

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

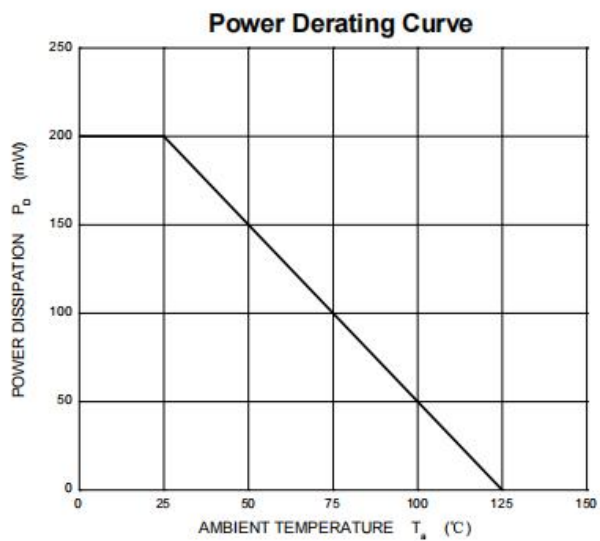
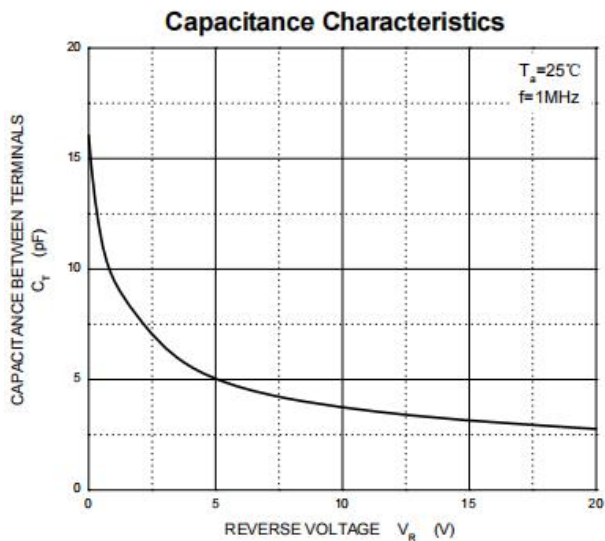
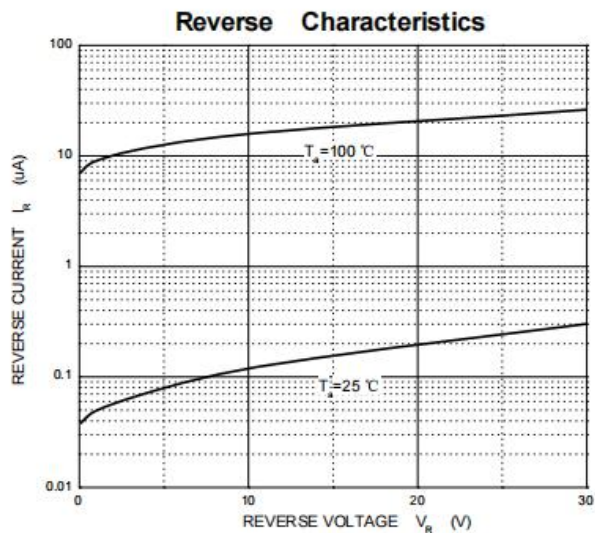
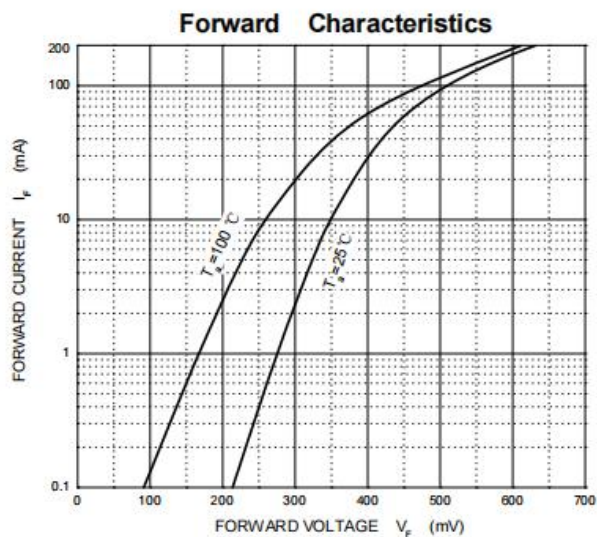
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Reverse Voltage 反向峰值电压	V_{RRM}	30	V
Reverse Work Voltage 反向工作电压	V_{RWM}		
DC Reverse Voltage 直流反向电压	V_R		
Forward Work Current 正向工作电流	$I_F(I_O)$	200	mA
Peak Forward Current 正向峰值电流	I_{FM}	500	mA
Power dissipation 耗散功率	$P_D(T_a=25^\circ\text{C})$	200	mW
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

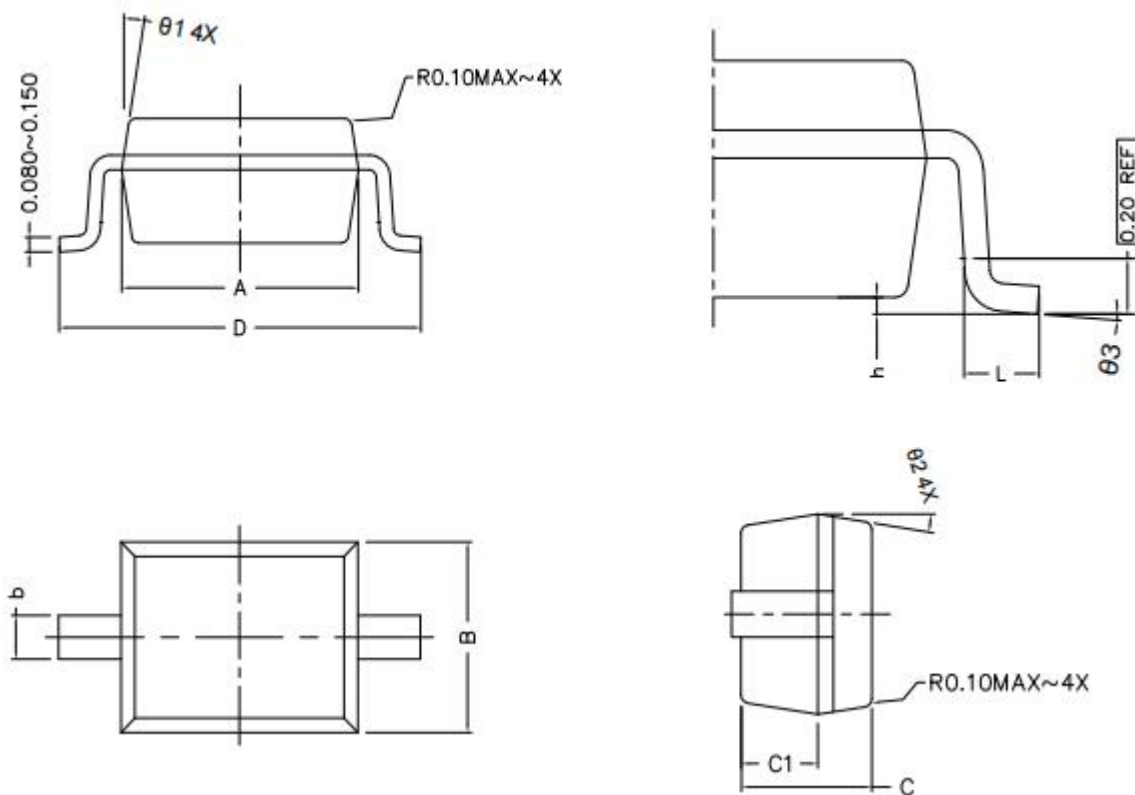
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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(BAT43WS $I_F=2\text{mA}$) 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	1.600	1.800	0.063	0.071
B	1.200	1.400	0.047	0.055
C	0.750	0.950	0.030	0.037
C1	0.450	0.550	0.018	0.022
D	2.450	2.800	0.096	0.110
L	0.200	0.400	0.008	0.016
b	0.200	0.400	0.008	0.016
h	0.020	0.120	0.001	0.005
$\theta 3$	0°	8°	0°	8°