

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

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	ES2 AW	ES2 BW	ES2 CW	ES2 DW	ES2 EW	ES2 GW	ES2 JW	Unit 单位
Marking 印字		E2A	E2B	E2C	E2D	E2E	E2G	E2J	
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	2							A
Peak Surge Current 峰值浪涌电流	I_{FSM}	50							A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	60							$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-50\text{to}+150$							$^{\circ}\text{C}$

■Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	ES2AW-ES2DW	ES2EW-ES2GW	ES2JW	Unit 单位	Condition 条件
Forward Voltage 正向电压	V_F	0.95	1.25	1.7	V	$I_F=2\text{A}$
Reverse Current 反向电流	I_R	5($T_A=25^{\circ}\text{C}$) 500($T_A=100^{\circ}\text{C}$)			μA	$V_R=V_{RRM}$
Reverse Recovery Time 反向恢复时间	T_{rr}	35			nS	$I_F=0.5\text{A}, I_R=1\text{A}$ $I_{rr}=0.25\text{A}$
Junction Capacitance 结电容	C_J	50			pF	$V_R=4\text{V}$, $f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

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

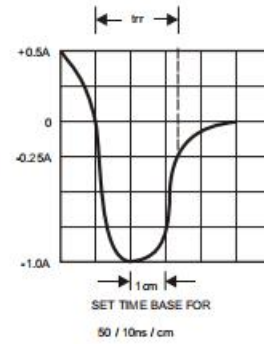
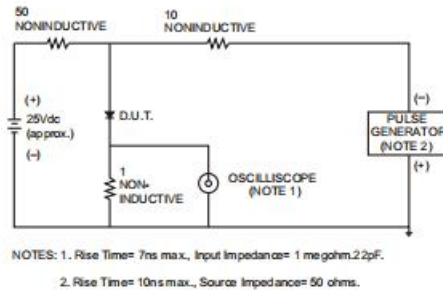


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

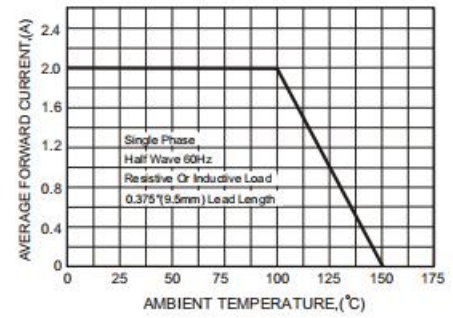


FIG.3-TYPICAL FORWARD CHARACTERISTICS

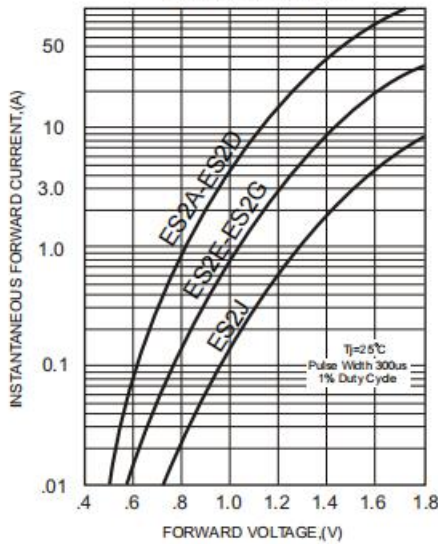


FIG.4-TYPICAL REVERSE CHARACTERISTICS

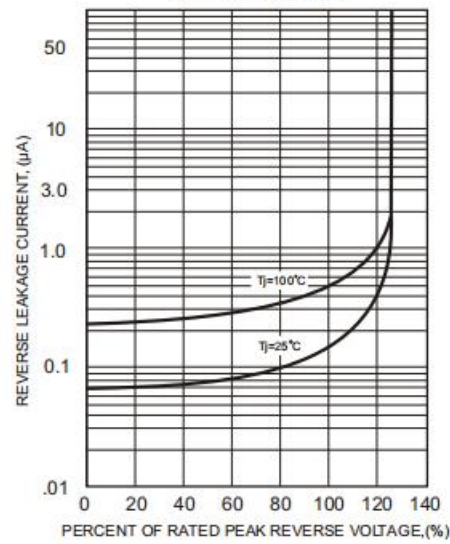


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

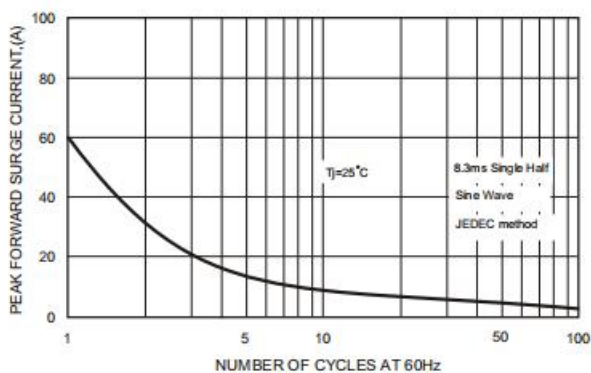
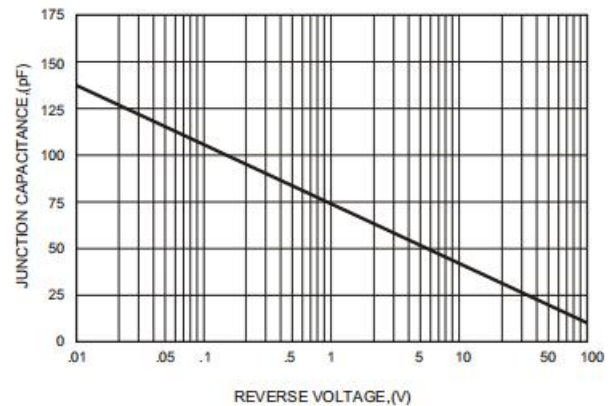
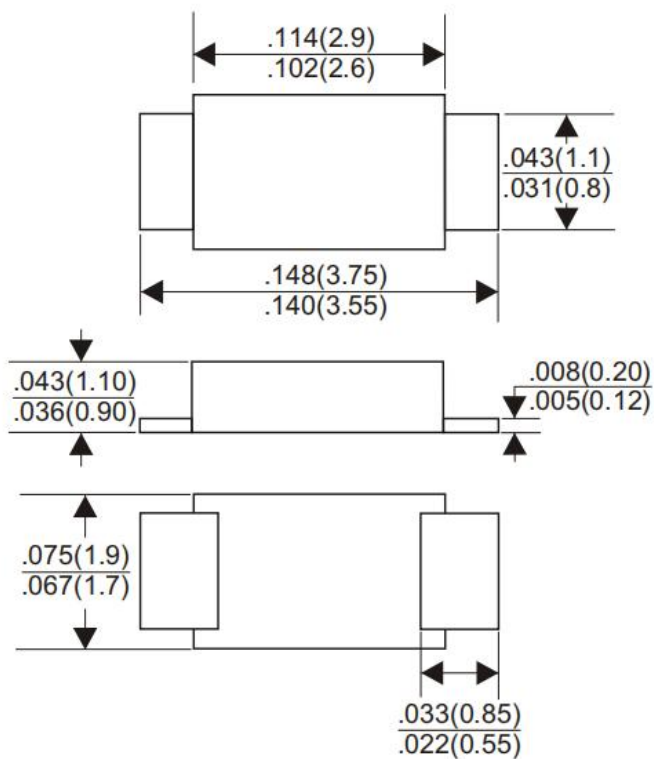


FIG.6-TYPICAL JUNCTION CAPACITANCE



■ Dimension 外形封装尺寸



Dimensions in inches and (millimeters)