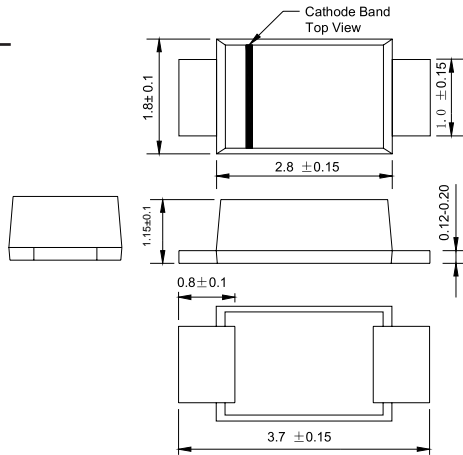


■外形尺寸和印记 **Outline Dimensions and Mark**

SOD-123FL



Dimensions in millimeters

特征 Features

- I_b 1A
- VRRM 50V-600V
- 玻璃钝化芯片
Glass passivated chip
- 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	测试条件 Test Conditions	E1						
				A	B	C	D	E	G	J
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	600
RMS 电压最高值 Maximum RMS Voltage	V_{RMS}	V		35	70	105	140	210	280	420
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	正弦半波 60Hz, 电阻负载, $T_L = 90^\circ C$ 60Hz Half-sine wave, Resistance load, $T_L = 120^\circ C$	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, $T_a = 25^\circ C$ 60Hz Half-sine wave, 1 cycle, $T_a = 25^\circ C$	25						
结温 Junction Temperature	T_J	$^\circ C$		-55 ~ +100						
储存温度 Storage Temperature	T_{STG}	$^\circ C$		-55 ~ +150						

电特性 (Ta=25°C 除非另有规定)

Electrical Characteristics (T=25°C Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	E1						
				A	B	C	D	E	G	J
正向峰值电压	V_F	V	$I_F = 1.0A$	0.95			1.25		1.70	
最大反向恢复时间 Maximum reverse recovery time	t_r	ns	$I_F = 0.5A$ $I_R = 1A$ $I_{RR} = 0.25A$	35						
反向漏电流 Peak Reverse Current	I_{RRM1}	μA	$V_{RM} = V_{RRM}$	$T_a = 25^\circ C$						
	I			$T_a = 100^\circ C$						
热阻 (典型) Thermal Resistance (Typical)	$R_{\theta JA}$	$^\circ C/W$	结和环境之间 Between junction and ambient				85 ¹⁾			
	$R_{\theta JL}$		结和终端之间 Between junction and terminal				35 ¹⁾			

■ 特性曲线 (典型)

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

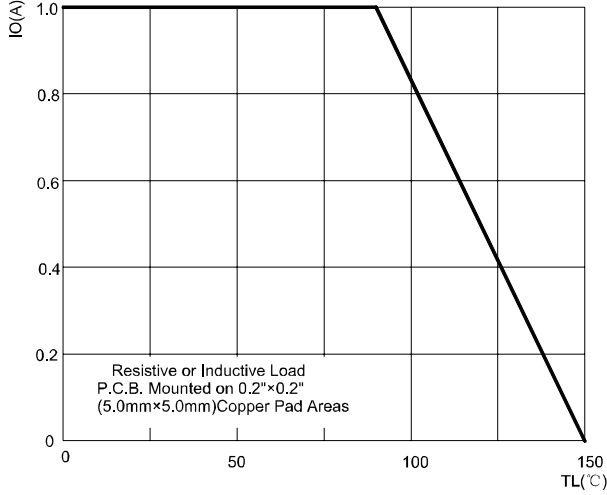


图2: 最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

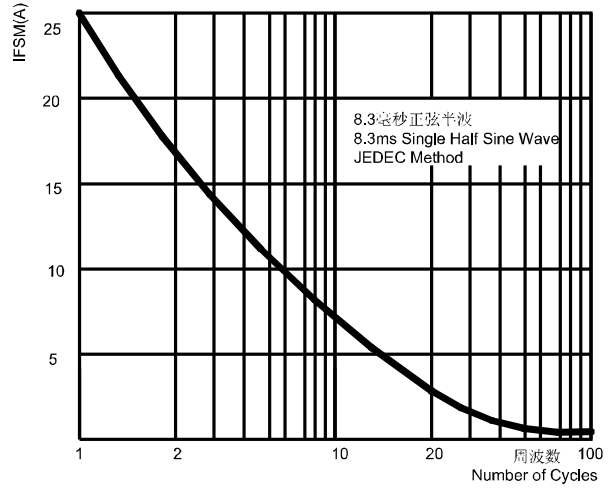


图3: 典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

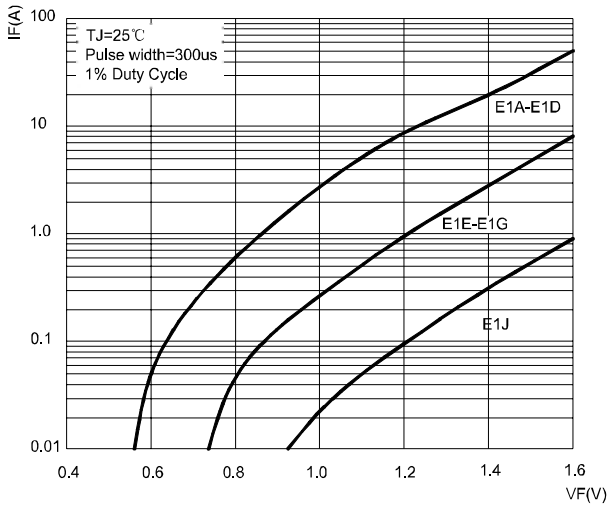


图4: 典型反向特性曲线
FIG.4: TYPICAL REVERSE CHARACTERISTICS

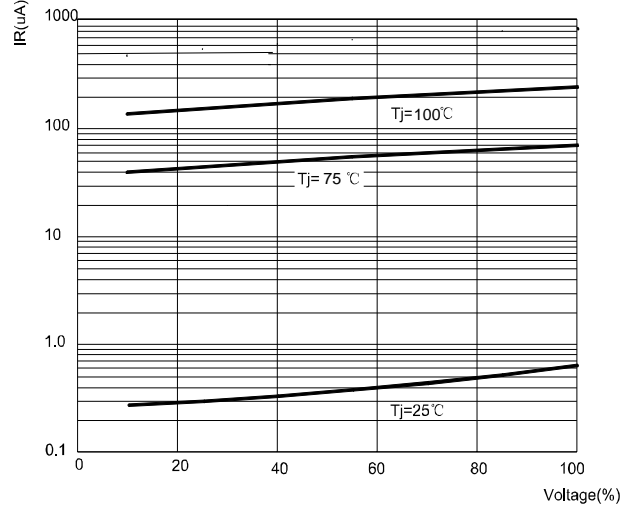


图5: 反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

