



SF21 THRU SF28

超快恢复二极管 Super Fast Rectifier

■特征 Features

- I_o 2.0A
- VRRM 50V-600V
- 耐正向浪涌电流能力高
- High surge current capability

■用途 Applications

- 整流用 Rectifier

■极限值（绝对最大额定值）

•Limiting Values (Absolute Maximum Rating)

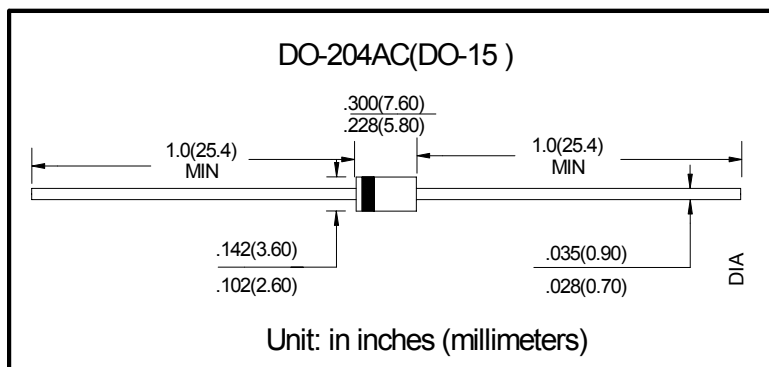
参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	SF							
				21	22	23	24	25	26	27	28
反向重复峰值电压 Repetitive Peak Reverse Voltage	VRRM	V		50	100	150	200	300	400	500	600
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	(正弦半波 60HZ, 电阻负载, $T_a=50^{\circ}\text{C}$) ; (60HZ Half-sine wave, Resistance load, $T_a=50^{\circ}\text{C}$)	2.0							
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, $T_a=25^{\circ}\text{C}$)	50							
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（ $T_a=25^{\circ}\text{C}$ 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		SF							
					21	22	23	24	25	26	27	28
正向峰值电压 Peak Forward Voltage	V _{FM}	V	I _{FM} =2.0A		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℃	5							
	T _a =125℃			50								
反向恢复时间 Reverse Recovery time	t _{rr}	ns	I _F =0.5A I _R =1A I _{RR} =0.25A		35							
热阻 (典型) Thermal Resistance(Typical)	R _θ J-A	℃/W	结和环境之间 Between junction and ambient		55							
	R _θ J-L		结和引线之间 Between junction and lead		20							

■外形尺寸和印记 Outline Dimensions and Mark



■ 特性曲线（典型） Characteristics(Typical)

图1: 正向电流降额曲线
FIG.1: FORWARD CURRENT DERATING CURVE

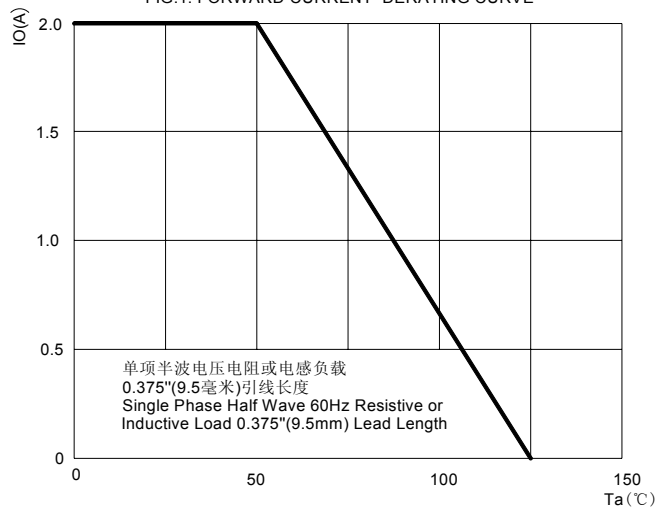


图2: 最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

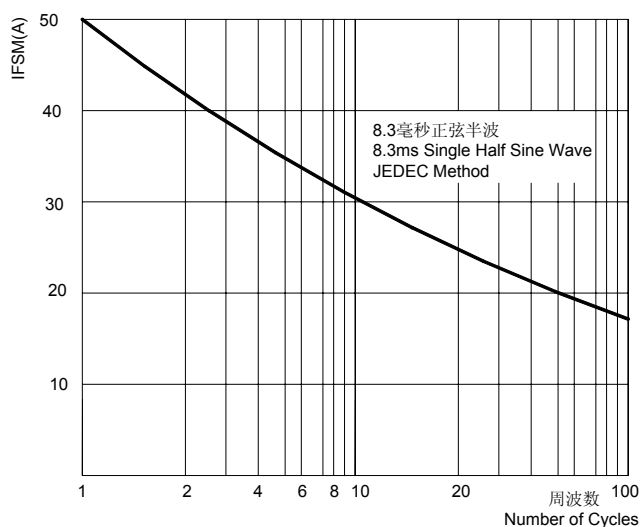


图3: 典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

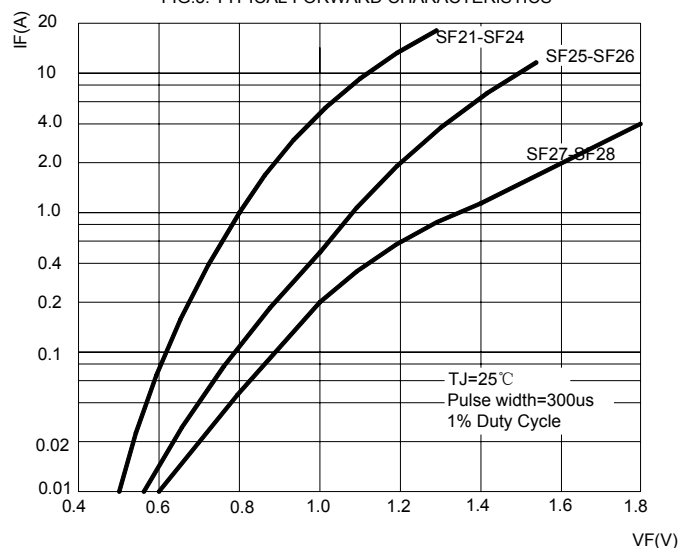


图4: 典型反向特性曲线
FIG.4: TYPICAL REVERSE CHARACTERISTICS

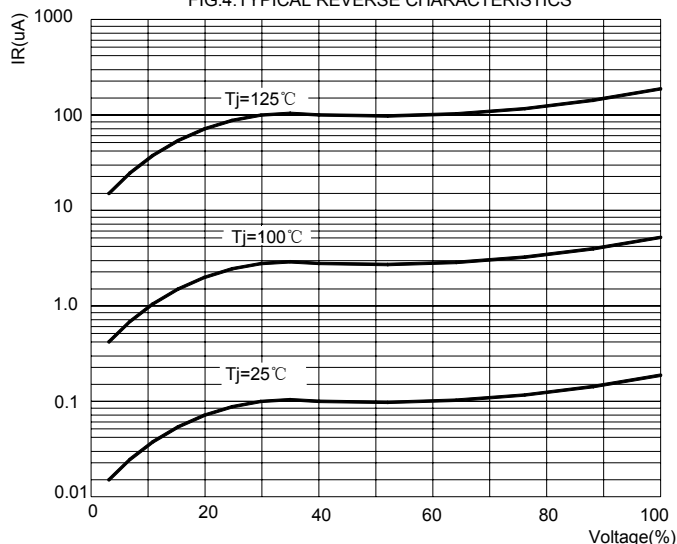


图5: 反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

