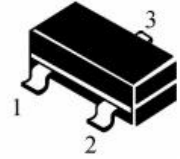
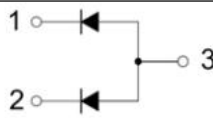
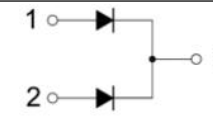
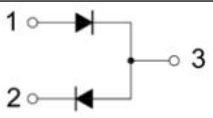


BAV3004A/C/S

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
Non-Repetitive Peak Reverse Voltages 不重复反向峰值电压	V_{RM}	350	V
Repetitive Peak Reverse Voltages 可重复反向峰值电压	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 $I_{rr} = 0.1 * I_R, R_L = 100\Omega, I_F = 10 mA, V_R = 6V$	T_{rr}	—	35	nS

■ Typical Characteristic Curve 典型特性曲线

Fig.1 Power Derating Curve

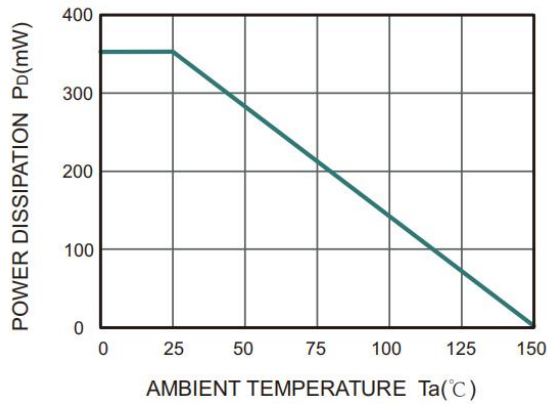


Fig.2 Reverse Characteristics

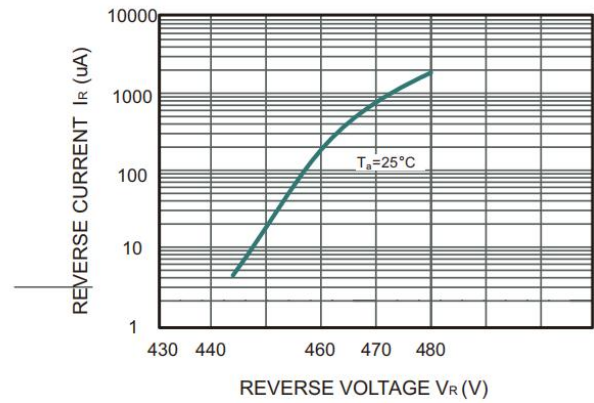


Fig.3 Forward Characteristics

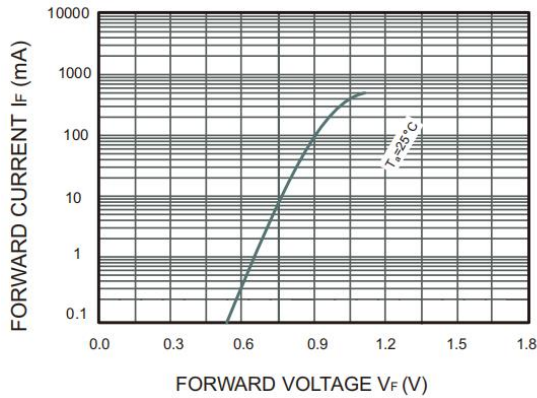


Fig.4 Capacitance Characteristics

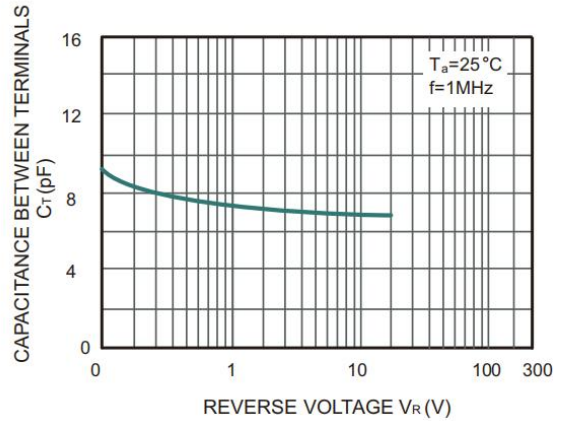
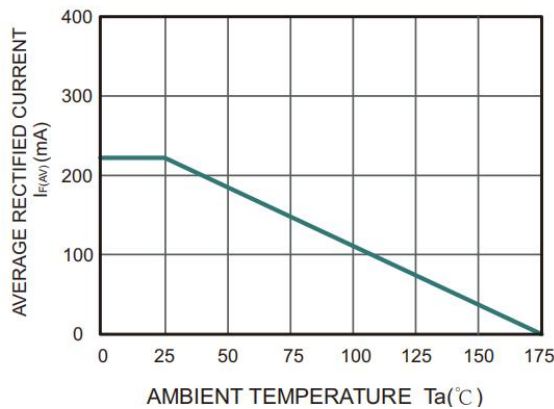
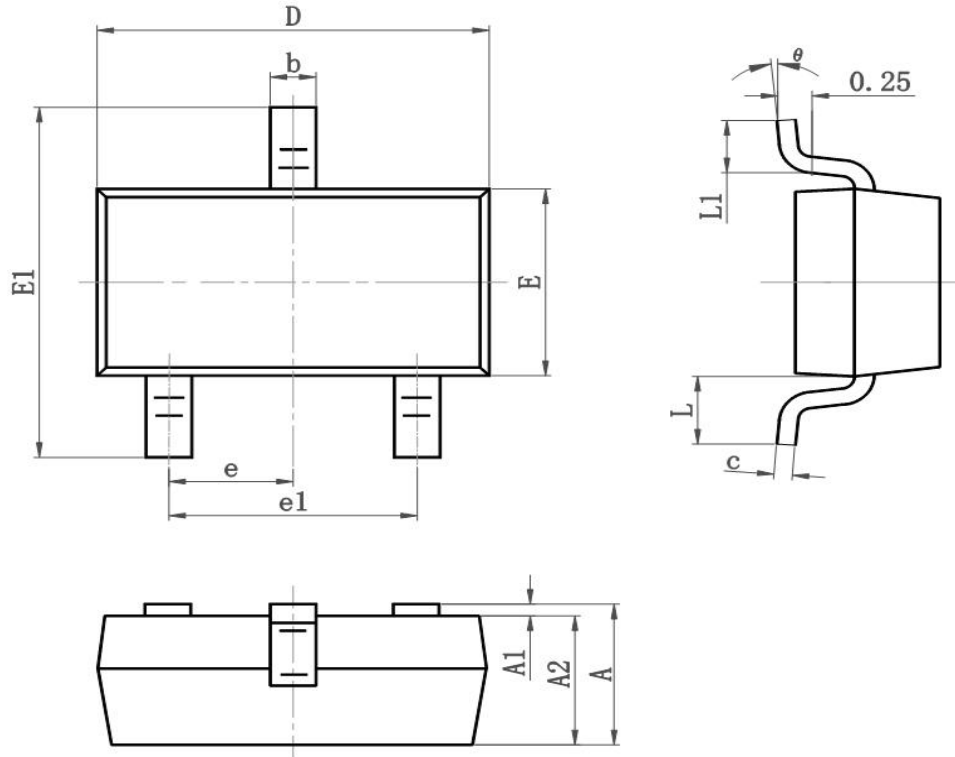


Fig.5 Semiconductor Intrinsic Property



■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°