

## 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  $25^{\circ}\text{C}$ )

| 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  $25^{\circ}\text{C}$ )

| 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( $T_A=25^{\circ}\text{C}$ )<br>500( $T_A=100^{\circ}\text{C}$ ) |             |       | $\mu\text{A}$ | $V_R=V_{RRM}$                                             |
| Reverse Recovery Time 反向恢复时间 | $T_{rr}$  | 35                                                                |             |       | nS            | $I_F=0.5\text{A}, I_R=1\text{A}$<br>$I_{rr}=0.25\text{A}$ |
| Junction Capacitance 结电容     | $C_J$     | 15                                                                |             |       | pF            | $V_R=4\text{V}$ ,<br>$f=1\text{MHz}$                      |

## ■ Typical Characteristic Curve 典型特性曲线

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

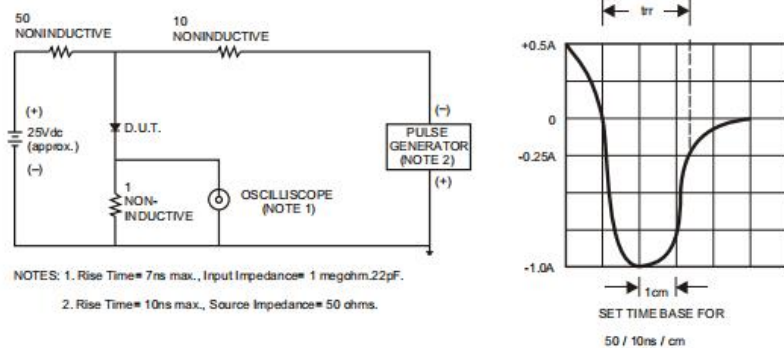


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

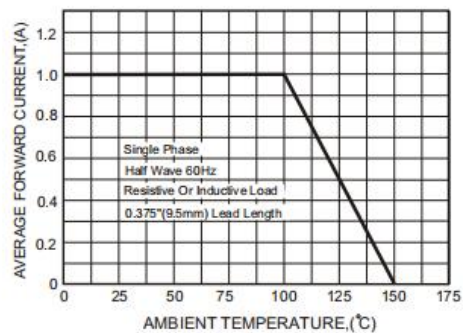


FIG.3-TYPICAL FORWARD CHARACTERISTICS

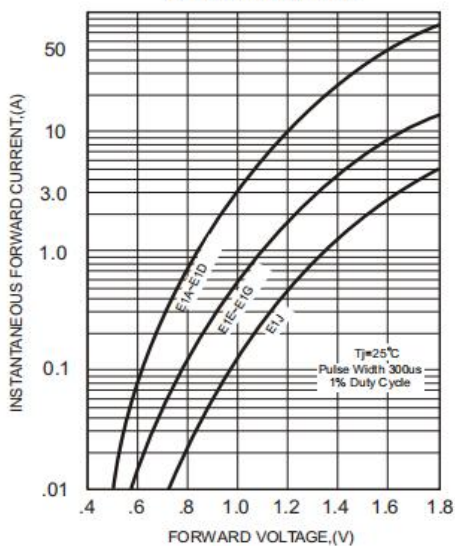


FIG.4-TYPICAL REVERSE CHARACTERISTICS

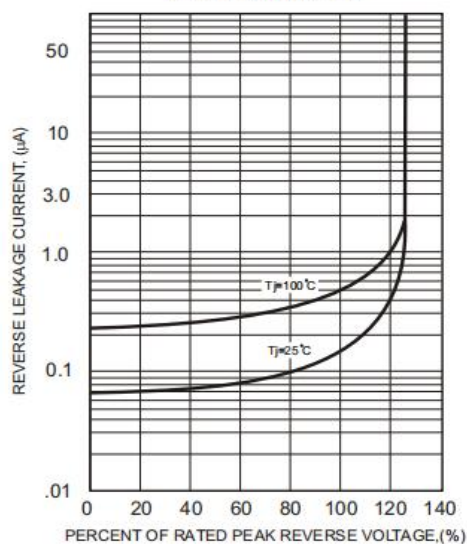


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

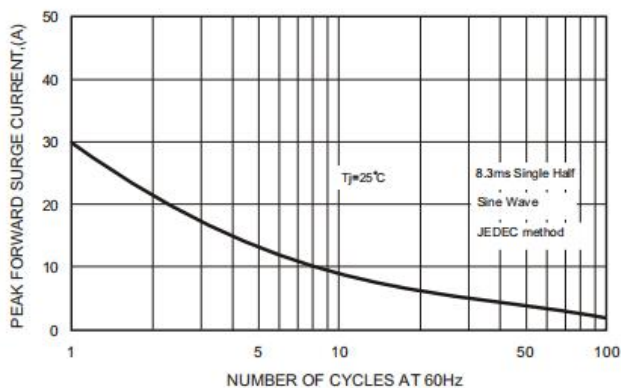
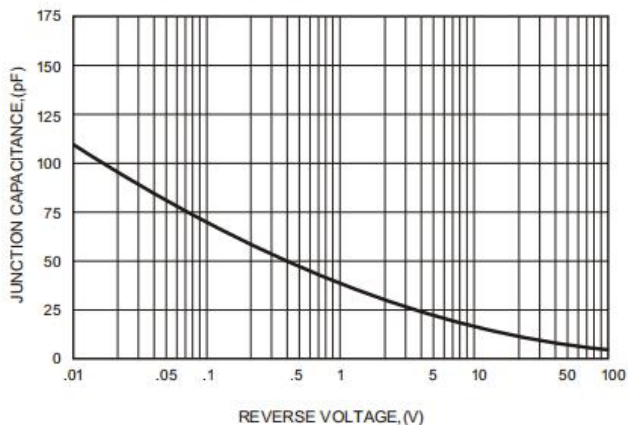
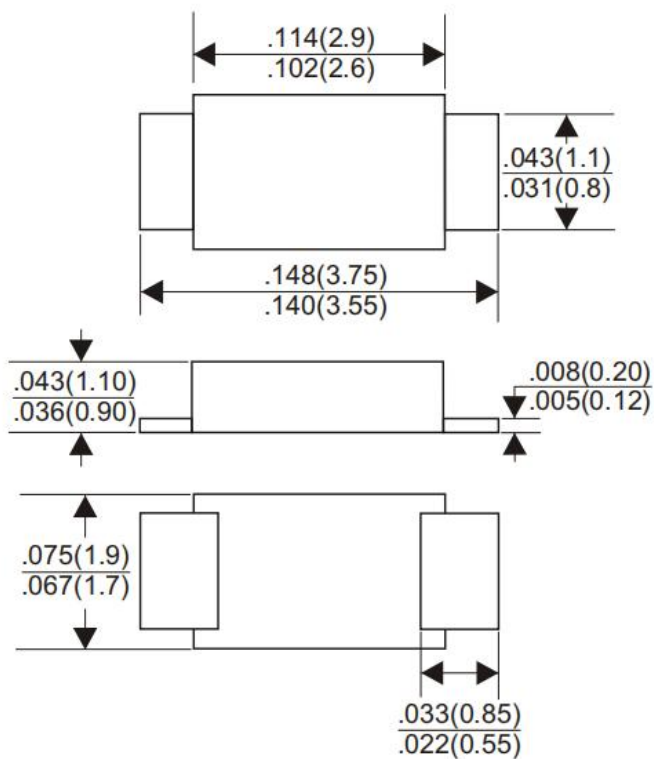


FIG.6-TYPICAL JUNCTION CAPACITANCE



■ Dimension 外形封装尺寸



Dimensions in inches and (millimeters)