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: IF (AV) --Tc Derating

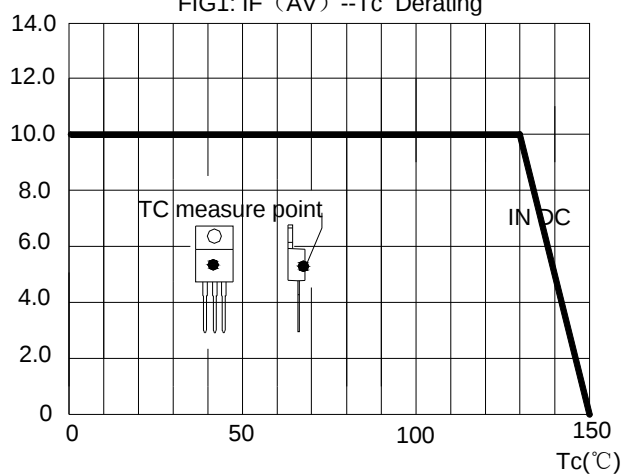


图2: 耐正向浪涌电流曲线

FIG2: Surge Forward Current Capability

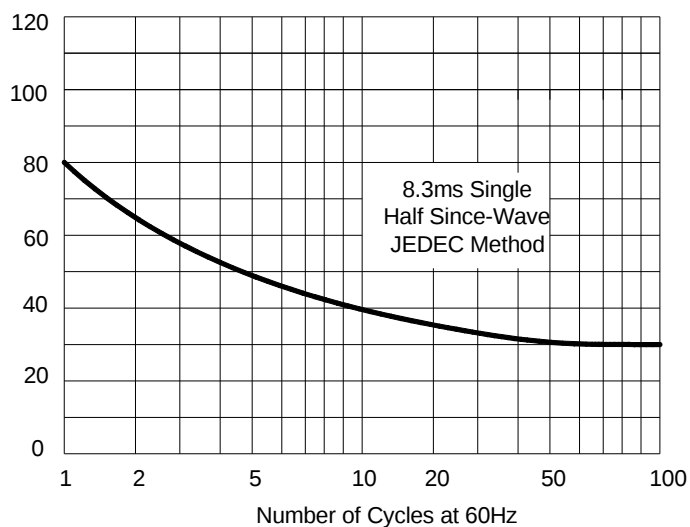


图3: 正向电压曲线

FIG3: Instantaneous Forward Voltage

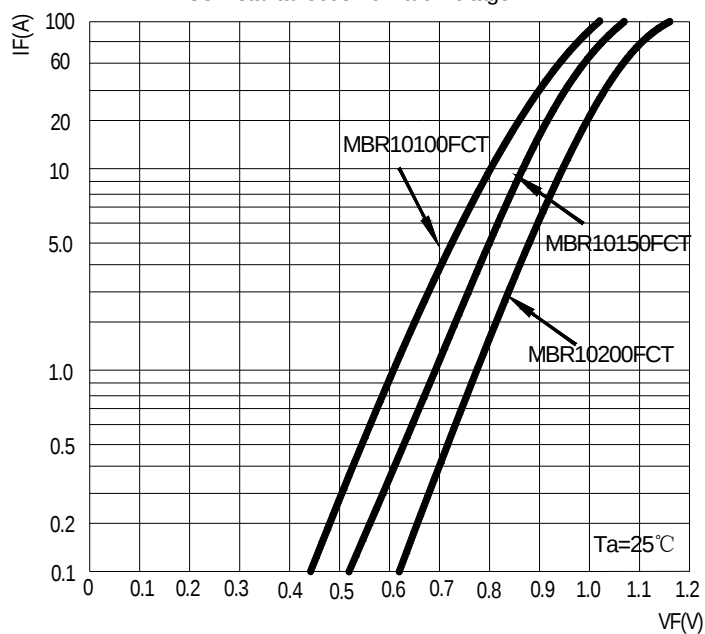


图4: 反向电流曲线

FIG4: Typical Reverse Characteristics

