

SOD-123 Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

■Features 特点

Low forward voltage drop 低正向压降

High current capability 高电流能力

Surface mount device 表面贴装器件

Case 封装:SOD-123

Marking 印字: S4



■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	Rating 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	40	V
DC Reverse Voltage 直流反向电压	V_R	40	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	28	V
Forward Rectified Current 正向整流电流	I_F	0.35	A
Peak Surge Current 峰值浪涌电流	I_{FSM}	2	A
Power Dissipation 耗散功率	P_D	310	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	400	$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-50\text{to}+150^{\circ}\text{C}$	$^{\circ}\text{C}$

■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	Min 最小值	Type 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	40			V	$I_R=1\text{mA}$
Forward Voltage 正向电压	V_F			0.6	V	$I_F=0.2\text{A}$
Reverse Current 反向电流	I_R			0.05 8	mA	$V_R=40\text{V}(25^{\circ}\text{C})$ (100°C)
Diode Capacitance 二极管电容	C_T		20		pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

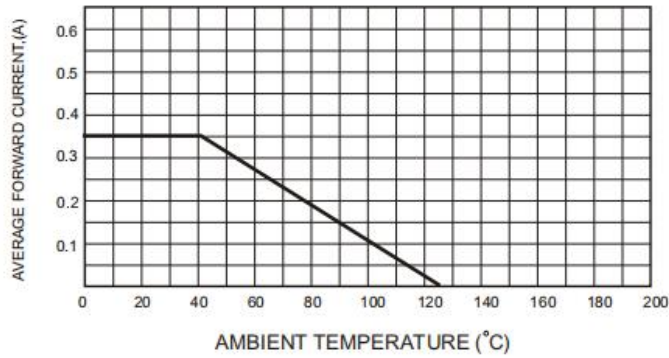


FIG.3 - Power Derating Curve

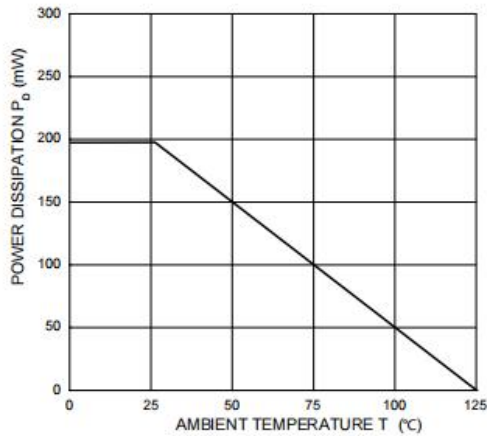


FIG.4-TYPICAL JUNCTION CAPACITANCE

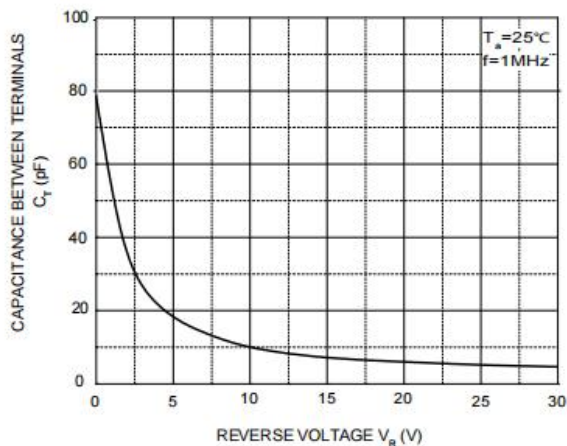


FIG.2-TYPICAL FORWARD CHARACTERISTICS

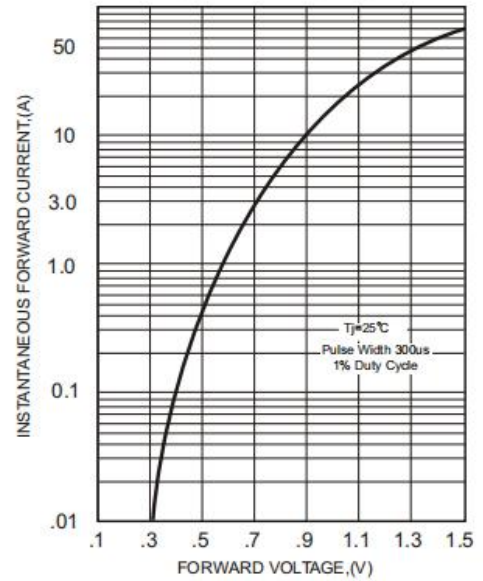
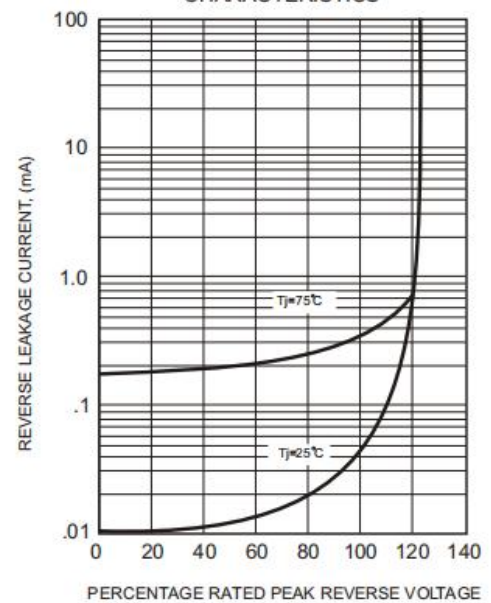
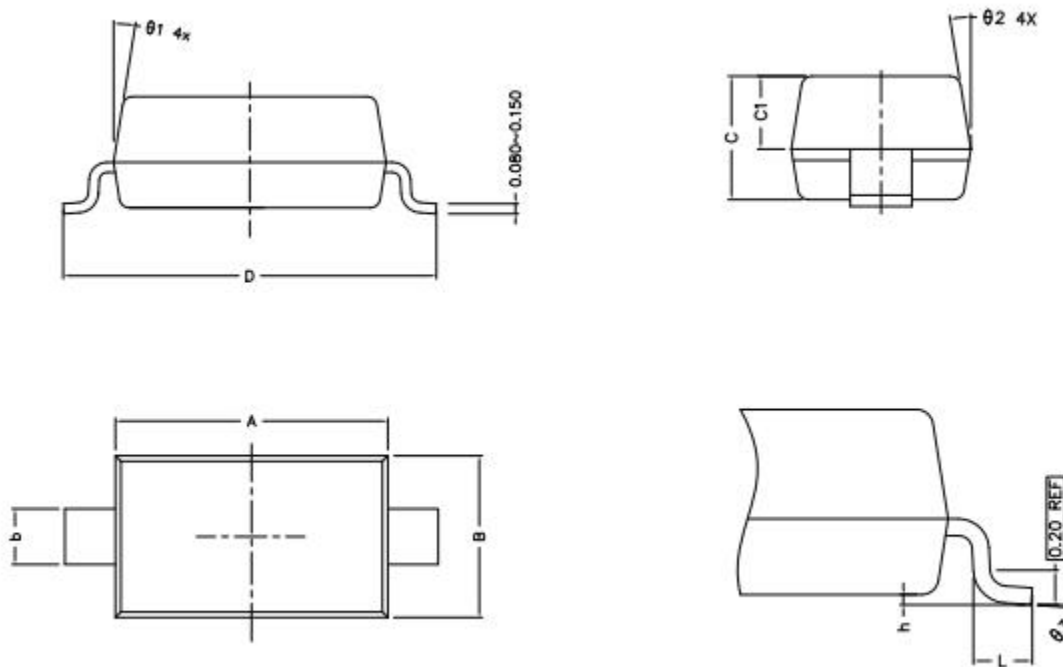


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



■ **Dimension** 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.600	2.800	0.102	0.110
B	1.500	1.700	0.059	0.067
C	1.050	1.150	0.041	0.045
C1	0.600	0.700	0.024	0.028
D	3.550	3.850	0.140	0.152
L	0.250	0.450	0.010	0.018
b	0.450	0.650	0.018	0.026
h	0.020	0.120	0.001	0.005
θ 3	0°	7°	0°	7°