



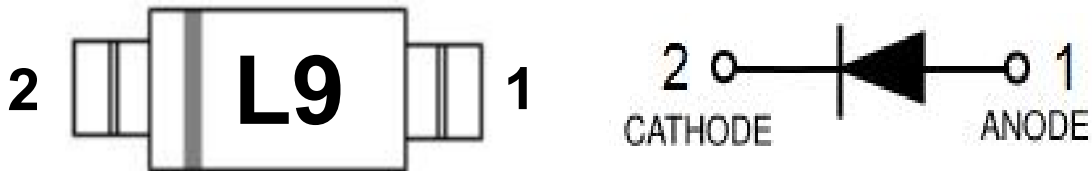
# BAT54W

SCHOTTKY BARRIER DIODE

## 主要特征/Features

- ◇ Surface Mount SOD-323 Package
- ◇ Low forward Voltage Drop;
- ◇ Fast Switching Speed;
- ◇ RoHS compliant / Green EMC;

## 印字/MARKING 等效电路/Equivalent Circuit



## 极限参数/Absolute Maximum Ratings(TA=25°C unless otherwise noted)

参数 Parameter	符号 Symbol	数值 Value	单位 Unit
DC blocking voltage	$V_R$	30	V
RMS reverse voltage	$V_{R(RMS)}$	21	
Average rectified output current	$I_o$	100	mA
Forward continuous current	$I_F$	200	mA
Repetitive peak forward current	$I_{FRM}$	350	mA
Forward surge current @t<1s	$I_{FSM}$	600	mA
Power dissipation	$P_D$	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature range	$T_{STG}$	-55~+150	°C

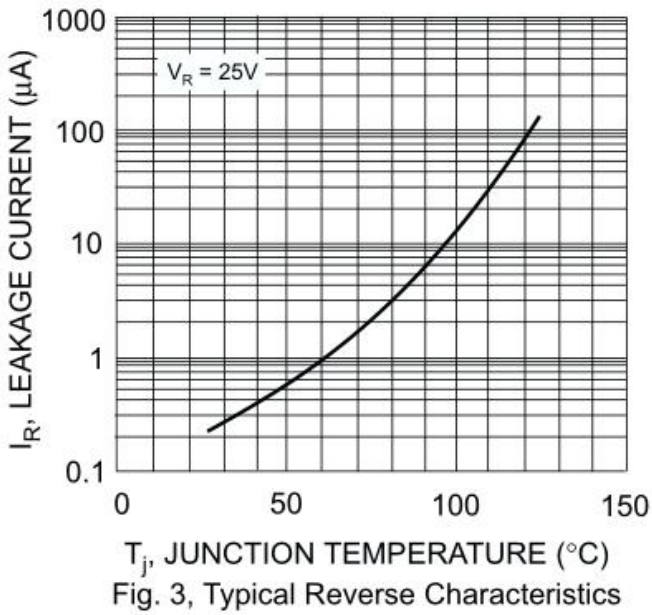
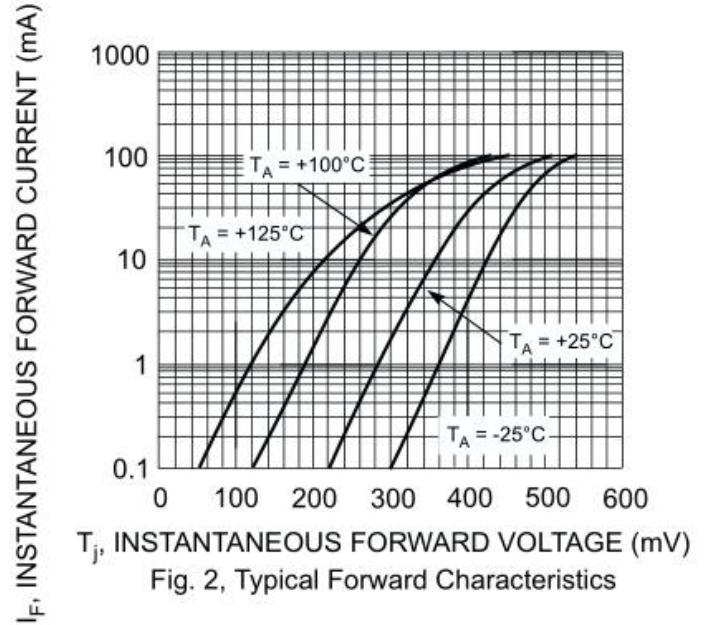
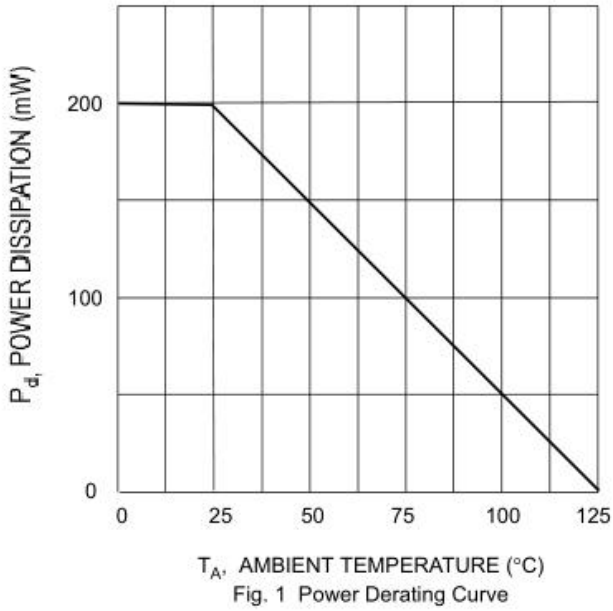


## 电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted )

参数 Parameter	符号 Symbol	测试条件 Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu A$	30			V
Reverse Current	$I_R$	$V_R=25V$			2.0	$\mu A$
Forward voltage	$V_{F1}$	$I_F=0.1mA$			240	mV
	$V_{F2}$	$I_F=1.0mA$			320	mV
	$V_{F3}$	$I_F=10mA$			400	mV
	$V_{F4}$	$I_F=30mA$			500	mV
	$V_{F5}$	$I_F=100mA$			1000	mV
Reverse recovery time	$t_{rr}$	$I_F=10mA$ $I_R=10mA$ to 1mA $R_L=100\Omega$			5.0	nS
Capacitance between terminals	$C_T$	$V_R=1V, f=1MHz$			10	pF

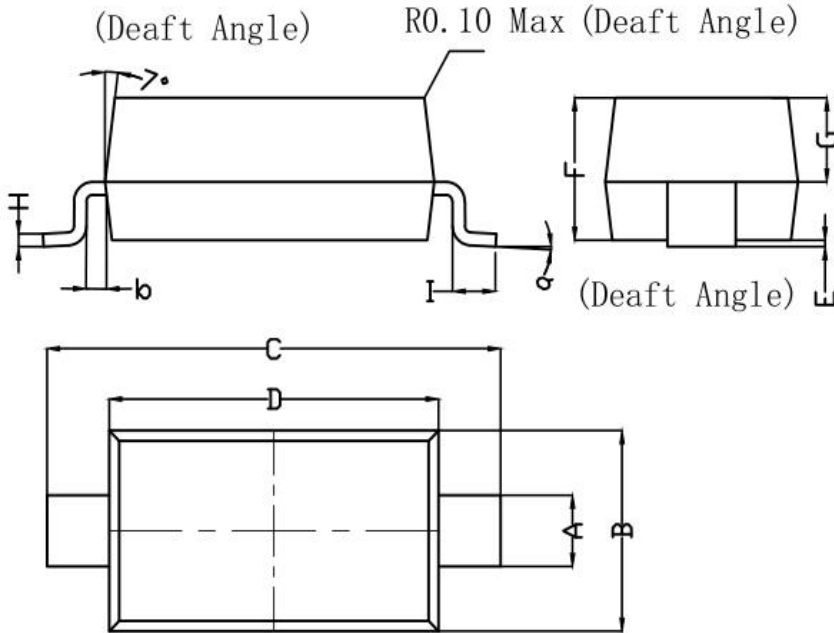


典型特性曲线图/Typical Characteristics





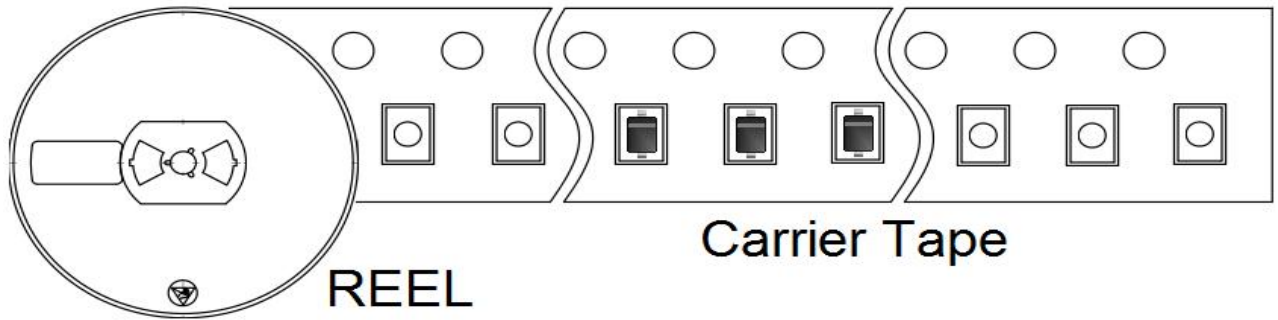
成品外观尺寸/SOD-123 Package Information



Symbol	Dim in mm		
	Min	Nom	Max
A	0.520	0.550	0.570
B	1.400	1.550	1.700
C	3.350	3.650	3.850
D	2.550	2.650	2.850
E	0.000	0.050	0.100
F	1.050	1.100	1.150
G	0.620	0.650	0.670
H	0.100	0.110	0.120
I	0.250	0.350	0.450
a	0°	-	6°
b	0.4°	-	0.8°

Mold Surface roughness <4um

出货规范/Shipping Specifications



×15



×4



Reel	Reel Size	Box	Box Size(mm)	Carton	Carton size(mm)
3000 Pcs	7 inch	45 KPcs	185×185×188	180 KPcs	400×400×210