



超快恢复整流二极管 Ultra-Fast Recovery Rectifier Diodes

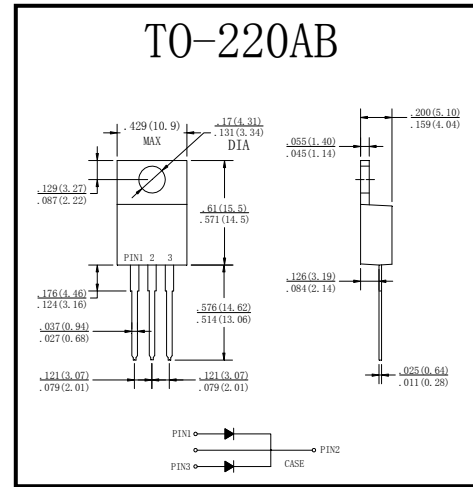
■特征 Features

- I_o 10.0A
- V_{RRM} 100V~600V
- 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

- 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	测试条件 Conditions	MUR-CT				
				1010	1015	1020	1040	1060
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		100	150	200	400	600
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, $T_a=25^\circ\text{C}$ 60Hz sine wave, 1 cycle, $T_a=25^\circ\text{C}$	55				
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	12				
贮存温度 Storage Temperature	T_{stg}	$^\circ\text{C}$		-55 ~ +150				
结温 Junction Temperature	T_j	$^\circ\text{C}$		-55 ~ +175				

■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	MUR-CT				
				1010	1015	1020	1040	1060
正向峰值电压 Peak Forward Voltage	V_{FM}	V	$I_{FM}=5.0\text{A}$	0.975			1.25	1.7
反向峰值电流 Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$				
	I_{RRM2}			$T_a=125^\circ\text{C}$				
反向恢复时间 Reverse Recovery Time	T_{rr}	ns	$I_F=0.5\text{A}$ $I_{RM}=1\text{A}$ $I_{RR}=0.25\text{A}$	35			50	
热阻 Thermal Resistance	$R_{\theta J-C}$	$^\circ\text{C}/\text{W}$	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

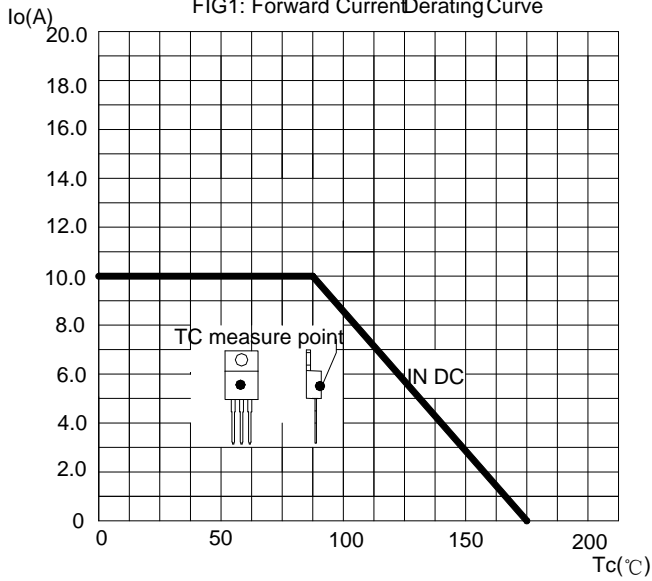


图2: 耐正向浪涌电流曲线

FIG2: Surge Forward Current Capability

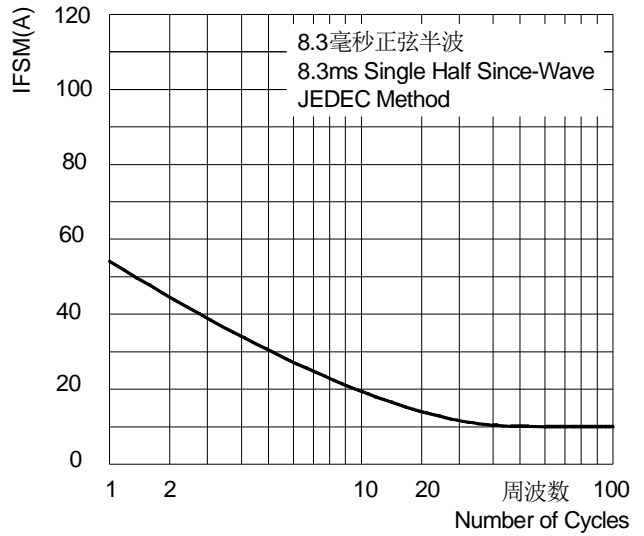


图3: 正向电压曲线

FIG3: Instantaneous Forward Voltage

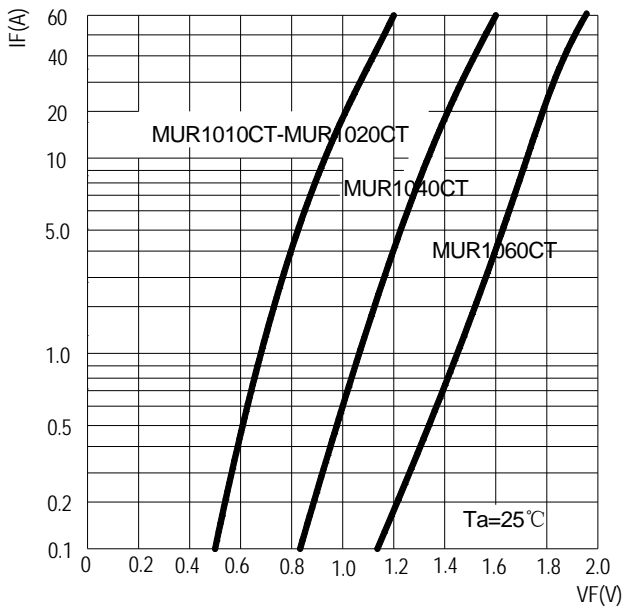


图4: 反向电流曲线

FIG4: Typical Reverse Characteristics

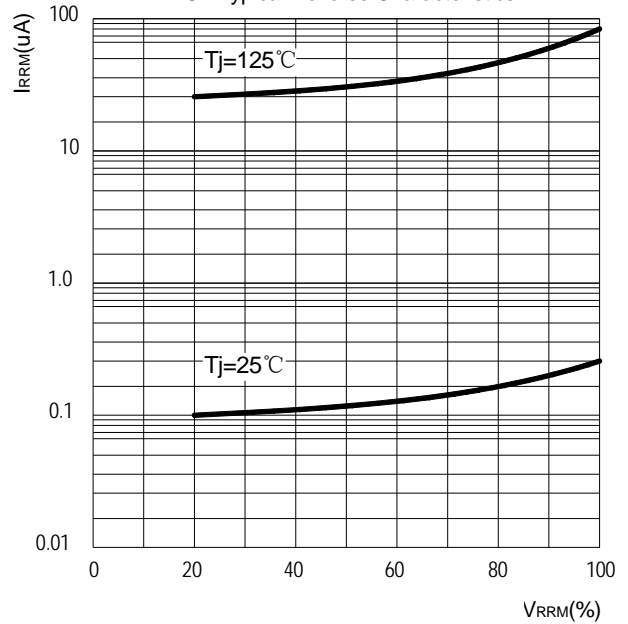


图5: 反向恢复时间试验电路及测试波形示意图
Diagram of circuit and Testing wave form of reverse recovery time

