



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

BAT54WS

SOD-323 Schottky Barrier Diode 肖特基势垒二极管

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

Type 型号	BAT54WS	
Pin 管脚		
Mark 打标	L9	

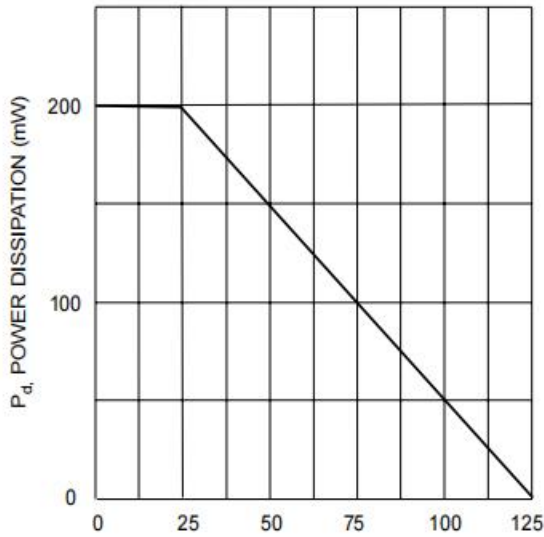
Absolute Maximum Ratings 最大额定值

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}	30	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	$V_{R(RMS)}$	21	V
Forward Work Current 正向工作电流	I_O	100	mA
Forward Continuous Current 正向连续电流	I_F	200	mA
Repetitive Peak Forward Current 重复峰值正向电流	I_{FRM}	300	mA
Peak Surge Forward Current 峰值浪涌正向电流	I_{FSM}	600	mA
Power dissipation 耗散功率	$P_D(T_a=25^\circ C)$	200	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	625	$^\circ C/W$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^\circ C$	

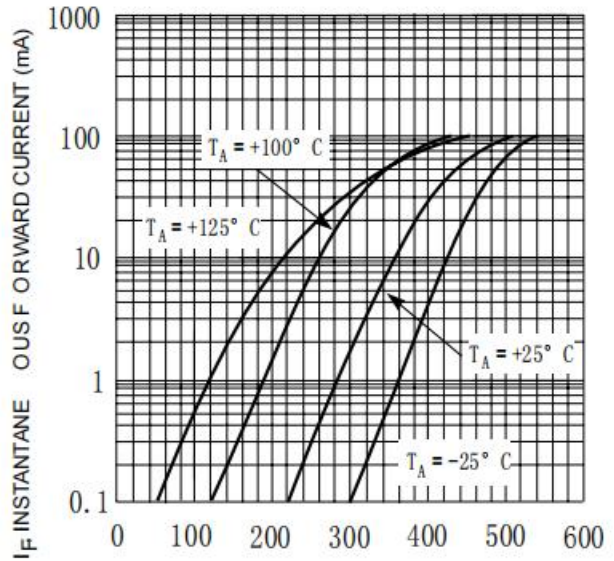
Electrical Characteristics 电特性($T_A=25^\circ C$ unless otherwise noted 如无特殊说明, 温度为 $25^\circ C$)

Characteristic 特性参数	Symbol 符号	Max 最大值	Unit 单位
Reverse Leakage Current 反向漏电流($V_R=25V$)	I_R	20	μA
Forward Voltage($I_F=0.1mA$) 正向电压($I_F=1mA$) ($I_F=10mA$) ($I_F=30mA$) ($I_F=100mA$)	V_F	0.24 0.32 0.4 0.5 1	V
Diode Capacitance 二极管电容($V_R=1V, f=1MHz$)	C_D	10	pF
Reverse Recovery Time 反向恢复时间	T_{rr}	5	nS

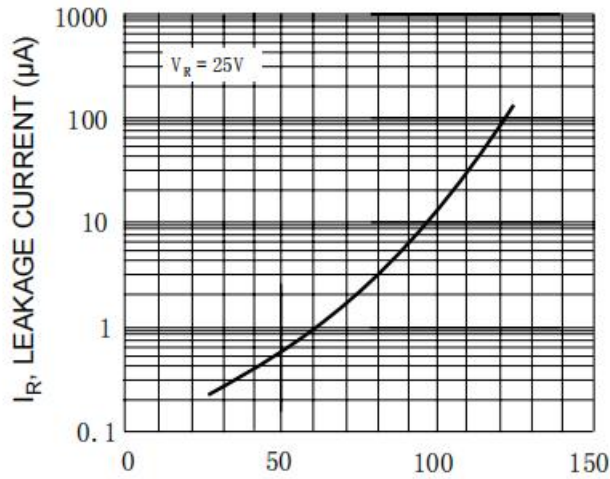
■ Typical Characteristic Curve 典型特性曲线



T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve

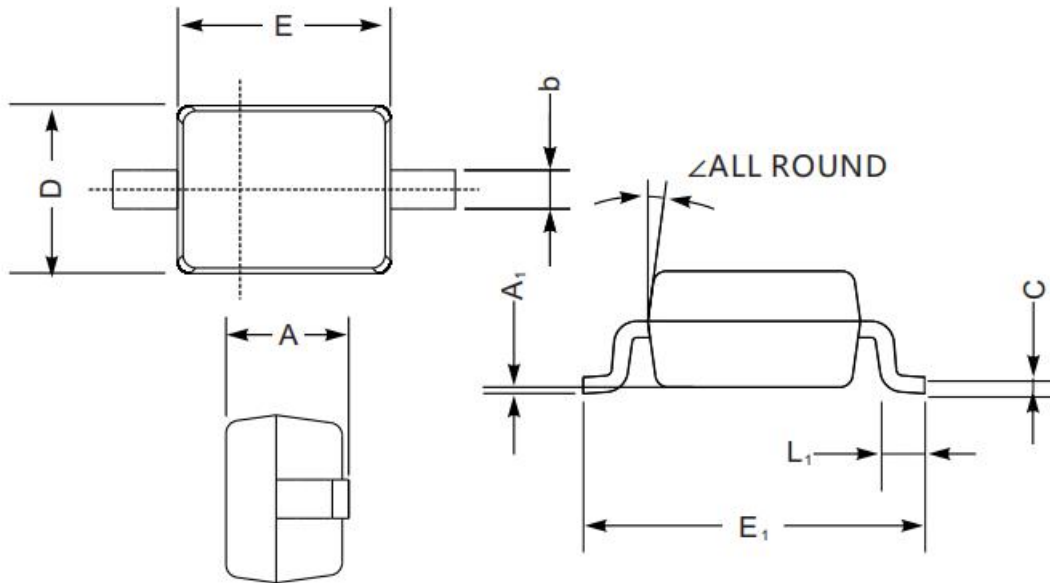


T_j , INSTANTANEOUS FORWARD VOLTAGE (mV)
Fig. 2, Typical Forward Characteristics



T_j , JUNCTION TEMPERATURE (°C)
Fig. 3, Typical Reverse Characteristics

■Dimension 外形封装尺寸



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	