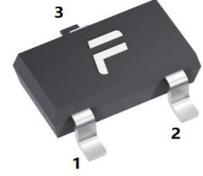


SOT-23 Switching Diode 开关二极管



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

Type 型号	BAS16	BAW56	BAV70	BAV99
Pin 管脚				
Mark 打标	A6	A1	A4	A7

Absolute Maximum Ratings 最大额定值

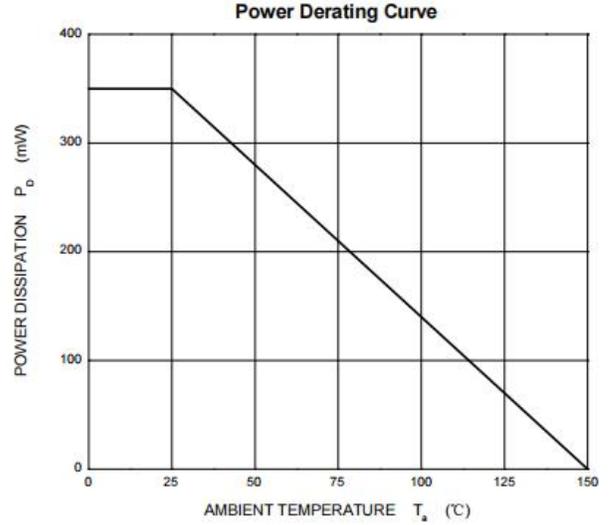
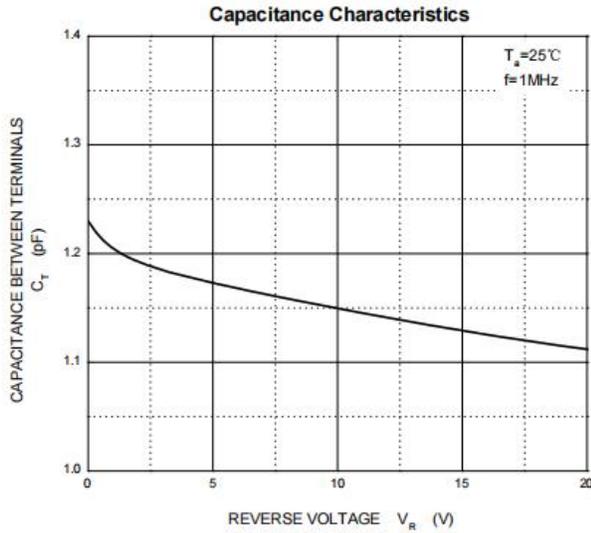
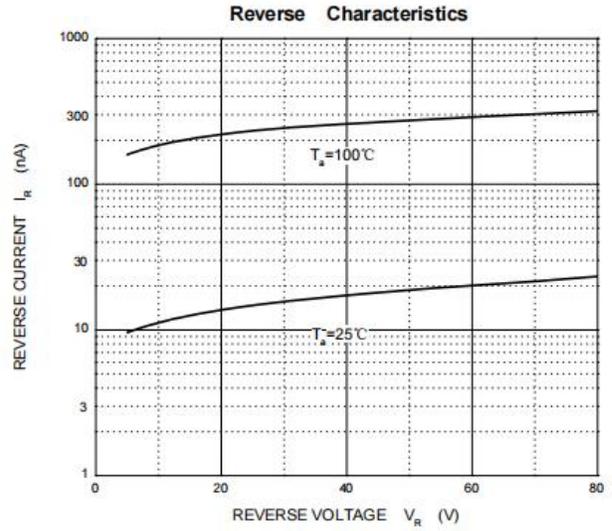
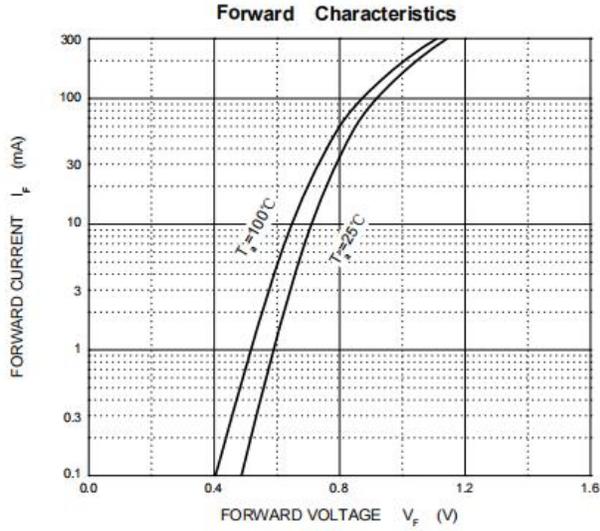
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	100	V
Reverse Work Voltage 反向工作电压	V_{RWM}	100	V
DC Reverse Voltage 直流反向电压	V_R	75	V
Forward Work Current 正向工作电流	$I_F(I_O)$	200	mA
Half-sine-wave Single Peak Forward Surge Current 正弦半波信号正向峰值浪涌电流	I_{FSM}	1us	2
		1ms	1
		1s	0.5
Power dissipation 耗散功率	$P_D(T_a=25^\circ C)$	225	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	555	$^\circ C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^\circ C$	

Electrical Characteristics 电特性

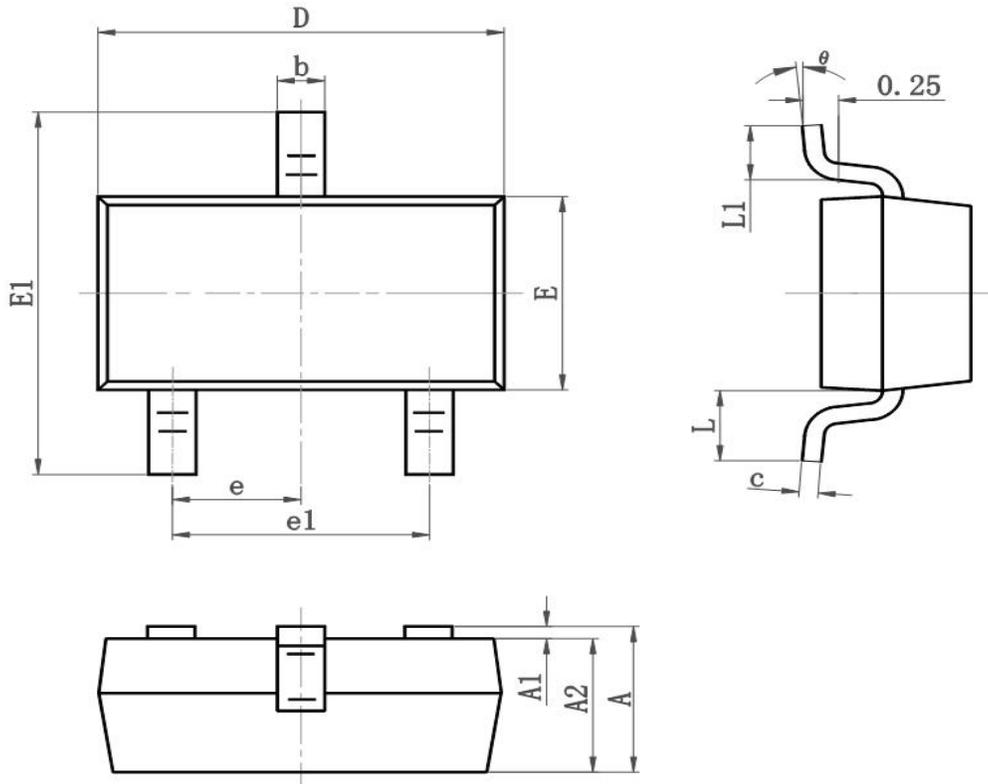
($T_A=25^\circ C$ unless otherwise noted 如无特殊说明, 温度为 $25^\circ C$)

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($I_R=100\mu A$)	$V_{(BR)}$	100	—	V
Reverse Leakage Current 反向漏电流($V_R=75V$)	I_R	—	2.5	μA
Forward Voltage($I_F=1mA$) 正向电压($I_F=10mA$) ($I_F=50mA$) ($I_F=150mA$)	V_F	—	0.715	V
			0.855	
			1.0	
			1.25	
Diode Capacitance 二极管电容($V_R=0V, f=1MHz$)	C_D	—	1.5	pF
Reverse Recovery Time 反向恢复时间	T_{rr}	—	6	nS

■ Typical Characteristic Curve 典型特性曲线



■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°