

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 反向电压均方根值	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}	1			A
@1S		3			
@1mS		9			
@1μS					
Power Dissipation 耗散功率	P _D	250			mW
Thermal Resistance J-A 结到环境热阻	R _{θJA}	500			℃/W
Junction/Storage Temperature 结温/储藏温度	T _J ,T _{stg}	-50to+150℃			℃

■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

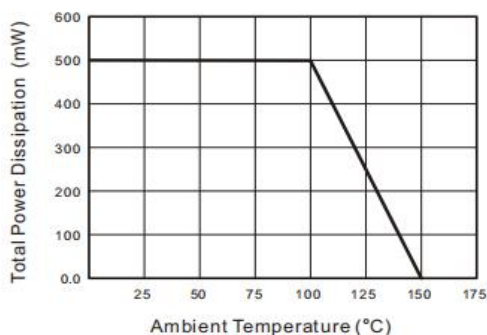


Fig.2 Typical Reverse Characteristics

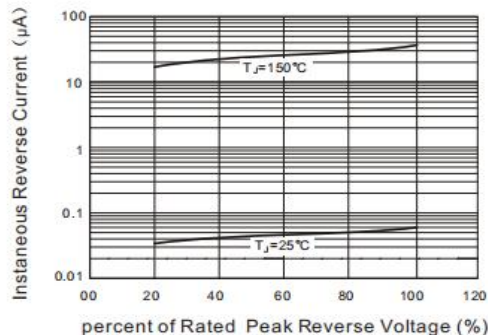


Fig.3 Typical Instantaneous Forward Characteristics

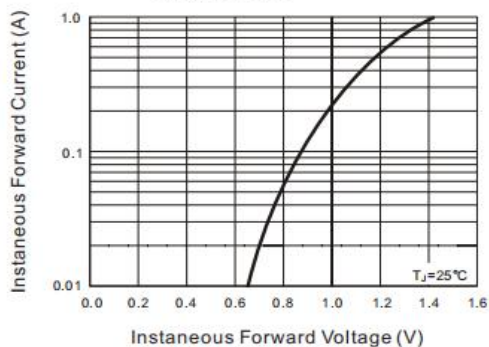
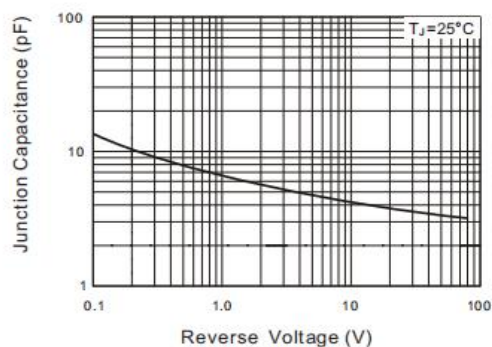


Fig.4 Typical Junction Capacitance



■ Dimension 外形封装尺寸 SOD-123

Symbol	Millimeters		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°

