



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	BAT42WS	BAT43WS
Pin 管脚		
Mark 打标	S7	S8

■ **Absolute Maximum Ratings 最大额定值**

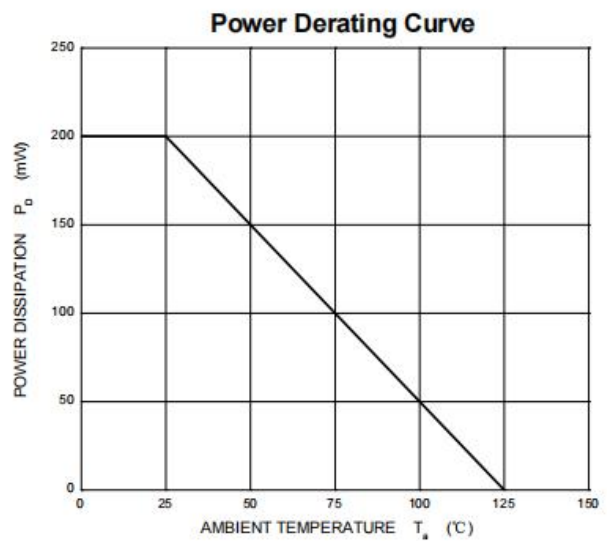
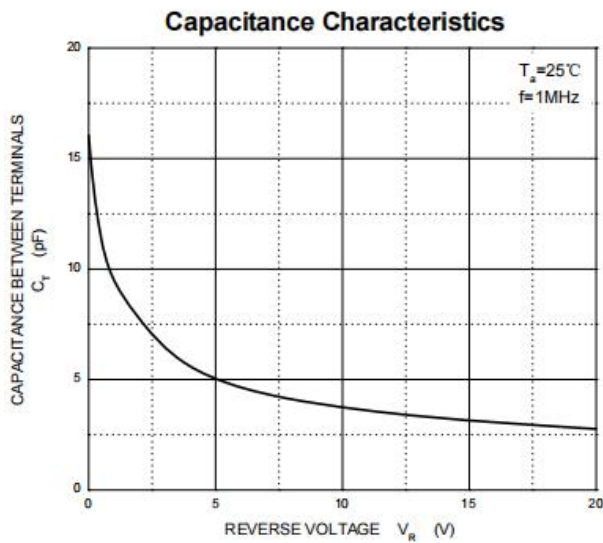
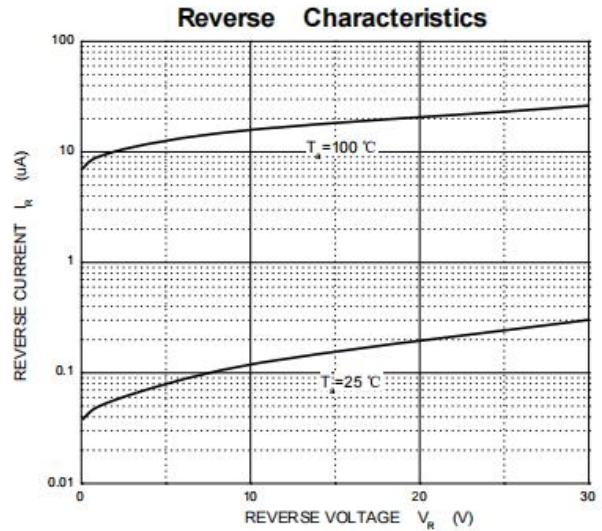
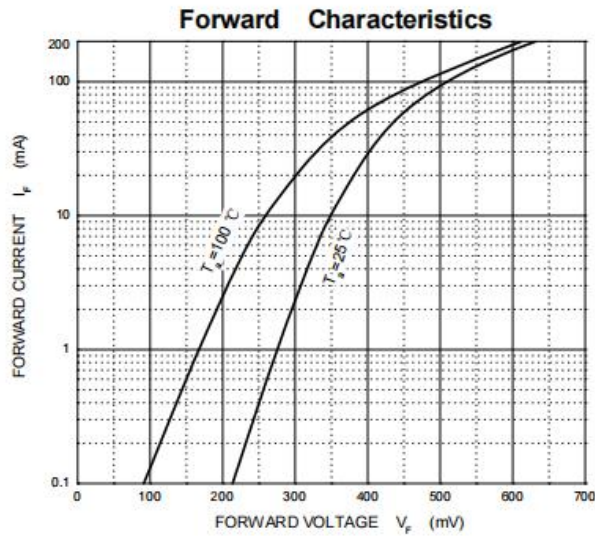
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	30	V
Reverse Work Voltage 反向工作电压	V_{RWM}		
DC Reverse Voltage 直流反向电压	V_R		
Forward Work Current 正向工作电流	$I_F(I_O)$	200	mA
Peak Forward Current 正向峰值电流	I_{FM}	500	mA
Power dissipation 耗散功率	$P_D(T_a=25^\circ\text{C})$	200	mW
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	T_J, T_{stg}	-55to+150 $^\circ\text{C}$	

■ **Electrical Characteristics 电特性**

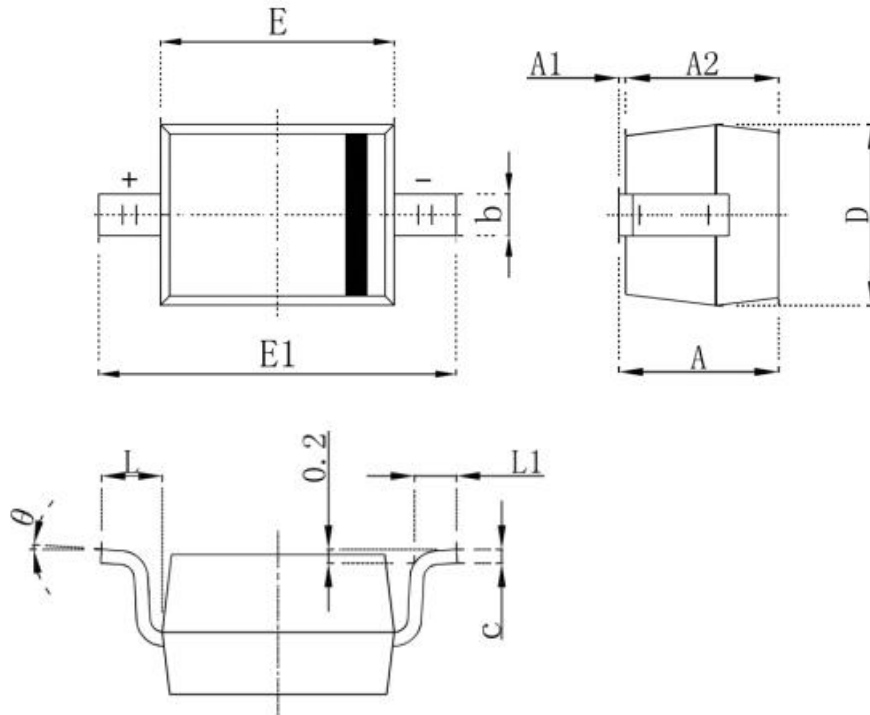
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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($I_R=10\mu\text{A}$)	$V_{(BR)}$	30	—	V
Reverse Leakage Current 反向漏电流($V_R=25\text{V}$)	I_R	—	0.5	μA
Forward Voltage(BAT43S $I_F=2\text{mA}$) 正向电压(BAT42WS $I_F=10\text{mA}$) (BAT43WS $I_F=15\text{mA}$) (BAT42WS $I_F=50\text{mA}$) (BAT42WS/BAT43WS $I_F=200\text{mA}$)	V_F	0.26	0.33 0.4 0.45 0.65 1	V
Diode Capacitance 二极管电容($V_R=1\text{V}$, $f=1\text{MHz}$)	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



■Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°