



## 快恢复二极管 Fast Recovery Rectifier

## ■特征 Features

- $I_o$  3.0A
- VRRM 50V-1000V
- 耐正向浪涌电流能力高
- High surge current capability

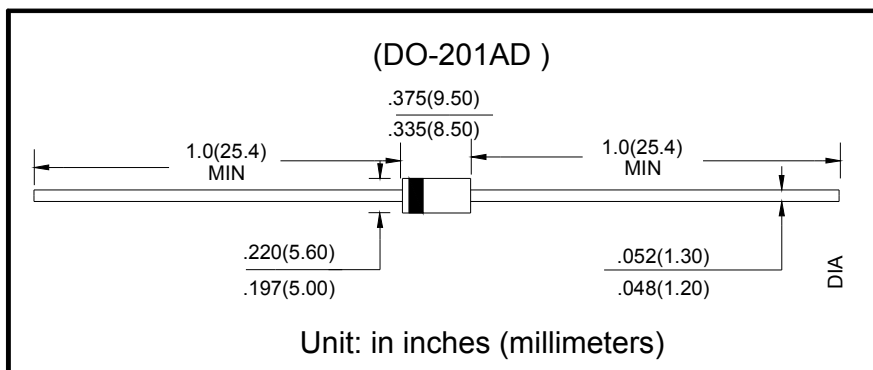
## ■用途 Applications

- 整流用 Rectifier

## ■极限值 (绝对最大额定值)

## Limiting Values (Absolute Maximum Rating)

## ■外形尺寸和印记 Outline Dimensions and Mark



参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	FR						
				301	302	303	304	305	306	307
反向重复峰值电压 Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	正弦半波 60Hz, 电阻负载, $T_a=50^\circ\text{C}$ 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	3						
正向 (不重复) 浪涌电流 Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	正弦半波 60Hz, 一个周期, $T_a=25^\circ\text{C}$ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	150						
结温 Junction Temperature	$T_J$	$^\circ\text{C}$		-55~+125						
储存温度 Storage Temperature	$T_{STG}$	$^\circ\text{C}$		-55 ~ +150						

## ■电特性 (Ta=25°C 除非另有规定)

## Electrical Characteristics (Ta=25°C Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	FR						
				301	302	303	304	305	306	307
正向峰值电压 Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=3.0A$	1.3						
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	$t_r$	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	150			250	500		
热阻 (典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C/W}$	结和环境之间 Between junction and ambient	20						
	$R_{\theta J-L}$		结和引线之间 Between junction and lead	10						

## ■ 特性曲线 (典型) Characteristics(Typical)

图1: 正向电流降额曲线

FIG.1: FORWARD CURRENT DERATING CURVE

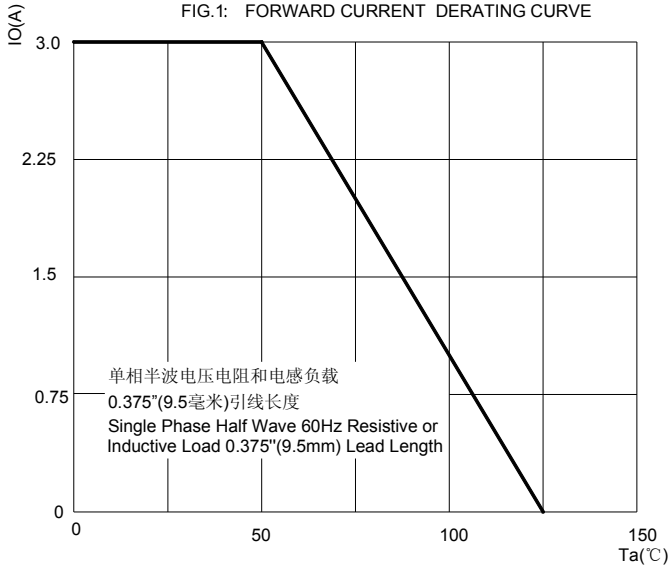


图2: 最大正向浪涌冲击耐受能力

FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

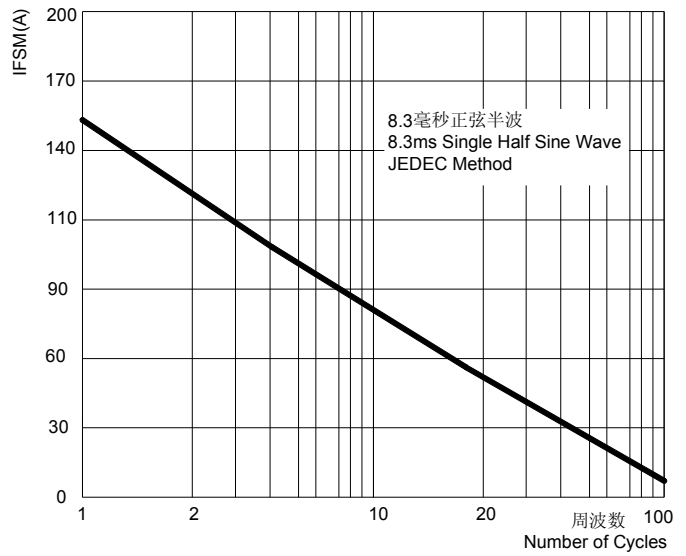


图3: 典型正向特性曲线

FIG.3: TYPICAL FORWARD CHARACTERISTICS

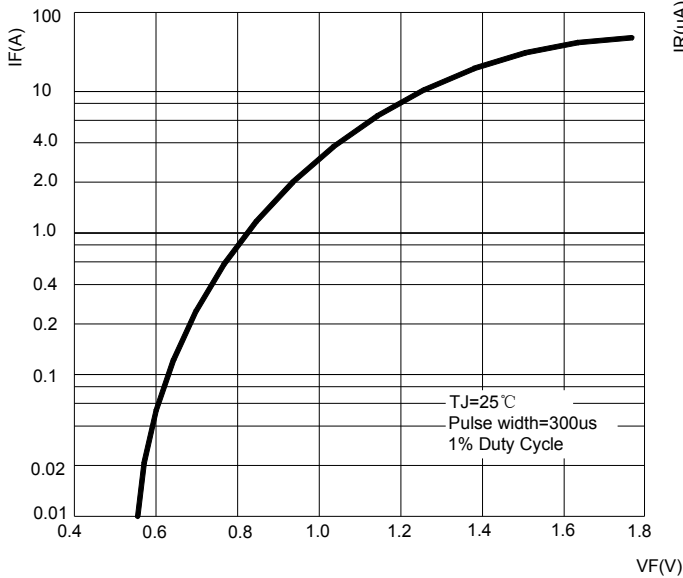


图4: 典型反向特性曲线

FIG.4: TYPICAL REVERSE CHARACTERISTICS

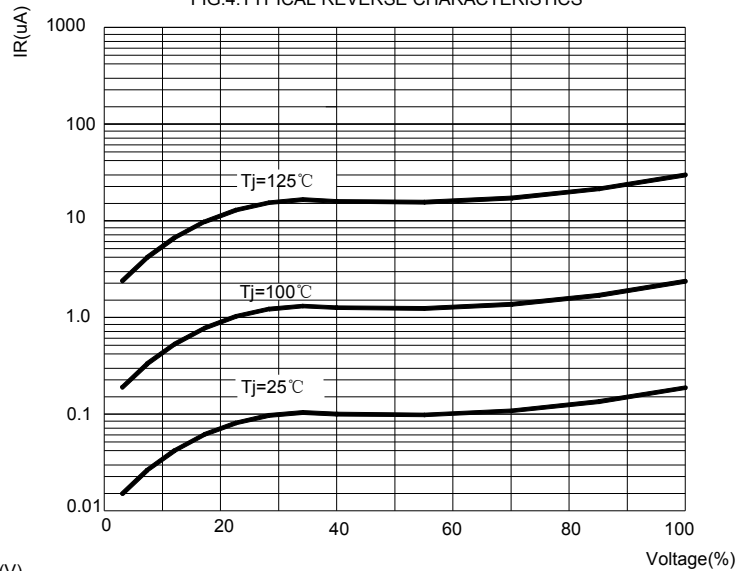


图5: 反向恢复时间试验电路及测试波形示意图

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

