SOD-123FL Super Fast Recovery Diode 超快恢复二极管

■Features 特点

Built-in Strain Relief 内应力释放
Fast Switching Speed 快的开关速度
Super Fast Recovery time 超快恢复时间
Surface Mount Device 表面贴装器件
Case 封装:SOD-123FL

■Maximum Rating 最大额定值

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

Characteristic 特性参数	Symbol 符号	ES1 AW	ES1 BW	ES1 CW	ES1 DW	ES1 EW	ES1 GW	ES1 JW	Unit 单位
Marking 印字		E1A	E1B	E1C	E1D	E1E	E1G	E1J	
Repetitive Peak Reverse Voltage 重复峰值反向电压	V_{RRM}	50	100	150	200	300	400	600	V
DC Reverse Voltage 直流反向电压	V_R	50	100	150	200	300	400	600	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	35	70	105	140	210	280	420	V
Forward Rectified Current 正向整流电流	I_F	1							A
Peak Surge Current 峰值浪涌电流	I_{FSM}	30							A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	80							℃/W
Junction/Storage Temperature 结温/储藏温度	T_J,T_{stg}	-50to+150℃							℃

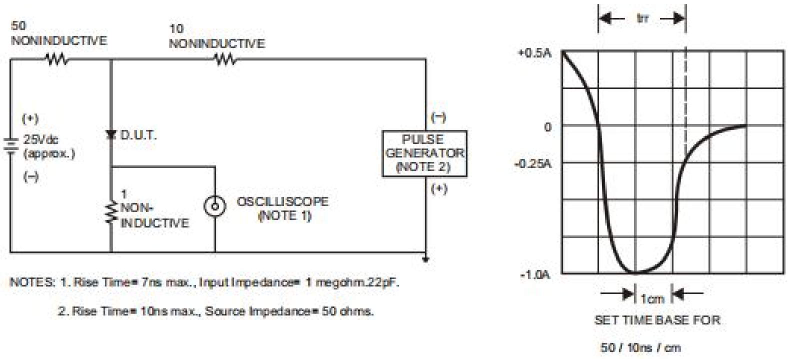
■Electrical Characteristics 电特性

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

Characteristic 特性参数	Symbol 符号	ES1AW-ES1DW	ES1EW-ES1GW	ES1JW	Unit 单位	Condition 条件
Forward Voltage 正向电压	V_F	0.95	1.25	1.7	V	I_F=1A
Reverse Current 反向电流	I_R	5(T_A=25℃) 500(T_A=100℃)			μA	V_R=V_{RRM}
Reverse Recovery Time 反向恢复时间	Trr	35			nS	I_F=0.5A,I_R=1A Irr=0.25A
Junction Capacitance 结电容	C_J	15			pF	V_R=4V, f=1MHz

■Typical Characteristic Curve 典型特性曲线

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

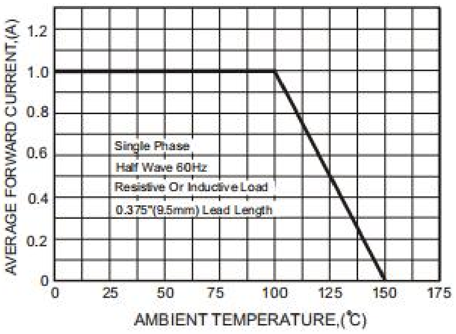


FIG.3-TYPICAL FORWARD CHARACTERISTICS

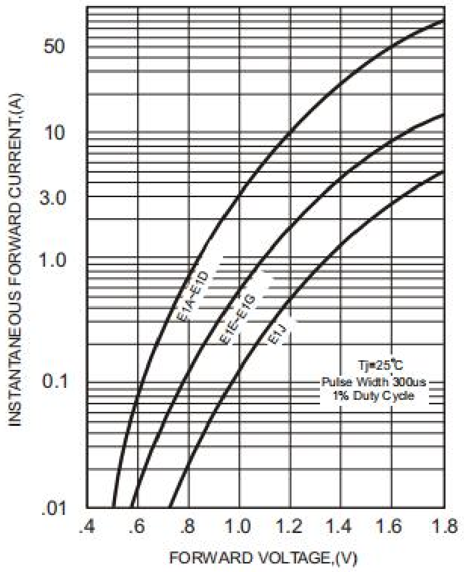


FIG.4-TYPICAL REVERSE CHARACTERISTICS

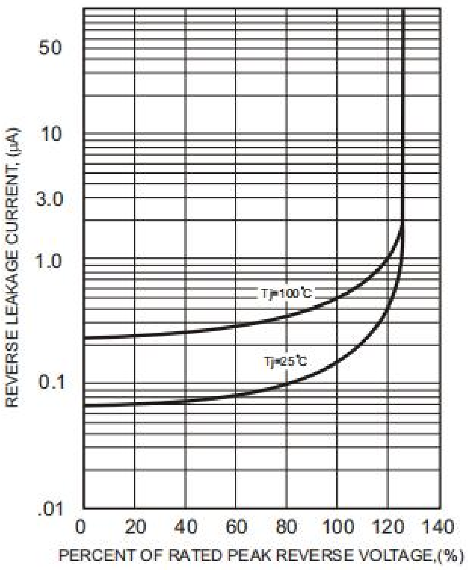


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

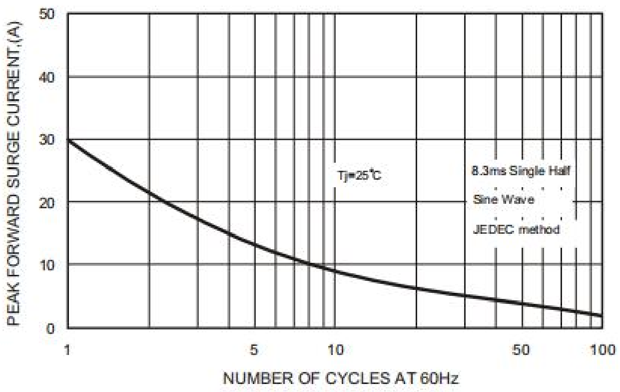
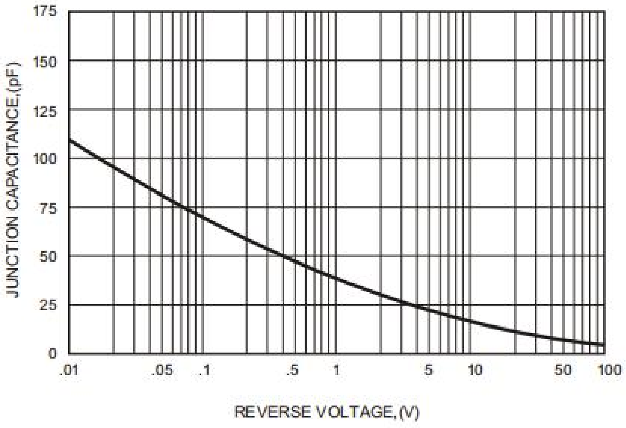
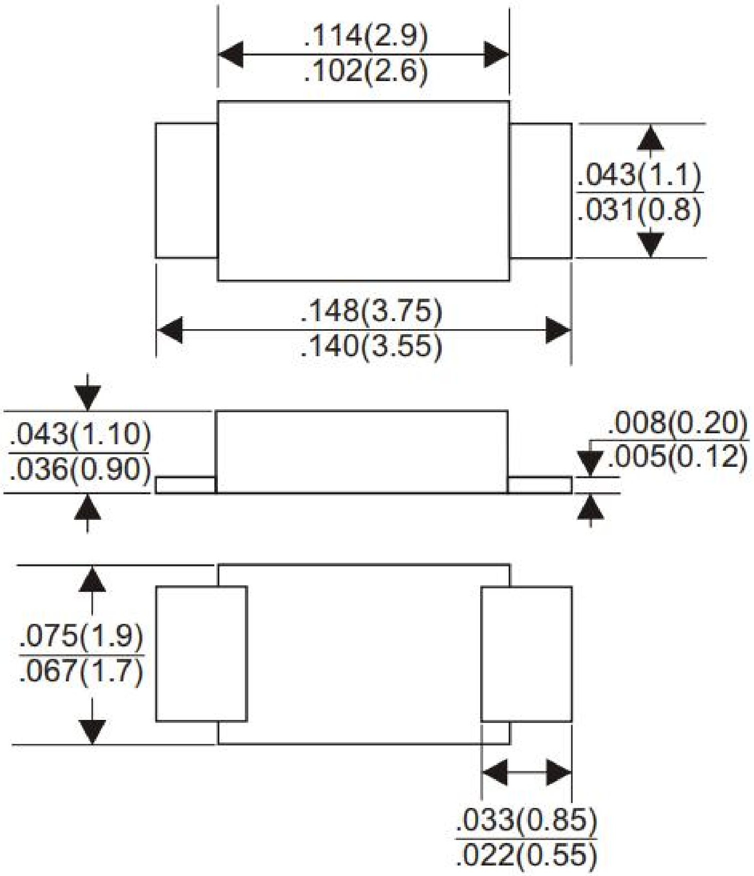


FIG.6-TYPICAL JUNCTION CAPACITANCE



■Dimension 外形封装尺寸



Dimensions in inches and (millimeters)