

Ultra-Fast Recovery Rectifier Diodes

■特征 Features

- I_o 20.0A
- 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

■ 极限值（绝对最大额定值）

Limiting Values (Absolute Maximum Rating)

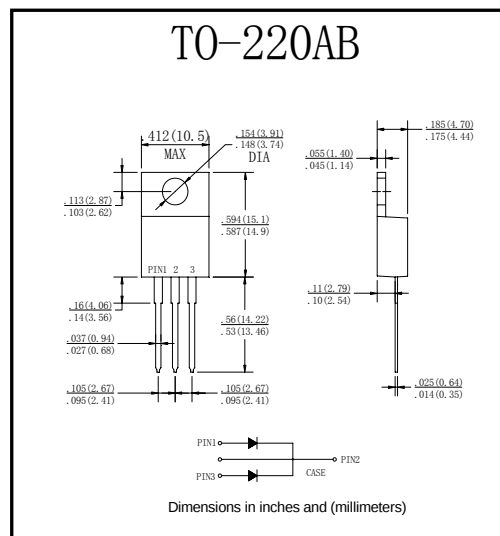
参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	MUR-CT				
				2010	2015	2020	2040	2060
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		100	150	200	400	600
平均整流输出电流 Average Rectified Output Current	I_o	A	60Hz 正弦波, 电阻负载, $T_a=25^{\circ}\text{C}$ 60Hz sine wave, R- load, $T_a=25^{\circ}\text{C}$	20				
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, $T_a=25^{\circ}\text{C}$	125				
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	65				
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℃ 除非另有规定)

Electrical Characteristics (T_a=25°C Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition		MUR-CT				
					2010	2015	2020	2040	2060
正向峰值电压 Peak Forward Voltage	V _{FM}	V	I _{FM} =10.0A		0.95			1.25	1.7
反向峰值电流 Peak Reverse Current	I _{RRM1}	μ A	V _{RM} =V _{RRM}	T _a =25℃	10				
	I _{RRM2}			T _a =125℃	500				
反向恢复时间 Reverse Recovery Time	T _{rr}	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A		35			50	
热阻 Thermal Resistance	R _{θ J-C}	℃/W	结和壳之间 Between junction and case		2.0				

■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: I_F (AV) $\rightarrow T_c$ Derating

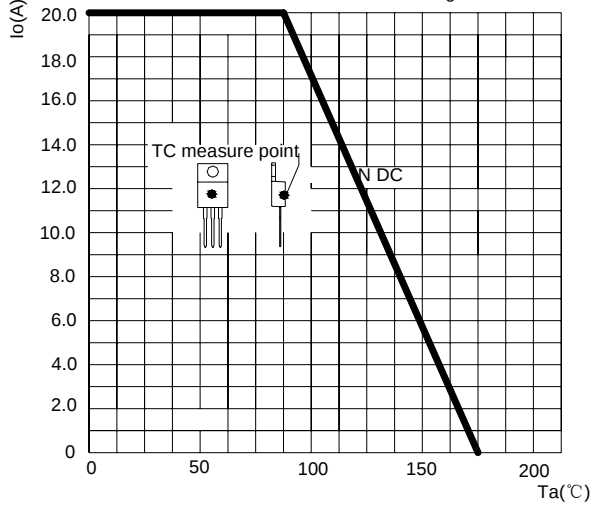


图2: 耐正向浪涌电流曲线
FIG2: Surge Forward Current Capability

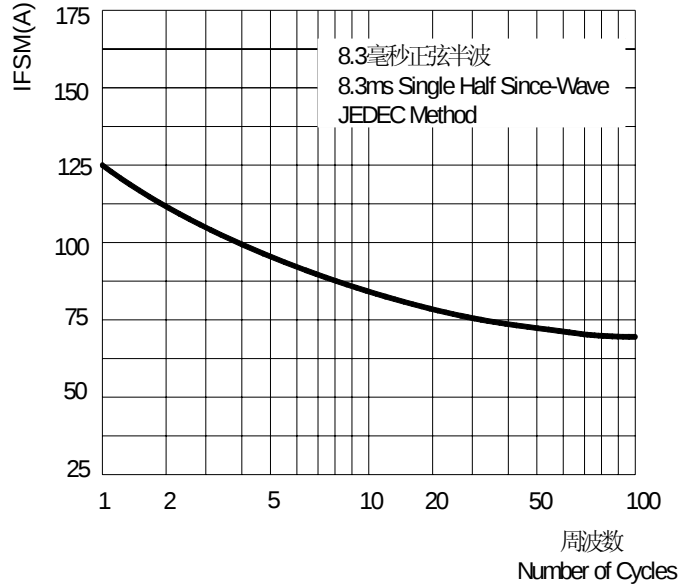


图3: 正向电压曲线
FIG3: Instantaneous Forward Voltage

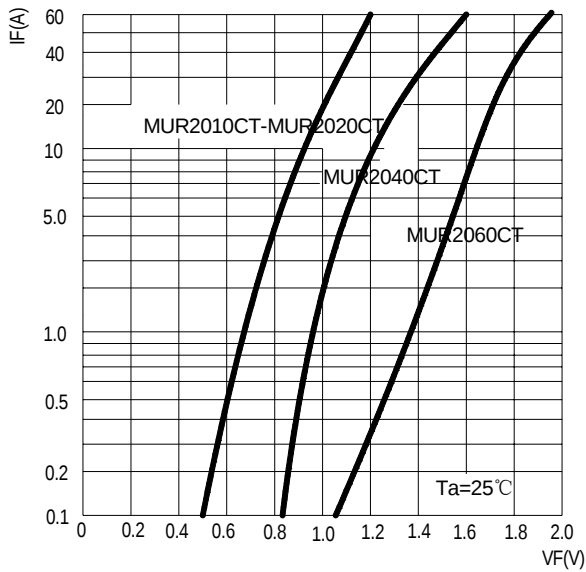


图4: 反向电流曲线
FIG4: Typical Reverse Characteristics

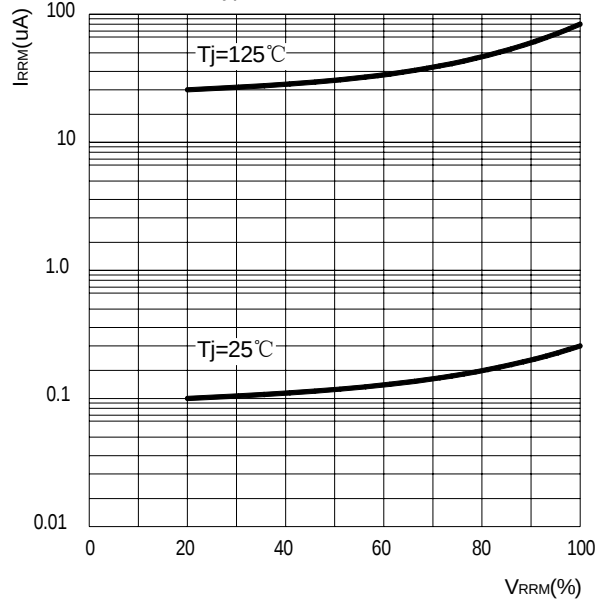


图5: 反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

