

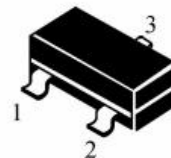


安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

BAV3004A/C/S

SOT-23 Switching Diode 开关二极管



Internal Configuration & Device Marking 内部结构与产品打标

Type 型号	BAV3004A	BAV3004C	BAV3004S
Pin 管脚			
Mark 打标	KAD	KAC	KAE

Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	300	V
Reverse Work Voltage 反向工作电压	V_{RWM}		
DC Reverse Voltage 直流反向电压	V_R		
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	212	V
Forward Work Current 正向工作电流	$I_F(I_O)$	225	mA
Peak Forward Current 正向峰值电流	I_{FM}	625	mA
Non-Repetitive Peak Surge Current@t=1ms 不重复峰值浪涌电流@t=8.3ms	I_{FSM}	7 4	A
Power dissipation 耗散功率	$P_D(T_a=25^{\circ}C)$	350	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	358	$^{\circ}C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^{\circ}C$	

Electrical Characteristics 电特性

($T_A=25^{\circ}C$ unless otherwise noted 如无特殊说明, 温度为 $25^{\circ}C$)

Characteristic 特性参数	Symbol 符号	Min 最小值	Max 最大值	Unit 单位
Reverse Breakdown Voltage 反向击穿电压($I_R=150\mu A$)	$V_{(BR)}$	350	—	V
Reverse Leakage Current($V_R=240V$) 反向漏电流($V_R=240V, T_J=150^{\circ}C$)	I_R	—	100 100	nA μA
Forward Voltage($I_F=100mA$) 正向电压($I_F=200mA$)	V_F	—	1 1.25	V
Diode Capacitance 二极管电容 ($V_R=0V, f=1MHz$)	C_D	—	10	pF
Reverse Recovery Time 反向恢复时间 $I_{rr}=0.1 \cdot I_R, R_L=100\Omega, I_F=10mA, V_R=6V$	T_{rr}	—	35	nS



■ Typical Characteristic Curve 典型特性曲线

Fig.1 Power Derating Curve

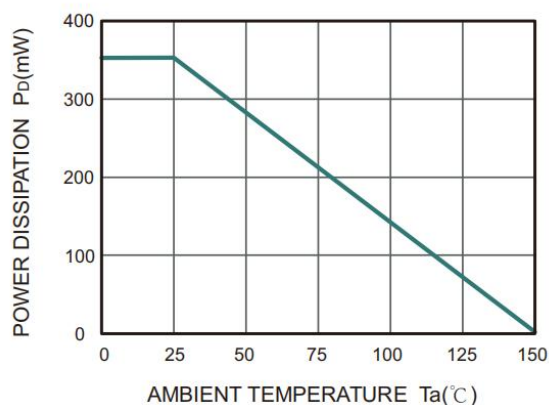


Fig.2 Reverse Characteristics

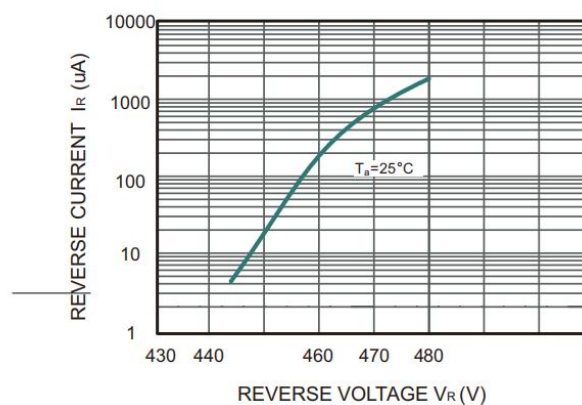


Fig.3 Forward Characteristics

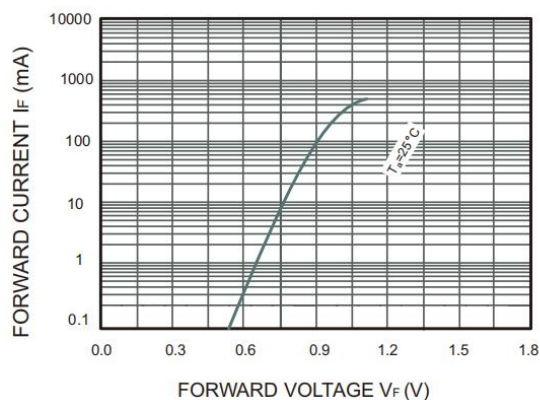


Fig.4 Capacitance Characteristics

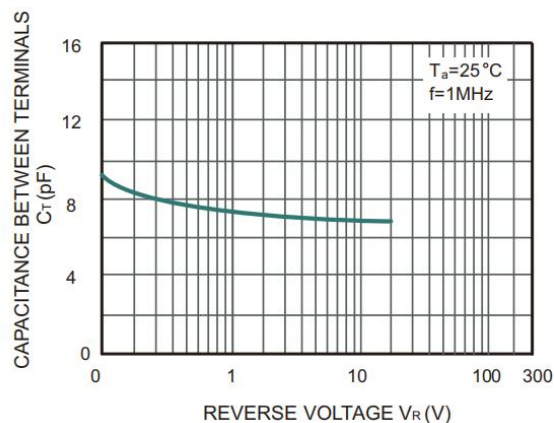
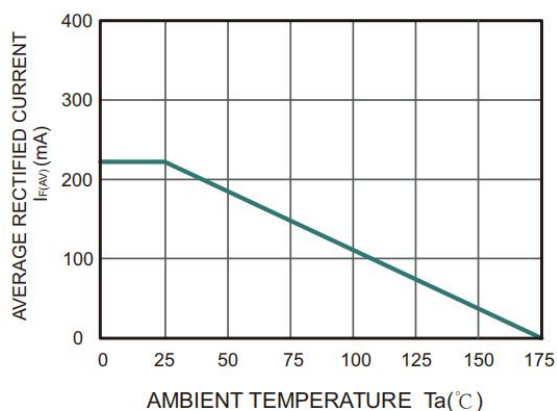
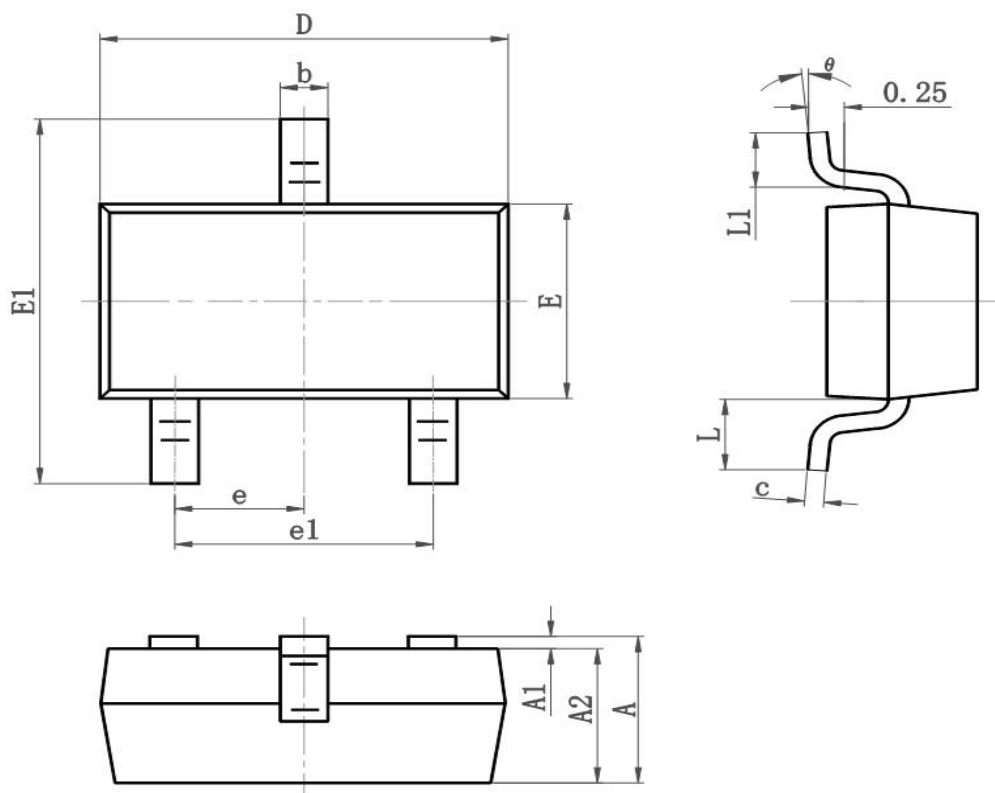


Fig.5 Semiconductor Intrinsic Property





■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.050	0.055
E1	2.250	2.550	0.089	0.100
e	0.900	1.00	0.035	0.039
e1	1.800	2.000	0.071	0.079
L	0.500	0.600	0.020	0.024
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°