超快恢复整流二极管 MUR1010FCT THRU MUR1060FCT

Ultra-Fast Recovery Rectifier Diodes

■特征 Features

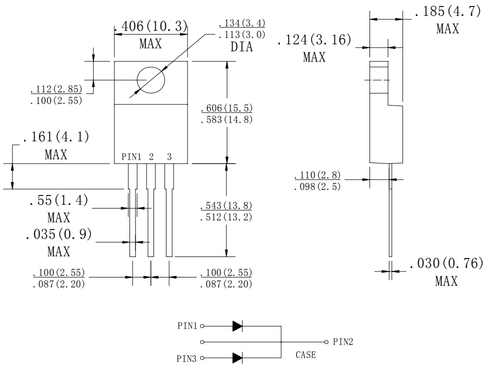
- I_o 10.0A
- V_{RRM} 100V~600V
- 玻璃钝化芯片 Glass passivated chip
- 耐正向浪涌电流能力高
High surge forward current capability

■用途 Applications

- 快速整流用
High speed switching

■外形尺寸和印记 Outline Dimensions and Mark

ITO-220AB



Dimensions in inches and (millimeters)

■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-FCT				
				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	60Hz 正弦波，电阻负载，T_a=25℃ 60Hz sine wave, R- load, T_a=25℃	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℃ 60Hz sine wave, 1 cycle, T_a=25℃	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	1ms≤t<8.3ms T_j=25℃,单个二极管 1ms≤t<8.3ms T_j=25℃,Rating of per diode	12				
贮存温度 Storage Temperature	T_{stg}	℃		-55 ~ +150				
结温 Junction Temperature	T_j	℃		-55 ~ +175				

■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		MUR-FCT				
					1010	1015	1020	1040	1060
正向峰值电压 Peak Forward Voltage	V_{FM}	V	I FM =5.0A		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	Trr	ns	I_F=0.5A I_{RM}=1A I_{RR}=0.25A		35				50
热阻 Thermal Resistance	$R_{\theta J\text{-}C}$	℃/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

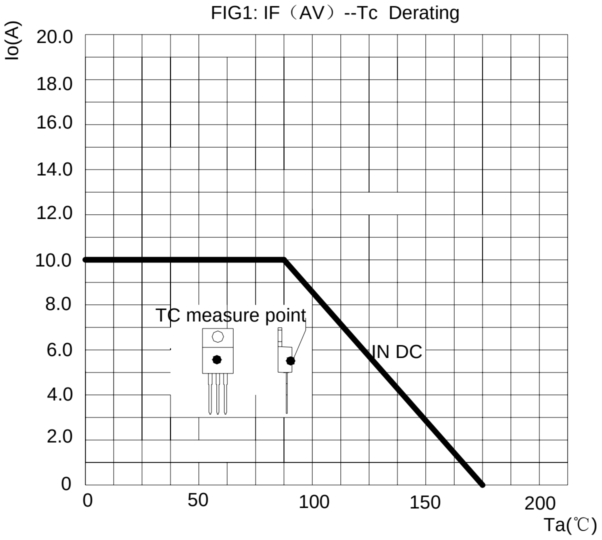


图2：耐正向浪涌电流曲线

FIG2:Surge Forward Current Capadility

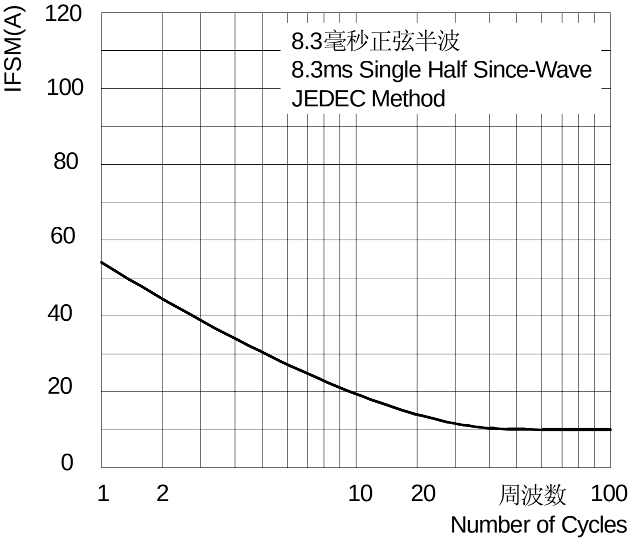


图3：正向电压曲线

FIG3:Instantaneous Forward Voltage

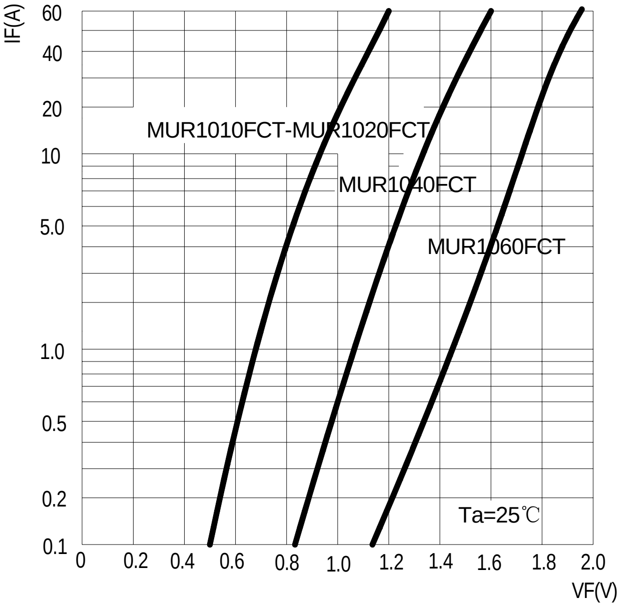


图4：反向电流曲线

FIG4:Typical Reverse Characteristics

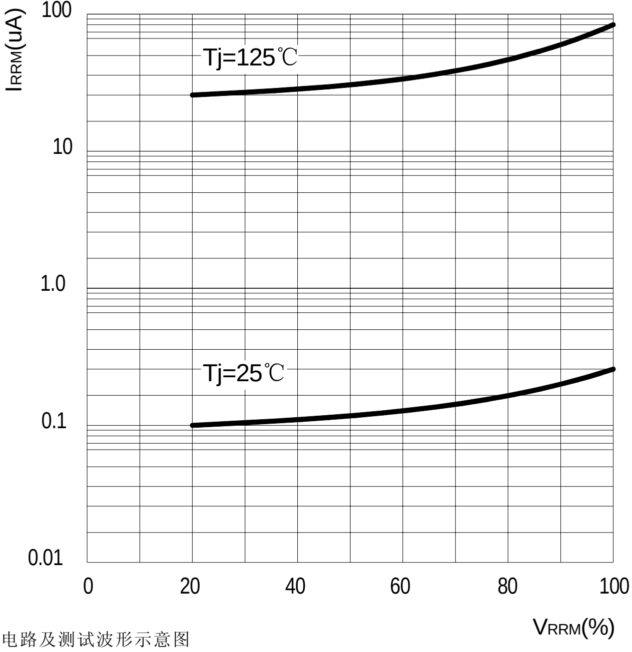


图5：反向恢复时间试验电路及测试波形示意图

FIG.5: Diagram of circuit and Testing wave form of reverse recovery time