



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

SD103AW

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

■ Features 特点

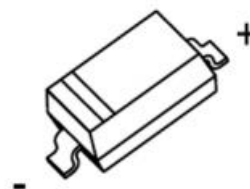
Low forward voltage drop 低正向压降

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	$V_{R(RMS)}$	21	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}	-50to+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

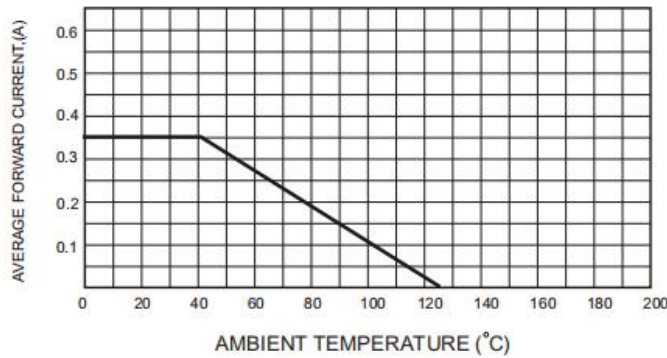


FIG.3 - Power Derating Curve

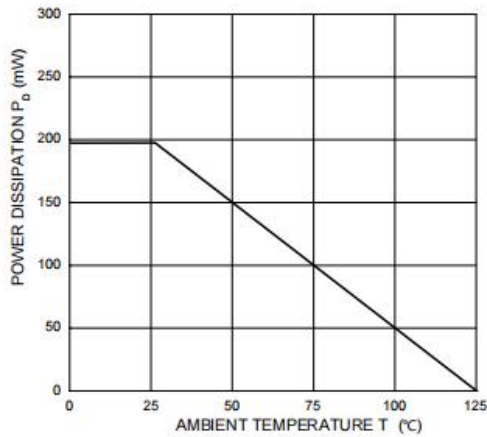


FIG.4-TYPICAL JUNCTION CAPACITANCE

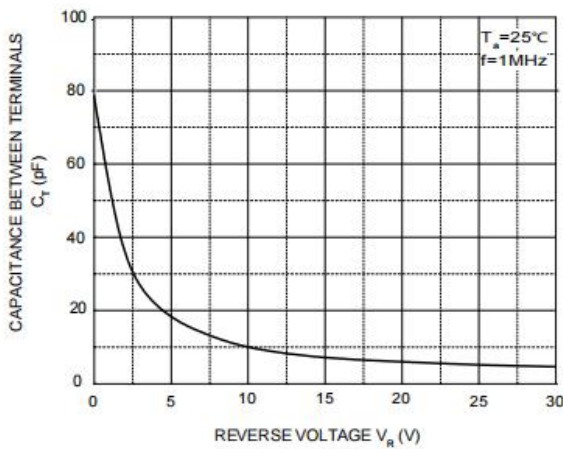


FIG.2-TYPICAL FORWARD CHARACTERISTICS

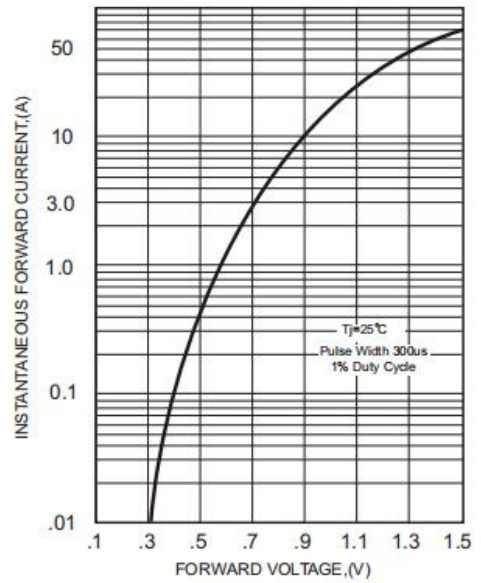
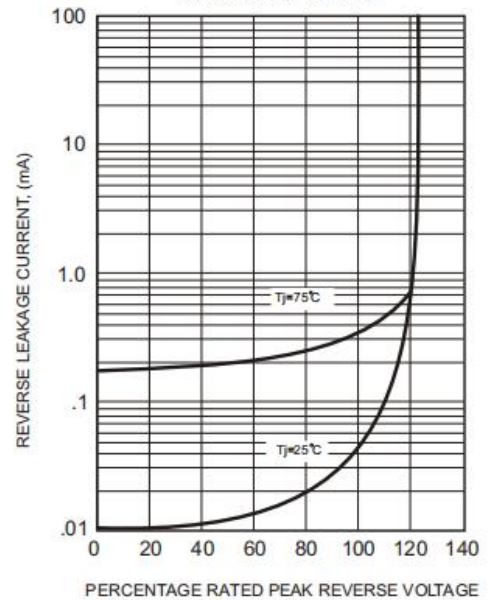
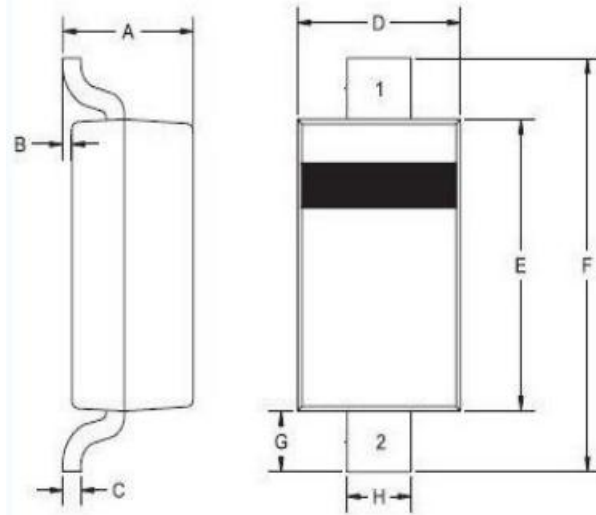


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



■ Dimension 外形封装尺寸



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0,037	0,053	0,95	1,35
B	0,000	0,005	0,00	0,12
C	-	0,008	-	0,20
D	0,055	0,071	1,40	1,80
E	0,098	0,110	2,50	2,80
F	0,142	0,154	3,60	3,90
G	0,016	-	0,40	-
H	0,020	0,028	0,50	0,70