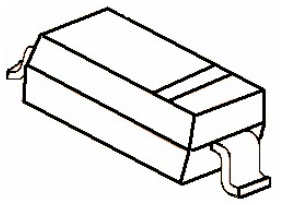
SOD-323 贴片塑封二极管

SOD-323

200mW SOD-323 Fast Switching Diode



MARKING: 5D

特征 Features

- 开关速度小; Fast Switching Device
- 最大功率耗散 200mW; Power Dissipation of 200mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage

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
- 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)

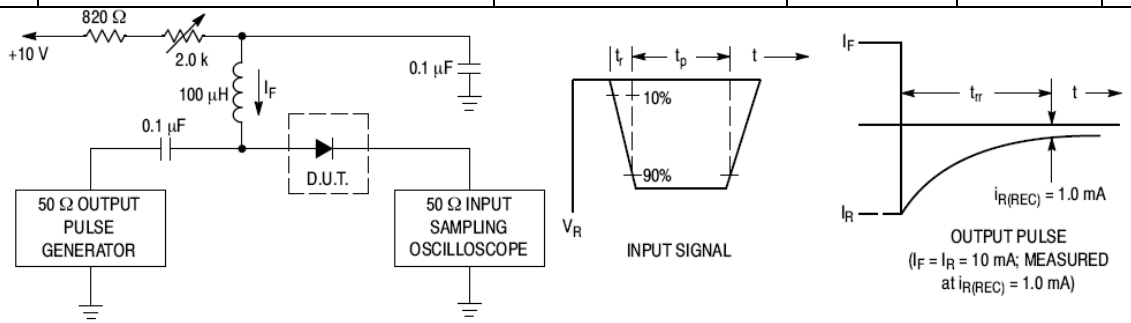
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V_R	100	V
功率消耗 Power Dissipation	Pd	200	mW
工作结温 Operating junction temperature	Tj	150	℃
存储温度 Storage temperature range	Ts	-50-+150	℃
热阻 Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	635	℃/W
正向(不重复)电流 Non-repetitive Peak Forward Current	I_{FM}	500	mA
正向(不重复)浪涌电流 Peak Forward Surge Current @tp=1us; TA=25℃	I_{FSM}	2.0	A

Valid provided that electrodes are kept at ambient temperature.

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

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
BV	反向击穿电压 Breakdown Voltage	IR=100uA	100		V
IR	反向漏电电流 Reverse Leakage Current	VR=20V	---	25	nA
		VR=75	---	5	uA
VF	正向电压 Forward Voltage	IF=10mA	---	1.00	V
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA(Figure 1)	---	4	nS
CT	结电容 Capacitance	VR=0V, f=1MHZ	---	4	pF



Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

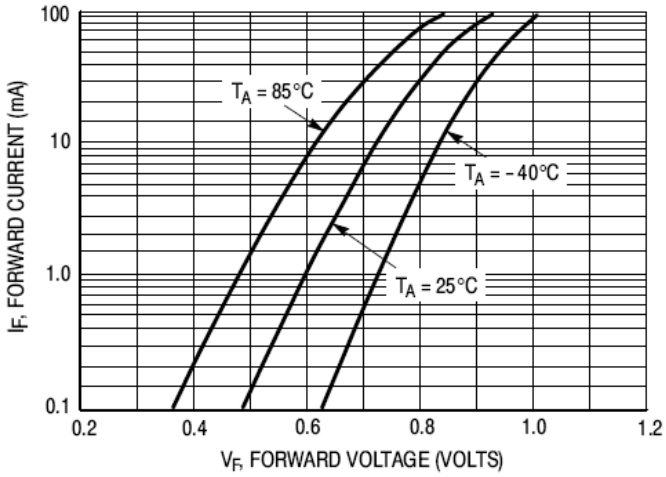


Figure 2. Forward Voltage

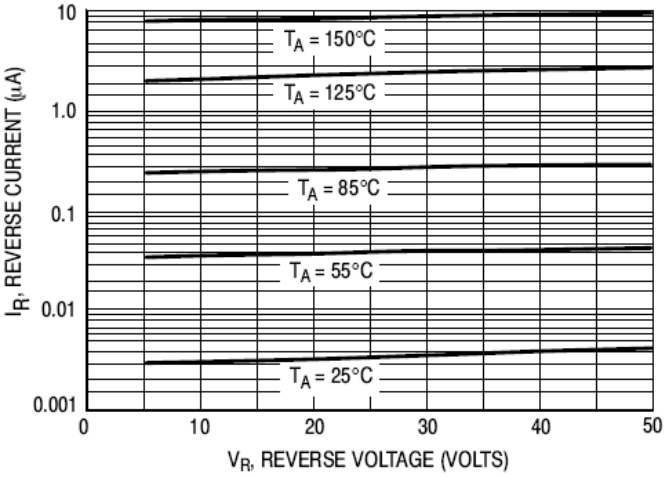


Figure 3. Leakage Current

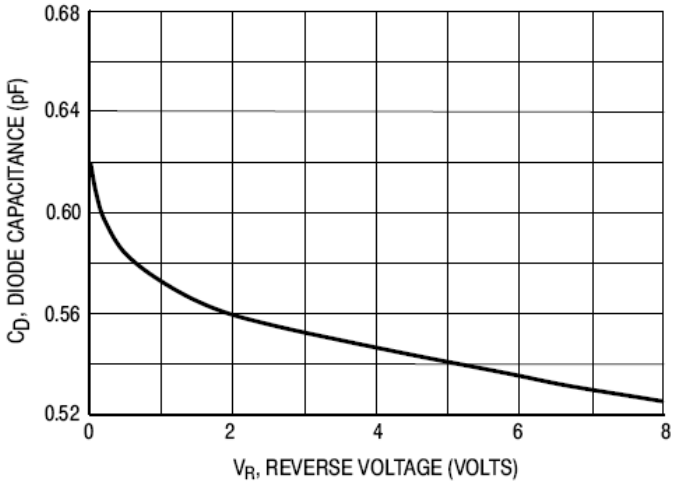
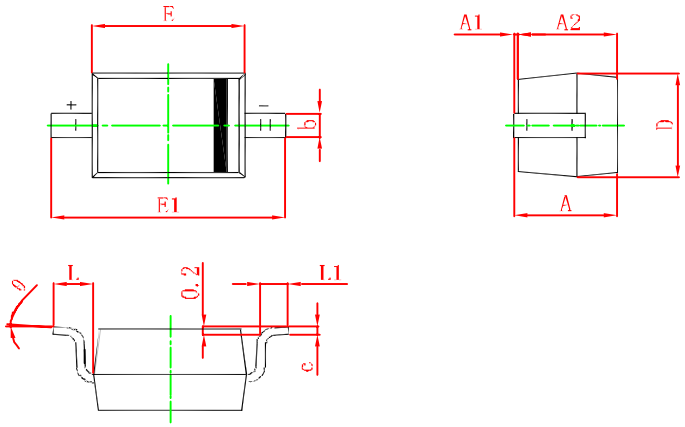


Figure 4. Capacitance

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°**