

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		
Forward Work Current 正向工作电流	$I_F(I_O)$	200	mA
Peak Forward Current 正向峰值电流	I_{FM}	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	Min 最小值	Max 最大值	Unit 单位
Reverse Breakdown Voltage 反向击穿电压($I_R=10\mu A$)	$V_{(BR)}$	30	—	V
Reverse Leakage Current 反向漏电流($V_R=25V$)	I_R	—	2	μA
Forward Voltage($I_F=1mA$) 正向电压($I_F=100mA$)	V_F		0.32 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



Fig.1 Forward Current Derating Curve

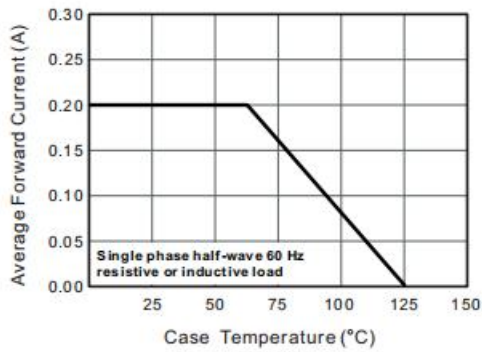


Fig.2 Typical Reverse Characteristics

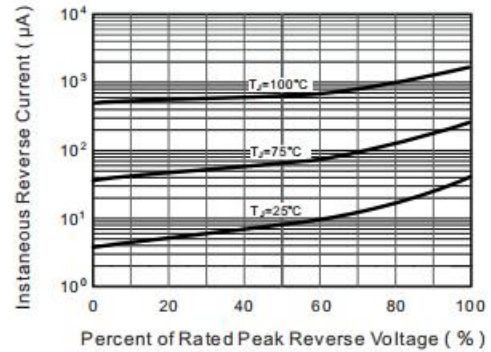


Fig.2 TYPICAL FORWARD VOLTAGE

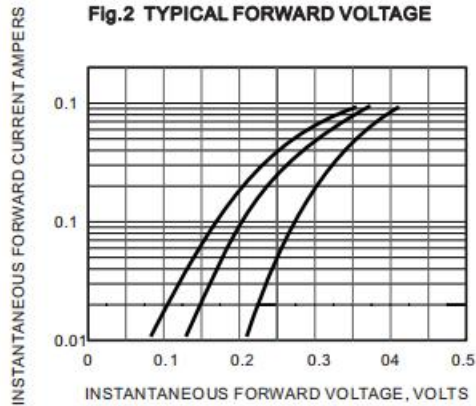


Fig.4 Typical Junction Capacitance

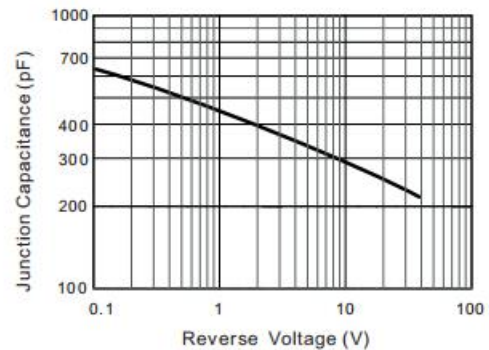
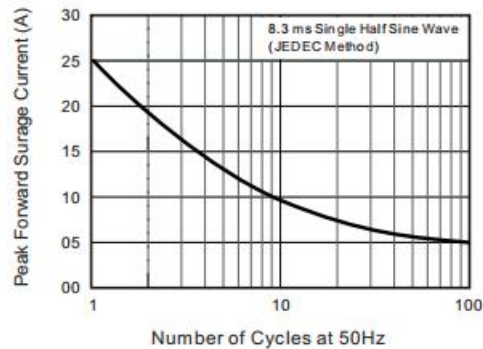
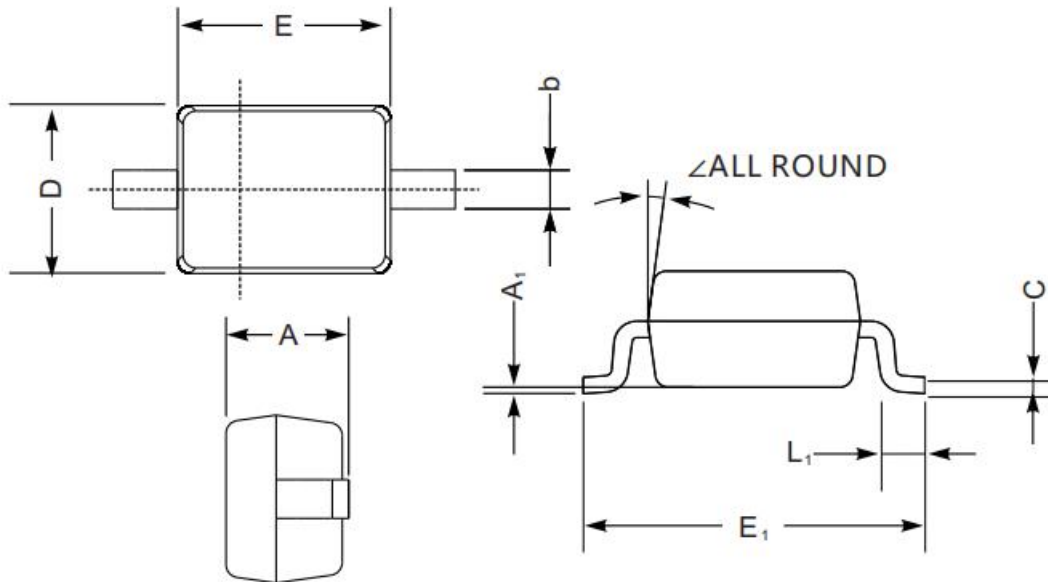


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



■Dimension 外形封装尺寸



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	$\angle$
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	—	