



# MUR810 THRU MUR860

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

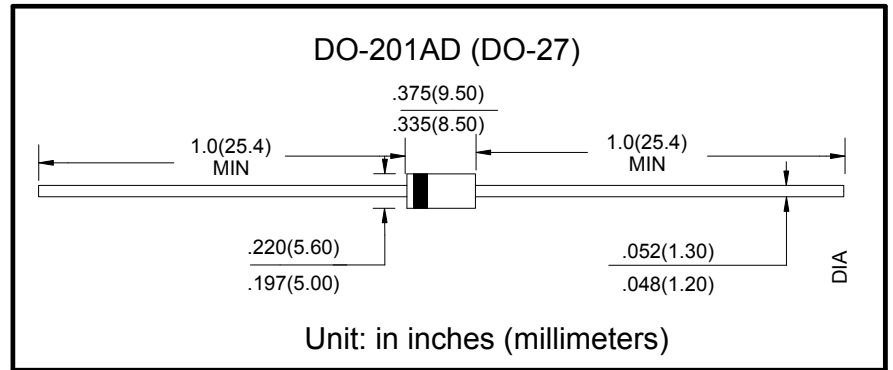
### ■特征 Features

- $I_o$  8.0A
- $V_{RRM}$  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				
				810	815	820	840	860
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, $T_a=25^\circ\text{C}$	8				
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	$I^2t$	$\text{A}^2\text{s}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$	65				
贮存温度 Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-55 ~ +150				
结温 Junction Temperature	$T_j$	$^\circ\text{C}$		-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	MUR				
				810	815	820	840	860
正向峰值电压 Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=8.0\text{A}$	0.95		1.25	1.7	
反向峰值电流 Peak Reverse Current	$I_{RRM1}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$				
	$I_{RRM2}$			$T_a=125^\circ\text{C}$				
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(典型) Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	结和环境之间 Between junction and ambient	15				
结电容 Typical junction capacitance	$C_j$	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	100				

## ■特性曲线（典型） Characteristics(Typical)

图1: 正向电流降额曲线  
FIG1:  $I_F$  (AV) -- $T_c$  Derating

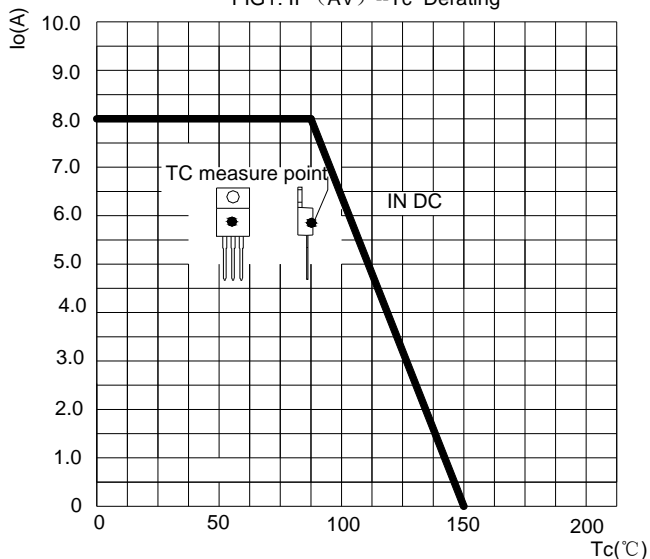


图2: 耐正向浪涌电流曲线  
FIG2: Surge Forward Current Capadility

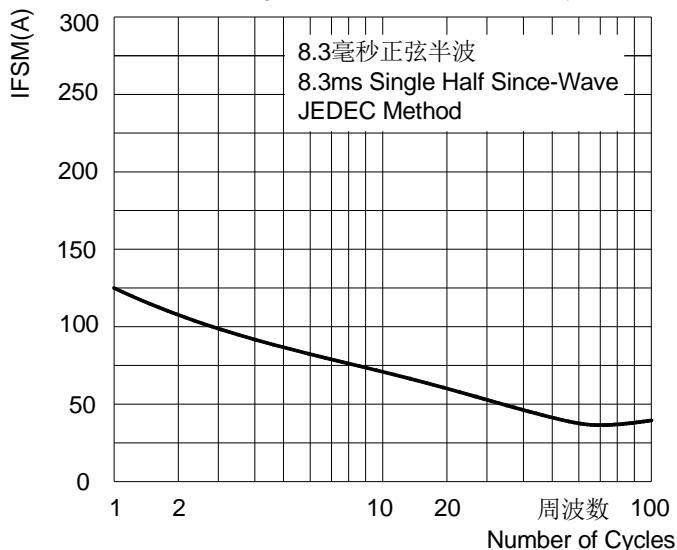


图3: 正向电压曲线  
FIG3: Instantaneous Forward Voltage

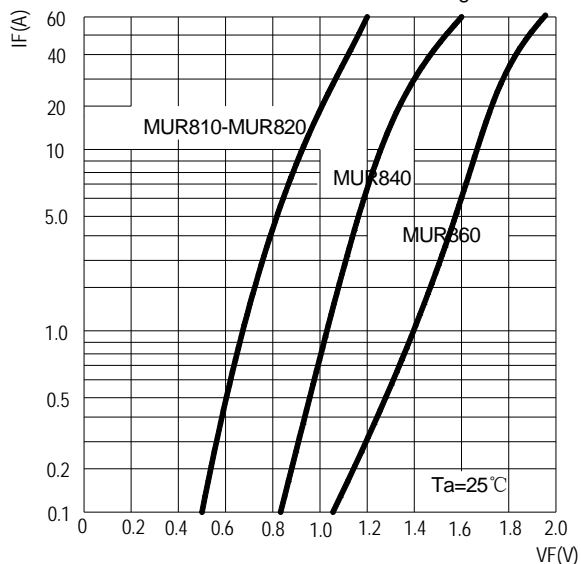


图4: 反向电流曲线  
FIG4: Typical Reverse Characteristics

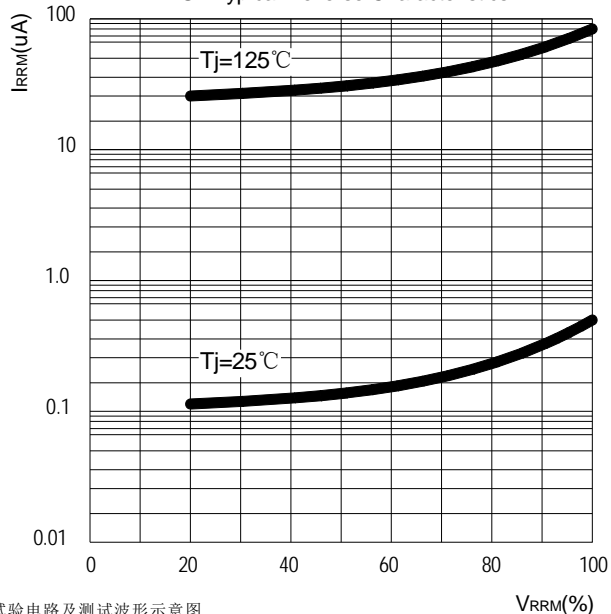


图5: 反向恢复时间试验电路及测试波形示意图  
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

