



超快恢复整流二极管 Super Fast Recovery Rectifier Diode

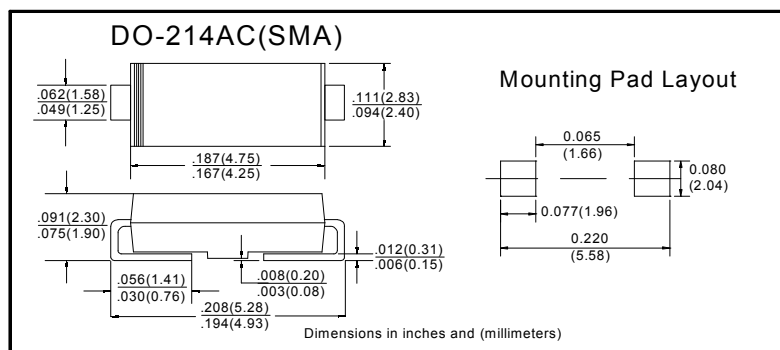
■特征 Features

- I_o 1.0A
- V_{RRM} 50V-600V
- 耐正向浪涌电流能力高
High surge current capability
- 封装：模压塑料
Cases: Molded plastic

■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	测试条件 Test Conditions	ES1							
				A	B	C	D	F	G	H	J
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， $T_L=120^{\circ}\text{C}$ 60HZ Half-sine wave, Resistance load, $T_L=120^{\circ}\text{C}$	1.0							
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, $T_a=25^{\circ}\text{C}$	30							
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		ES1							
					A	B	C	D	F	G	H	J
正向峰值电压 Peak Forward Voltage	V _F	V	I _F =1.0A		0.95				1.3		1.7	
最大反向恢复时间 Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A		35							
反向漏电流 Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5							
	I _{RRM2}			T _a =100℃	100							
热阻 (典型) Thermal Resistance(Typical)	R _{θJ-A}	℃/W	结和环境之间 Between junction and ambient		85 ¹⁾							
	R _{θJ-L}		结和终端之间 Between junction and terminal		35 ¹⁾							

备注: Notes:

¹⁾ 热阻从结到环境及从结到引线，在电路板的0.2" x 0.2" (5.0毫米 x 5.0毫米)铜垫片区

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ 特性曲线（典型） Characteristics(Typical)

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

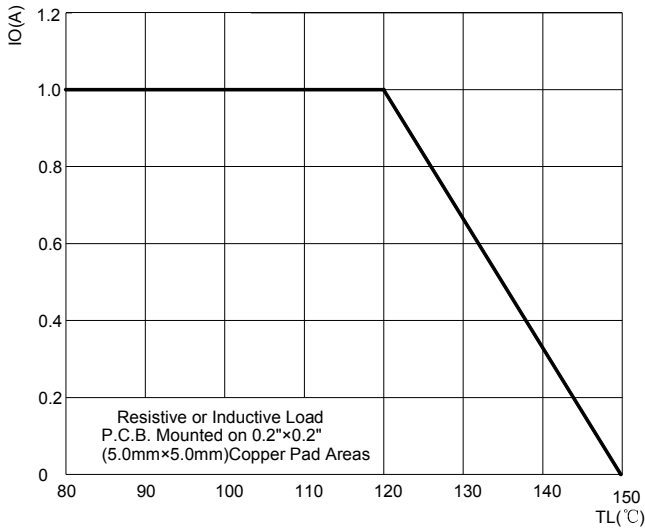


图2：最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

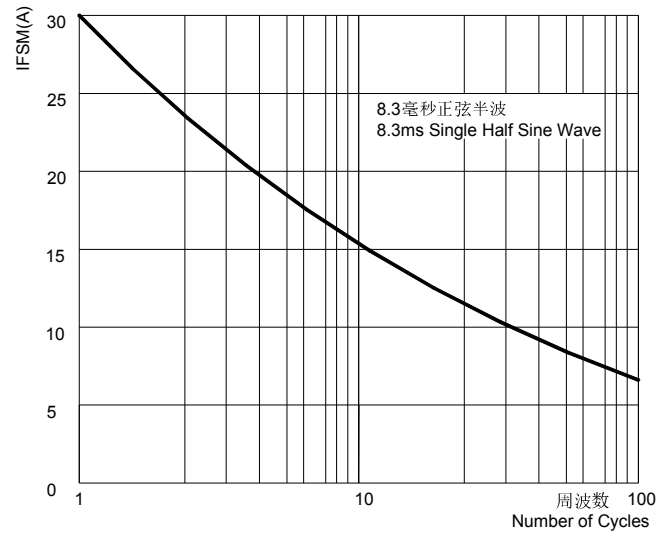


图3：典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

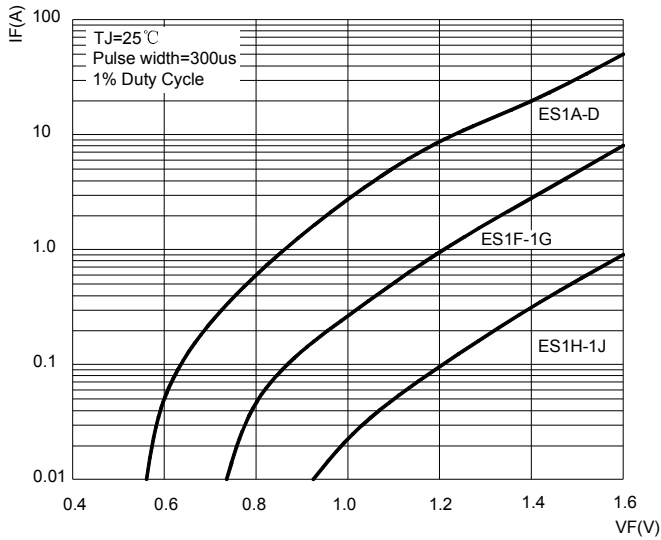


图4：典型反向特性曲线
FIG.4: TYPICAL REVERSE CHARACTERISTICS

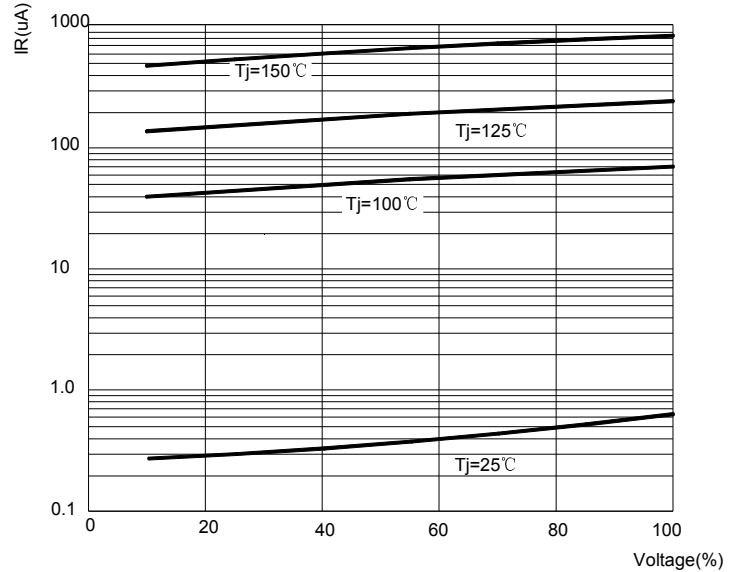


图5：反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

