



## 超快恢复二极管 Super Fast Rectifier

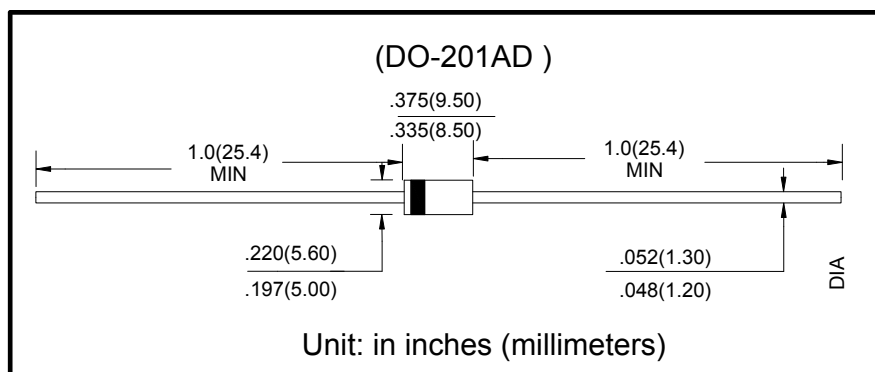
## ■特征 Features

- $I_o$  3.0A
- VRRM 50V-600V
- 耐正向浪涌电流能力高
- High surge current capability

## ■用途 Applications

- 整流用 Rectifier

## ■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	条件 Conditions	SF3							
				1G	2G	3G	4G	5G	6G	7G	8G
反向重复峰值电压 Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	150	200	300	400	500	600
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	正弦半波 60Hz, 电阻负载, $T_a$ (FIG 1) 60Hz Half-sine wave, Resistance load, $T_a$ (FIG 1)	3.0							
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, $T_a=25^\circ\text{C}$	125							
结温 Junction Temperature	$T_J$	$^\circ\text{C}$		-55~+150							
储存温度 Storage Temperature	$T_{STG}$	$^\circ\text{C}$		-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	SF3							
				1G	2G	3G	4G	5G	6G	7G	8G
正向峰值电压 Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=3.0A$	0.95		1.3		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	$t_r$	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	35							
热阻(典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	结和环境之间 Between junction and ambient	25							
结电容 Typical junction capacitance	$C_j$	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	80				70			



# SF31G THRU SF38G

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

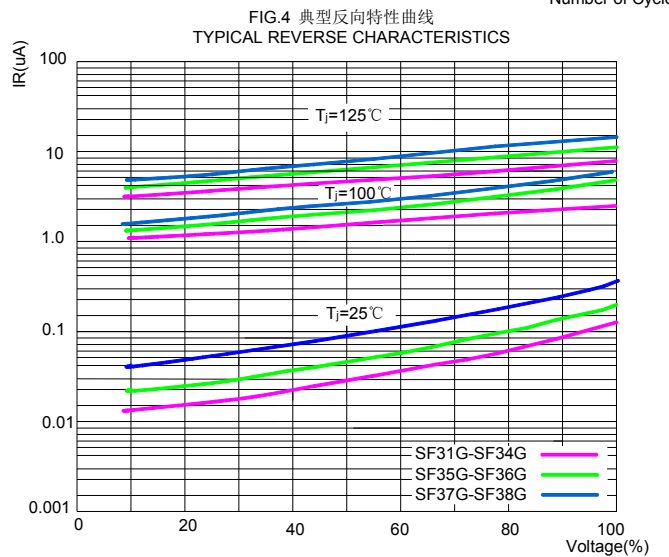
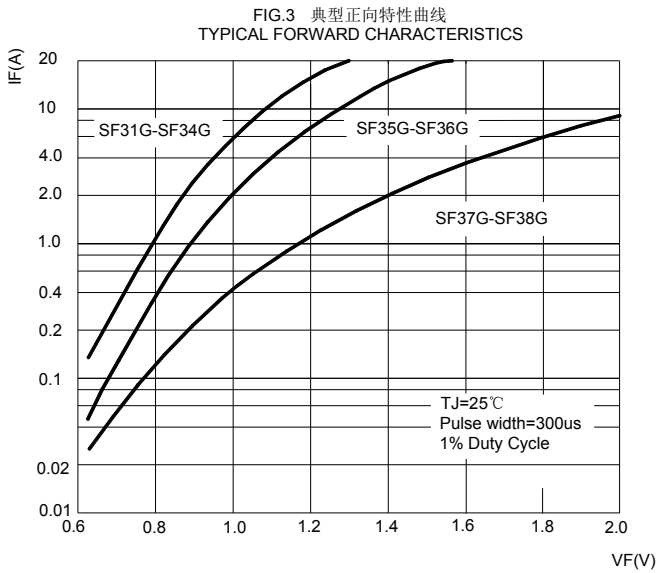
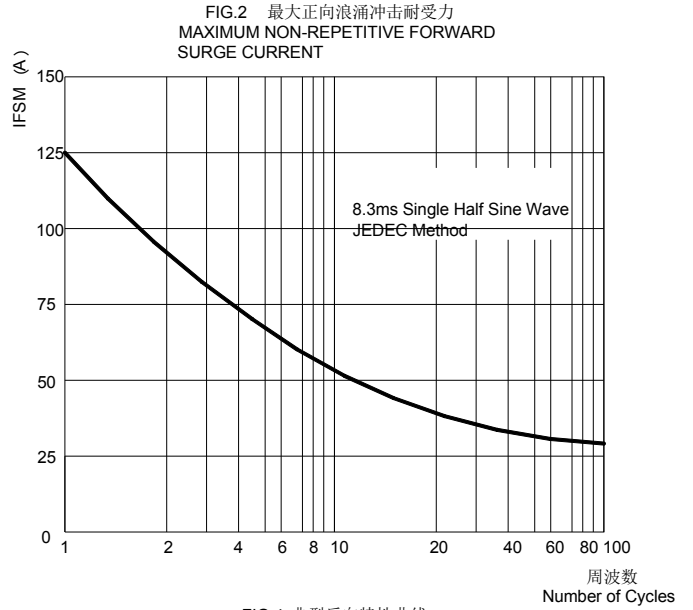
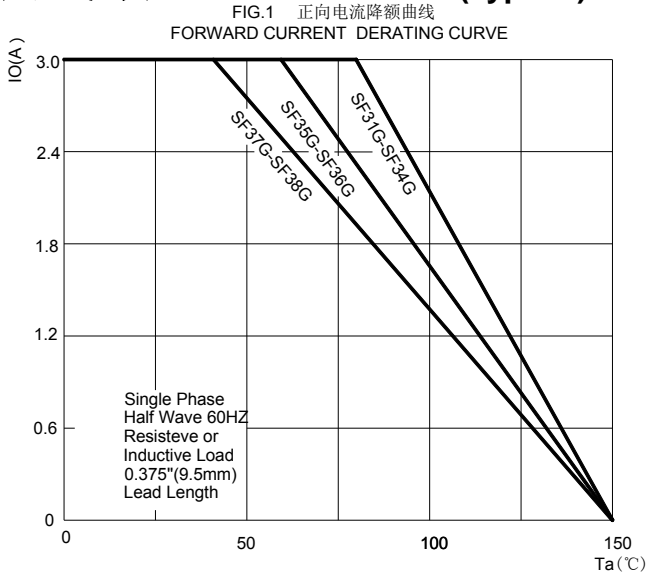


FIG.5 反向恢复时间试验电路及测试波形示意图  
Diagram of circuit and Testing wave form of reverse recovery time

