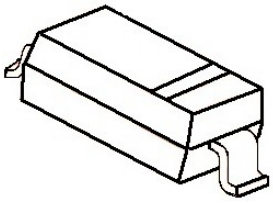
SOD-323 贴片塑封肖特基二极管

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

SOD-323



Marking: S1

特征 Features

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop

机械数据 Mechanical Data

- 封装: SOD-323 封装 SOD-323 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	界限 Limit	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	30	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	21	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	30	V
最大正向平均整流电流 Maximum average forward rectified current	I_{FM}	300	mA
峰值正向浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
典型热阻 Typical thermal resistance	$R_{\theta JA}$	500	℃/W
功率消耗 Power Dissipation	PD	230	mW
结温 Junction Temperature	TJ	125	℃
存储温度 Storage temperature range	T_{STG}	-50-+150	℃

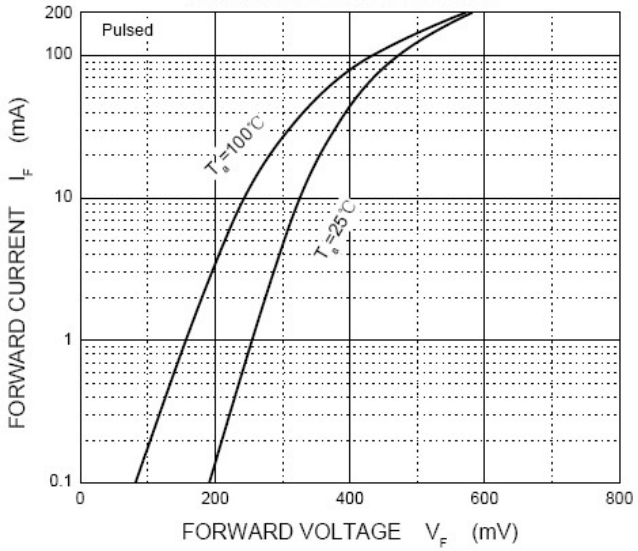
电特性 (TA = 25℃ 除非另有规定)

Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

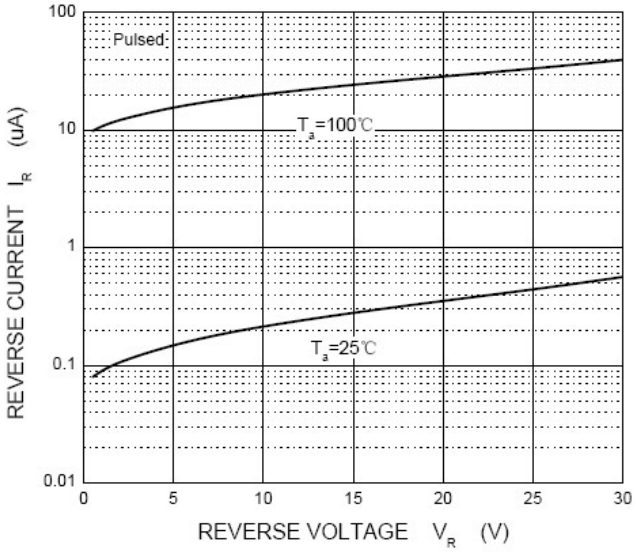
参数 Parameters	符号 Symbol	测试条件 Test conditions	Min	Typ	Max	单位 Unit
最大正向电压 Maximum forward voltage	V_{F1}	IF = 0.1mA			240	mV
	V_{F2}	IF = 1.0mA			320	
	V_{F3}	IF = 10mA			400	
	V_{F4}	IF = 30mA			500	
	V_{F5}	IF = 100mA			1000	
最大反向电压 Maximum reverse breakdown voltage	VR	IR=100uA	30			V
最大反向电流 Maximum reverse current	I_R	VR=25V			2.0	uA
典型结电容 Type junction capacitance	Cj	VR = 1.0V, f = 1MHz			10	pF
反向恢复时间 Reverse Recovery Time	Trr	IF=10mA,VR=6V, IR=10mA			6	nS

Typical Characteristics

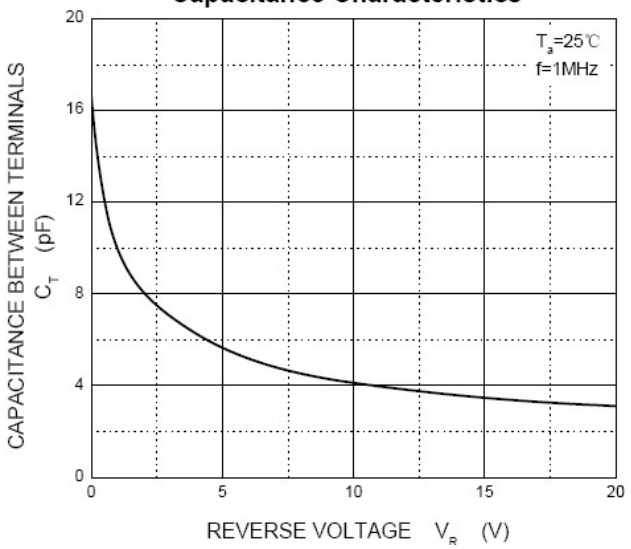
Forward Characteristics



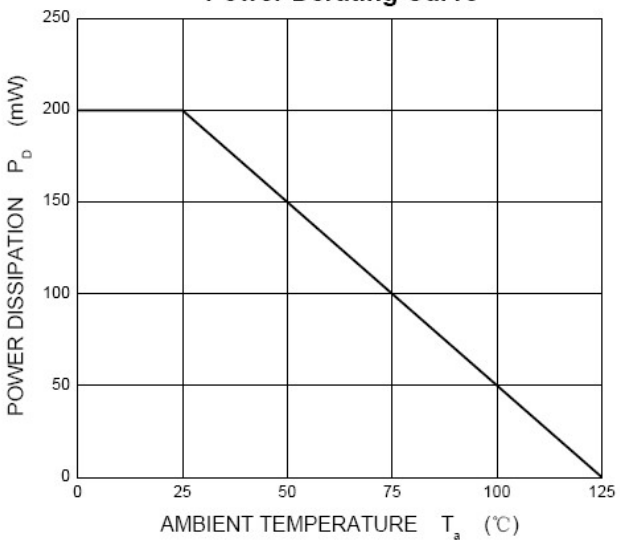
Reverse Characteristics



Capacitance Characteristics

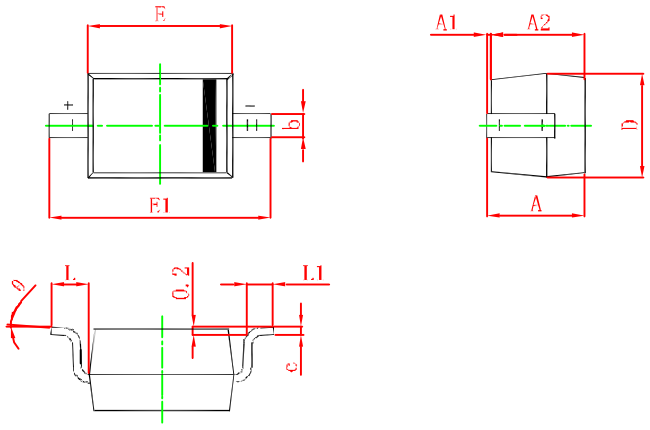


Power Derating Curve



SOD-323 PACKAGE OUTLINE Plastic surface mounted package

SOD-323



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°