



超快恢复二极管 Super Fast Rectifier

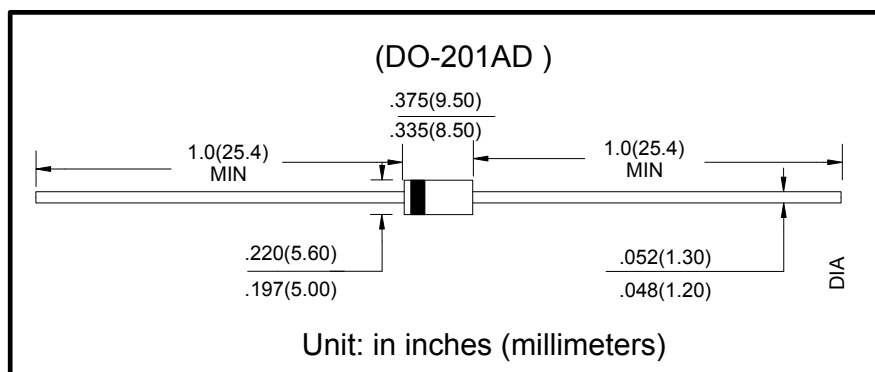
■特征 Features

- I_o 5.0A
- 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	SF5							
				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)	5.0							
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, $T_a=25^\circ\text{C}$	150							
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	SF5							
				1G	2G	3G	4G	5G	6G	7G	8G
正向峰值电压 Peak Forward Voltage	V_{FM}	V	$I_{FM}=5.0\text{A}$	0.95			1.3		1.7		
反向峰值电流 Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$							
	I_{RRM2}			$T_a=125^\circ\text{C}$							
反向恢复时间 Reverse Recovery time	t_r	ns	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{RR}=0.25\text{A}$	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	15							
结电容 Typical junction capacitance	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	100				80			



SF51G THRU SF58G

■特性曲线 (典型) Characteristics(Typical)

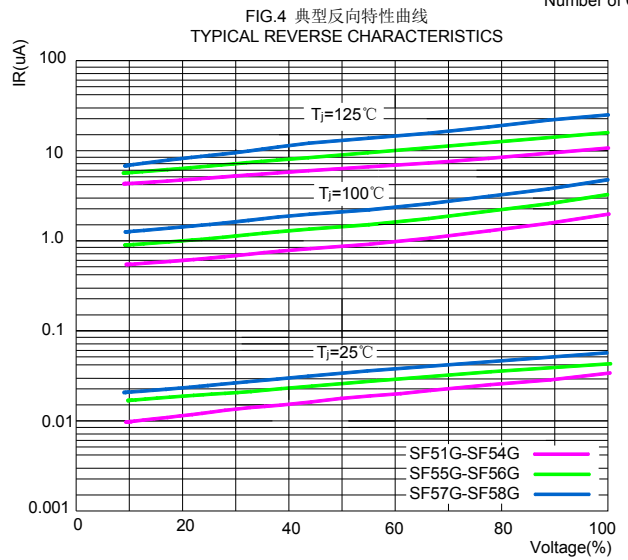
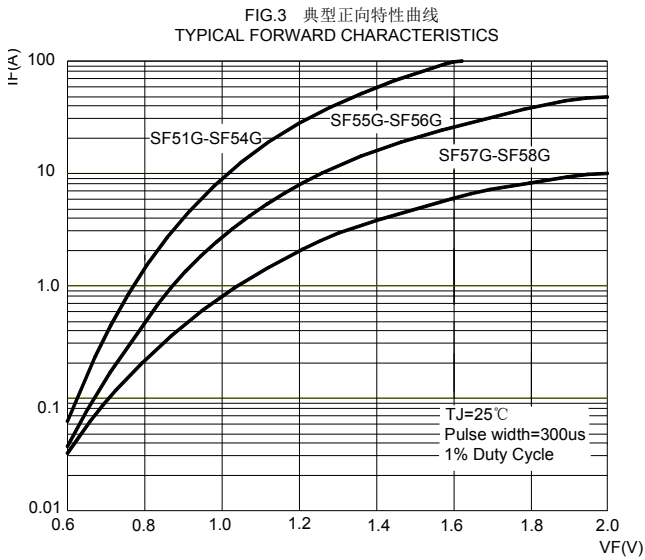
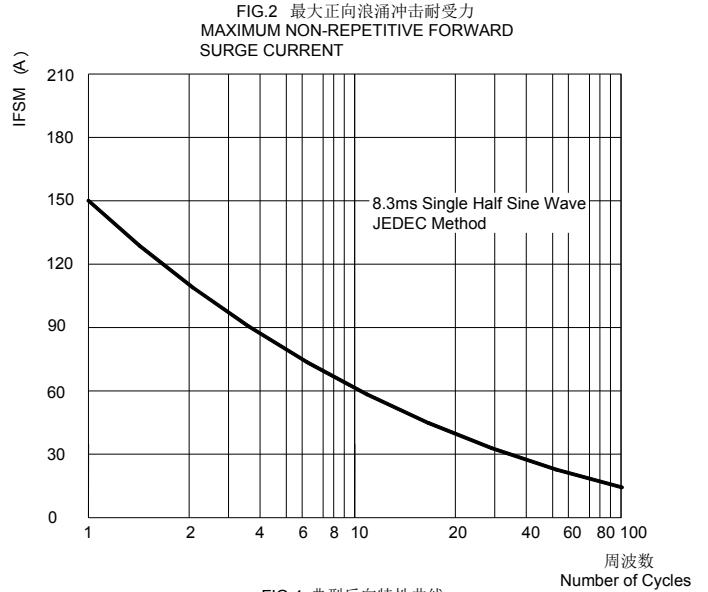
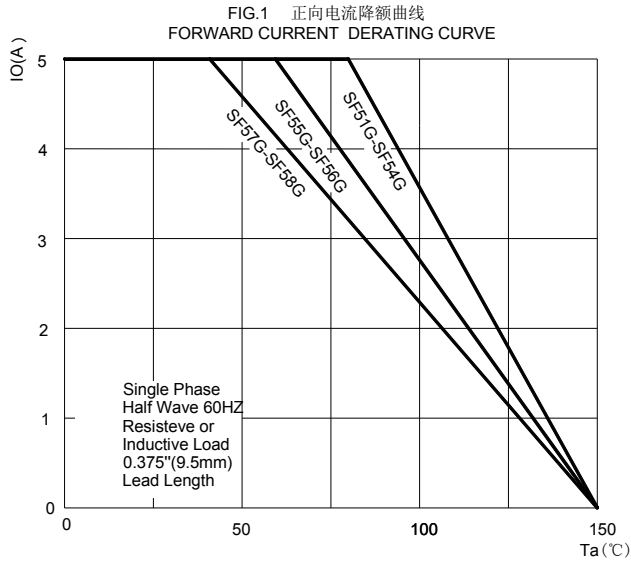


FIG.5 反向恢复时间试验电路及测试波形示意图
Diagram of circuit and Testing wave form of reverse recovery time

