



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

BAV19W-BAV21W

SOD-123 Switching Diode 开关二极管

■ Features 特点

Fast Switching Speed 快的开关速度

Surface mount device 表面贴装器件

High Conductance 高电导率

Case 封装:SOD-123



■ 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	BAV19W	BAV20W	BAV21W	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	120	200	250	V
DC Reverse Voltage 直流反向电压	V_R	120	200	250	V
RMS Reverse Voltage RMS 反向电压	$V_{R(RMS)}$	100	150	200	V
Forward Rectified Current 正向整流电流	I_F	0.25			A
Peak Surge Current 峰值浪涌电流	I_{FSM}	@1S	1		A
		@1mS	3		
		@1μS	9		
Power Dissipation 耗散功率	P_D	250			mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	500			$^{\circ}\text{C}/\text{W}$
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	BAV19W	BAV20W	BAV21W	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	120	200	250	V	$I_R=1\text{mA}$
Forward Voltage 正向电压	V_F	1.25			V	$I_F=0.2\text{A}$
Reverse Current 反向电流	I_R	0.1			μA	$V_R=V_{RRM}$
Reverse Recovery Time	T_{rr}	50			nS	
Diode Capacitance 二极管电容	C_T	5			pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

Fig.1 Forward Current Derating Curve

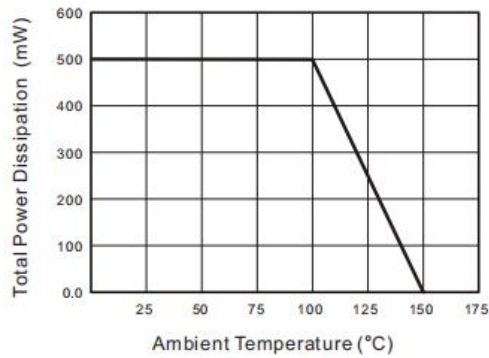


Fig.2 Typical Reverse Characteristics

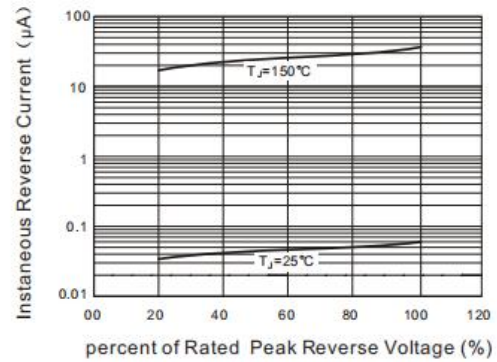


Fig.3 Typical Instantaneous Forward Characteristics

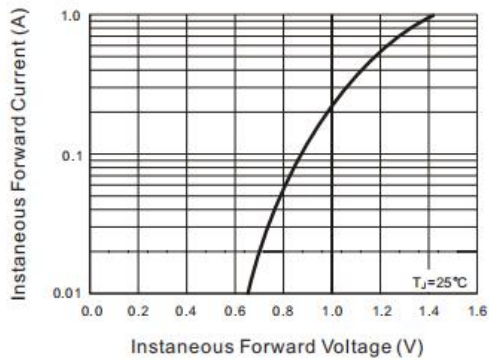
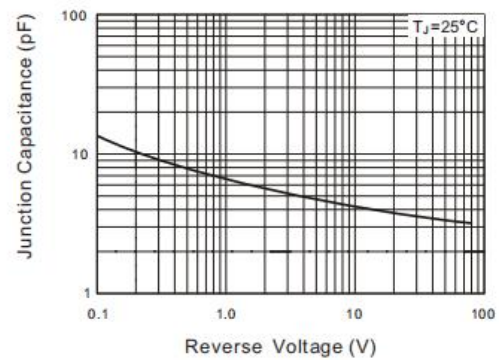
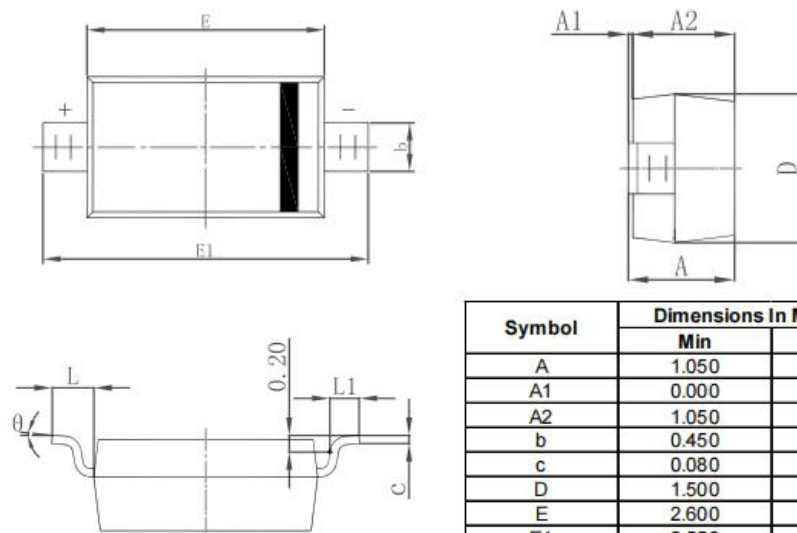


Fig.4 Typical Junction Capacitance



■ Dimension 外形封装尺寸 SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°		8°	