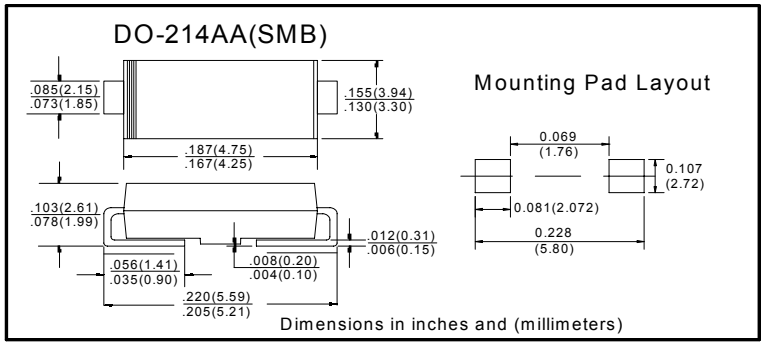
ES2A THRU ES2J

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

■特征 Features

- I_o 2.0A
- 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

■外形尺寸和印记 Outline Dimensions and Mark



■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	测试条件 Test Conditions	ES2							
				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=110℃ 60HZ Half-sine wave, Resistance load, T_L=110℃	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，Ta=25℃ 60Hz Half-sine wave ,1 cycle , Ta =25℃	50							
结温 Junction Temperature	T_J	℃		-55~+150							
储存温度 Storage Temperature	T_{STG}	℃		-55 ~ +150							

■电特性 （Ta=25℃ 除非另有规定）
Electrical Characteristics (T_a=25℃ Unless otherwise specified）

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition		ES2							
					A	B	C	D	F	G	H	J
正向峰值电压 Peak Forward Voltage	V_F	V	I_F=2.0A		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}	Ta =25℃	5.0							
	I_{RRM2}			Ta =100℃	350							
热阻(典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	结和环境之间 Between junction and ambient		75[1)]							
	$R_{\theta J-L}$		结和终端之间 Between junction and terminal		20[1)]							

备注：Notes:

1) 热阻从结到环境及从结到引线，在电路板的0.27" x 0.27" (7.0毫米 x 7.0毫米)铜垫片区
Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 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

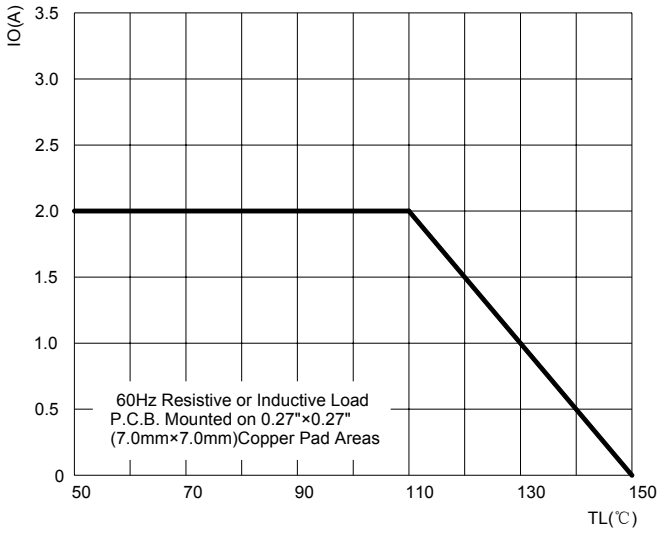


图2：最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

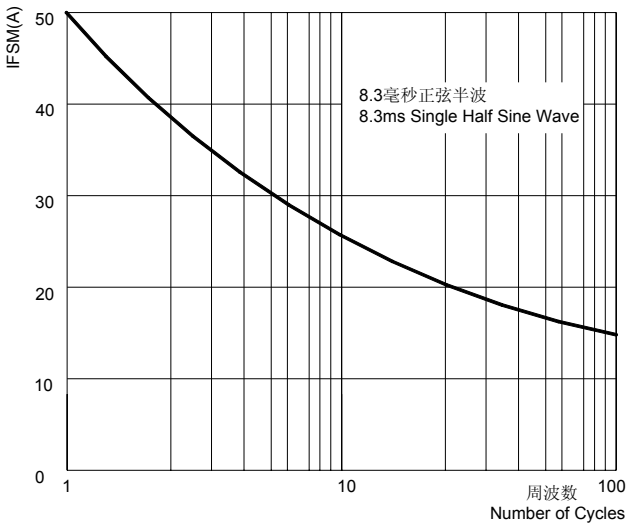


图3: 典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

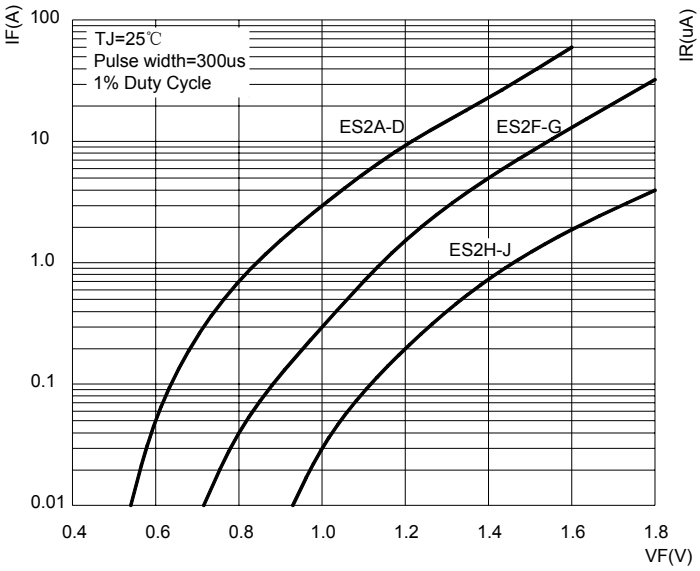


图4：典型反向特性曲线
FIG.4：TYPICAL REVERSE CHARACTERISTICS

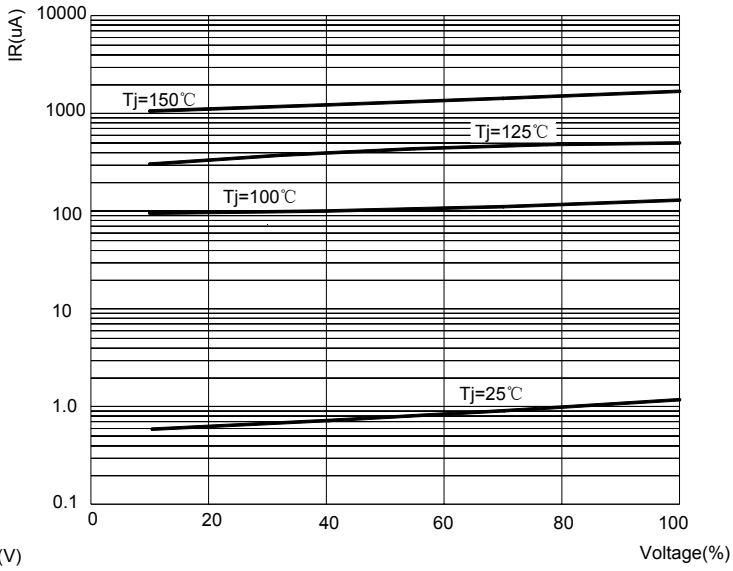
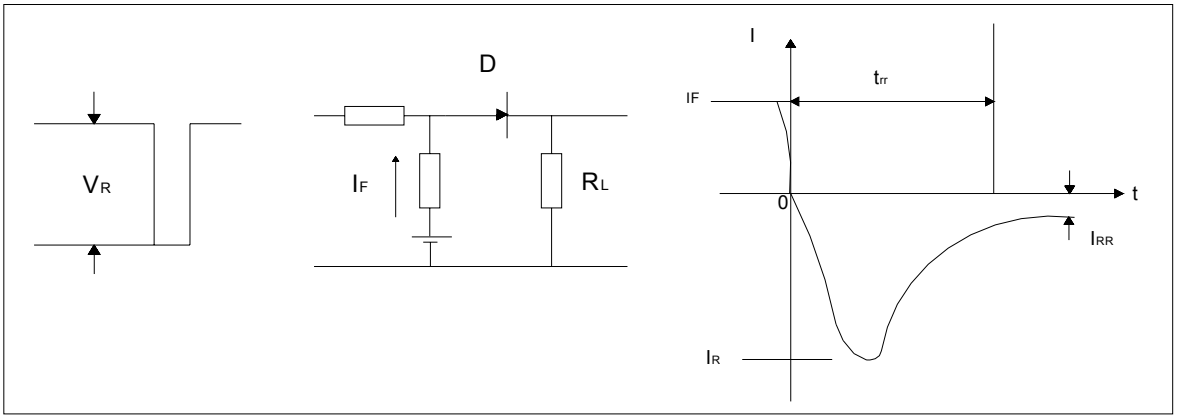


图5: 反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■标记信息 Marking Information

: 极性标识 Polarity Mark

ES2X : 器件型号 Device Number

X : A B C D F G H J