

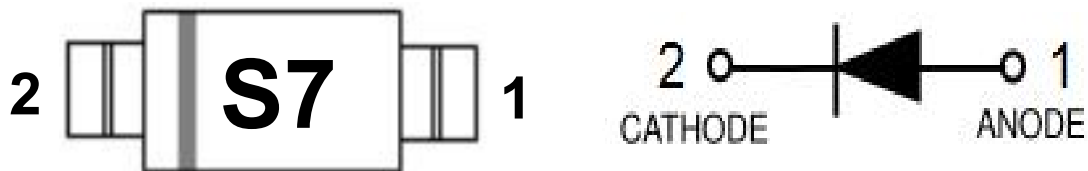


BAT42W SCHOTTKY BARRIER DIODE

主要特征/Features

- ◇ Surface Mount SOD-123 Package ;
- ◇ Low Forward Voltage Drop;
- ◇ Fast Switching Time;
- ◇ 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
Peak Repetitive Peak Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	30	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I_{FRM}	500	mA
Peak Forward Surge Current @t<10ms	I_{FSM}	4.0	A
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	TSTG	-55~+150	°C

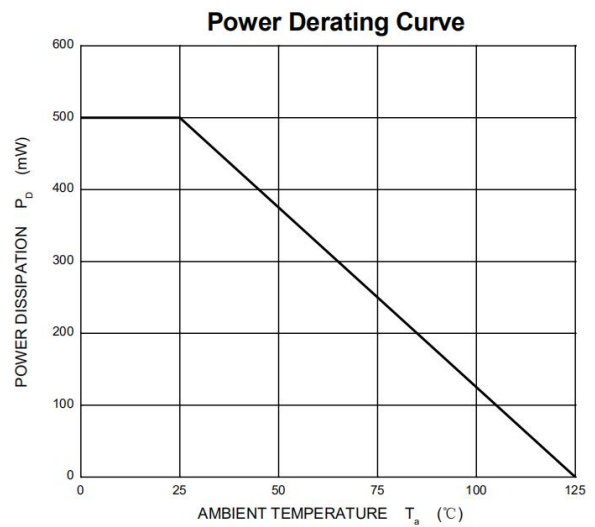
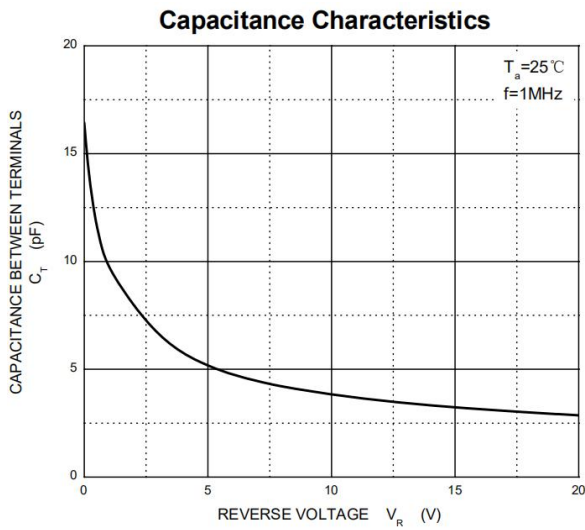
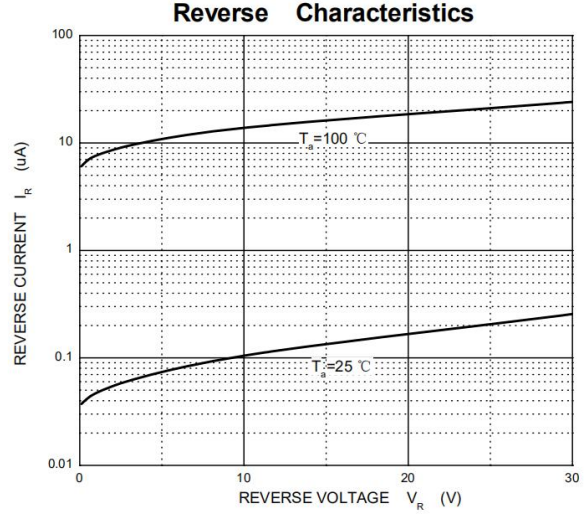
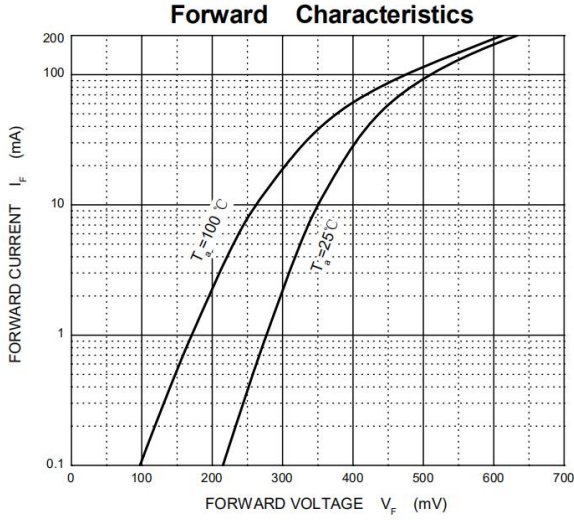


电性能参数/Electrical Characteristics (TA=25°C unless otherwise noted)

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	$V_{(BR)}$	$I_R=10\mu A$	30			V
Forward voltage	V_F	$I_F=10mA$			0.4	V
	V_F	$I_F=50mA$			0.65	
	V_F	$I_F=200mA$			1.0	
Reverse current	I_R	$V_R=25V$			0.5	μA
Capacitance Between Terminals	C_T	$V_R=1V, f=1MHz$			10	pF
Reverse Recovery Time	trr	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R$ $R_L=100\Omega$			5	ns

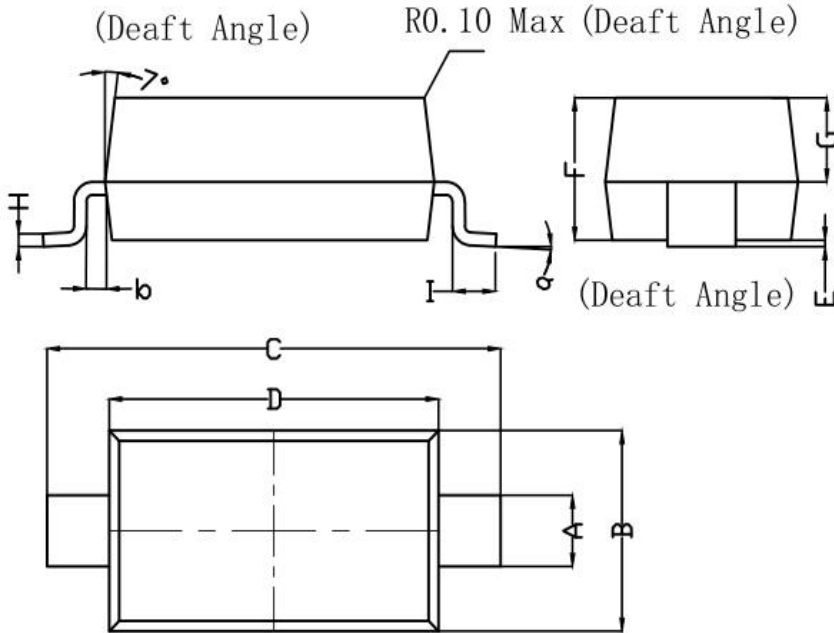


典型特性曲线图/Typical Characteristics





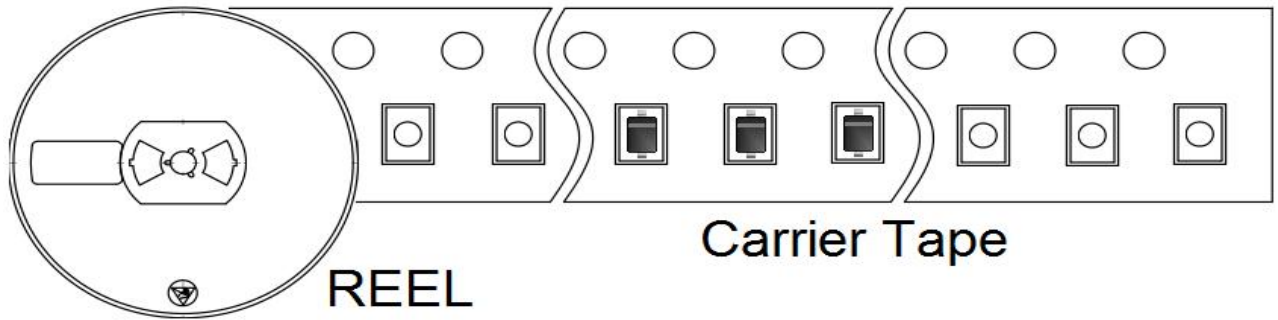
成品外观尺寸/SOD-123 Package Information



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