

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	ES1AW	ES1BW	ES1CW	ES1DW	ES1EW	ES1GW	ES1JW	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							$^{\circ}\text{C}/\text{W}$
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	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	$I_F=1\text{A}$
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	15			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

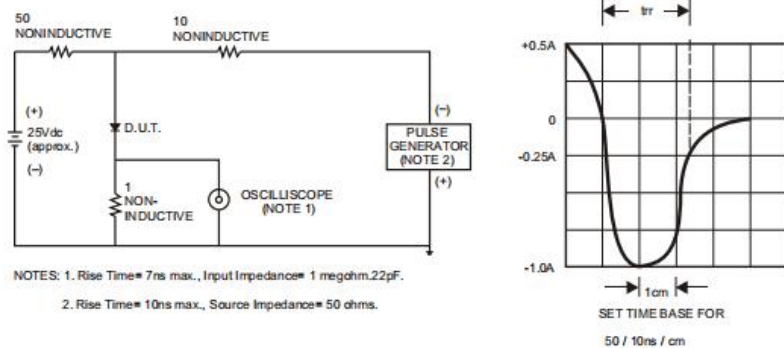


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

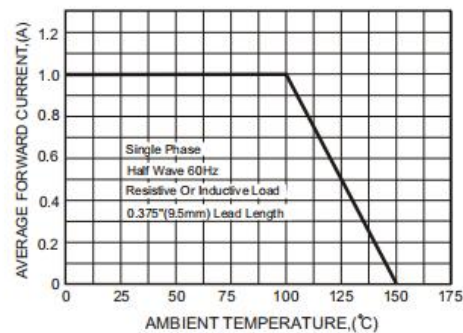


FIG.3-TYPICAL FORWARD CHARACTERISTICS

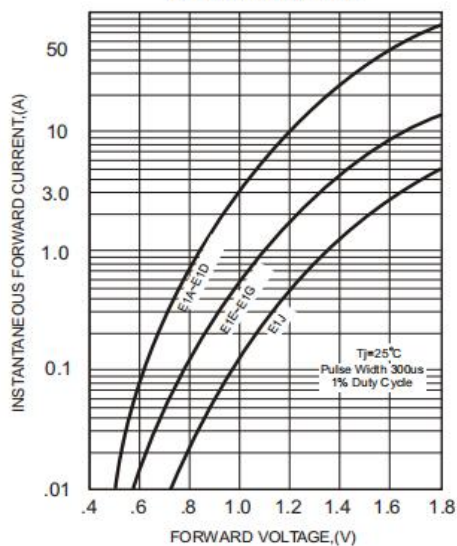


FIG.4-TYPICAL REVERSE CHARACTERISTICS

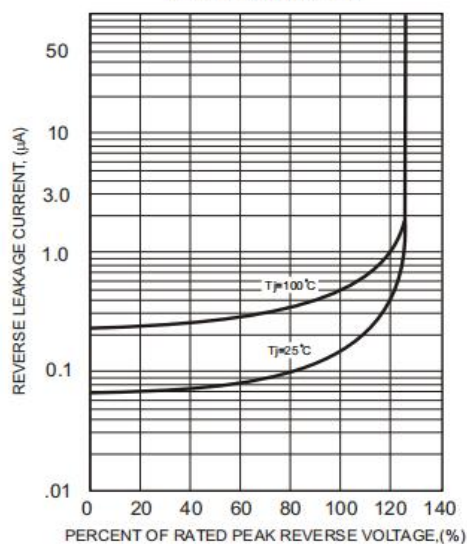


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

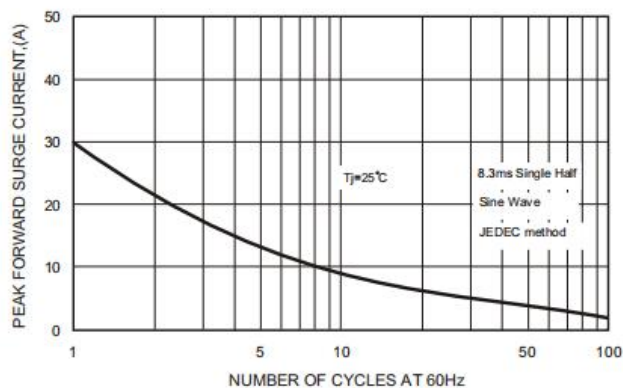
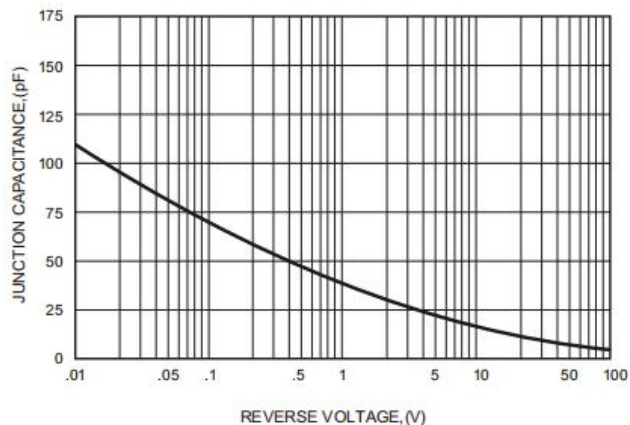
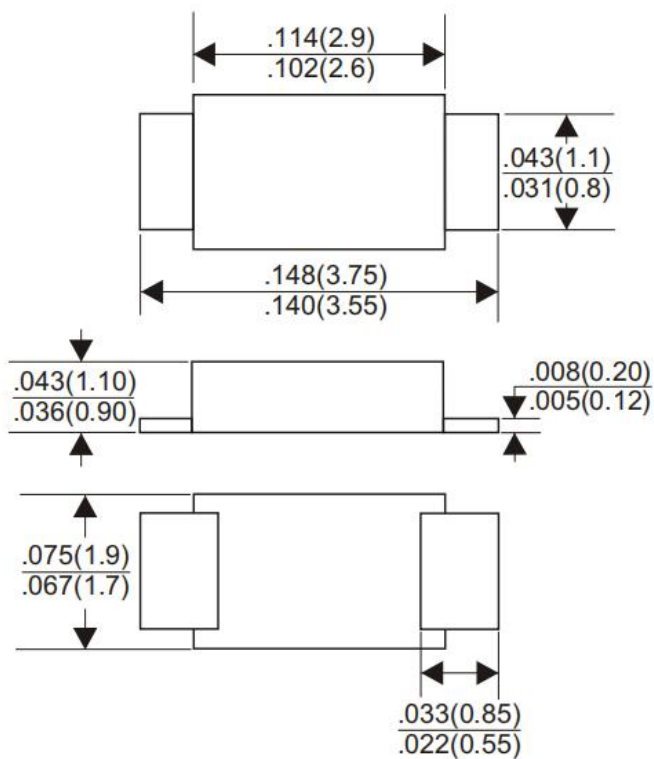


FIG.6-TYPICAL JUNCTION CAPACITANCE



■ Dimension 外形封装尺寸



Dimensions in inches and (millimeters)