

SOD-123FL Super Fast Recovery Diode 特快恢复二极管**■Features 特点**

High current capability 高电流能力
 Low forward voltage drop 低正向压降
 Super Fast Recovery time 特快恢复时间
 Surface mount device 表面贴装器件
 Case 封装:SOD-123FL

**■Maximum Rating 最大额定值**(T_A=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	US1AW	US1BW	US1DW	US1GW	US1JW	US1KW	US1MW	Unit 单位
Marking 印字		U1A	U1B	U1D	U1G	U1J	U1K	U1M	
Repetitive Peak Reverse Voltage 重复峰值反向电压	V _{RRM}	50	100	200	400	600	800	1000	V
DC Reverse Voltage 直流反向电压	V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage 反向电压均方根值	V _{R(RMS)}	35	70	140	280	420	560	700	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 _{θJA}	80							°C/W
Junction/Storage Temperature 结温/储藏温度	T _J , T _{stg}	-50to+150°C							

■Electrical Characteristics 电特性(T_A=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	U1A-U1D	U1G	U1J-U1M	Unit 单位	Condition 条件
Forward Voltage 正向电压	V _F	1.0	1.3	1.7	V	I _F =1A
Reverse Current 反向电流	I _R	5(T _A =25°C) 50(T _A =100°C)			μA	V _R =V _{RRM}
Reverse Recovery Time 反向恢复时间	T _{rr}	50		75	nS	I _F =0.5A, I _R =1A I _{rr} =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-TYPICAL FORWARD

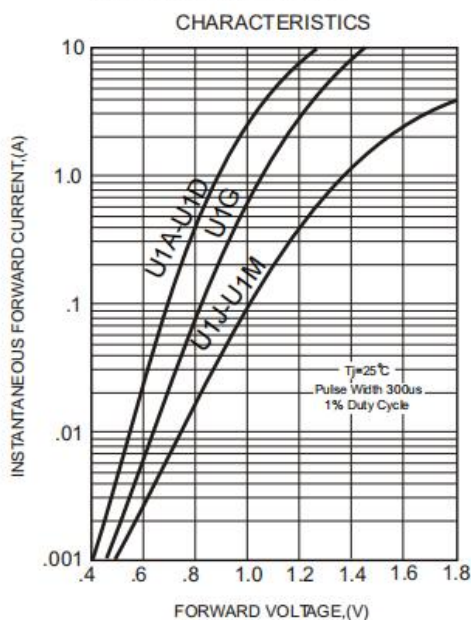


FIG.2-TYPICAL FORWARD CURRENT
DERATING CURVE

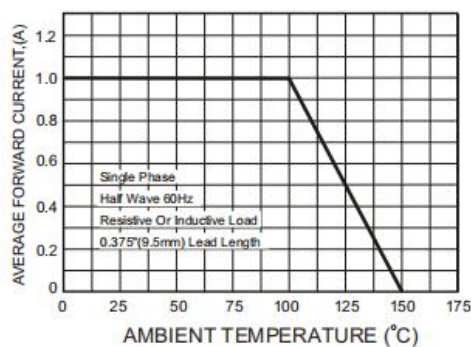


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

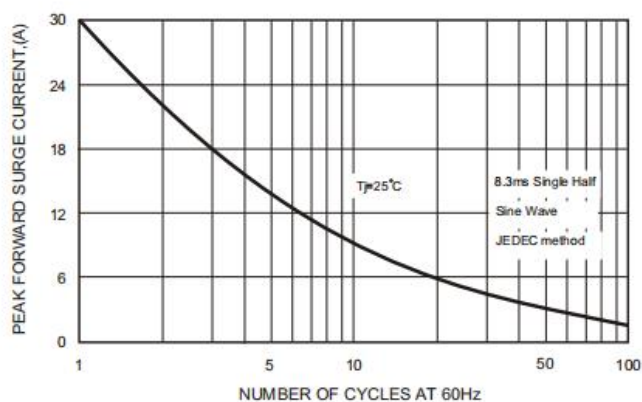
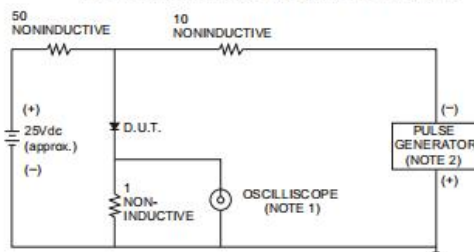


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE
RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time $\leq 7\text{ns}$ max., Input Impedance $\approx 1\text{ megohm}$, 22pF.

2. Rise Time $\leq 10\text{ns}$ max., Source Impedance $\approx 50\text{ ohms}$.

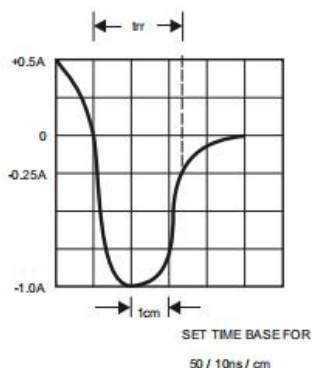
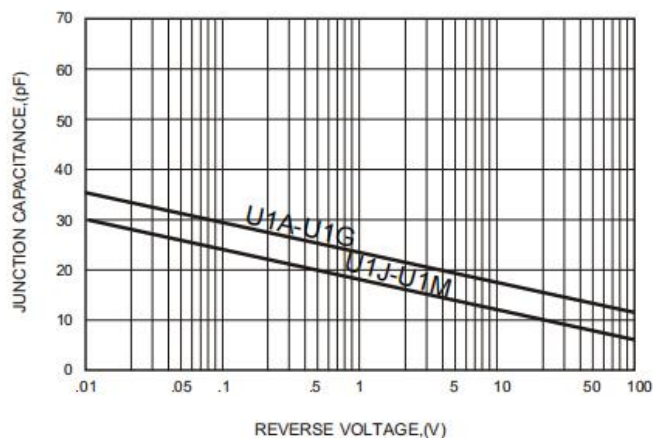
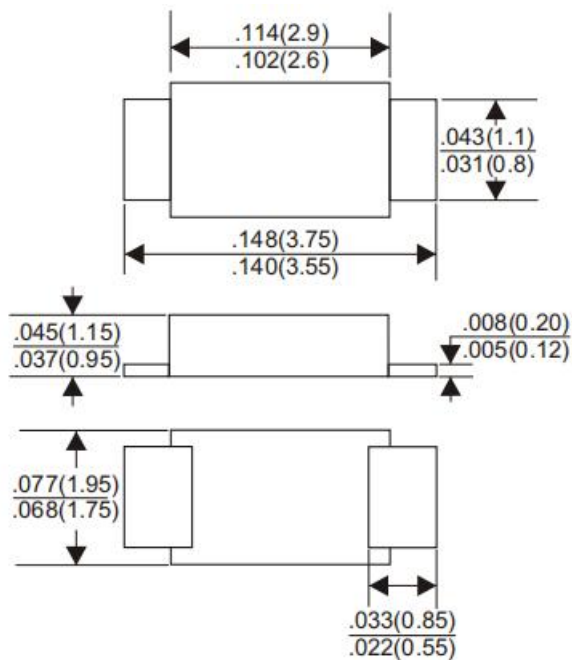


FIG.5-TYPICAL JUNCTION CAPACITANCE



■Dimension 外形封装尺寸



Dimensions in inches and (millimeters)