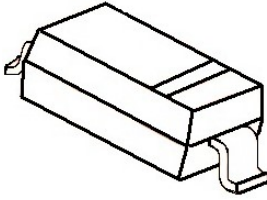


SOD-323

200mW SOD-323 Schottky Diode



MARKING: K73

特征 Features

- Fast Switching Device (TRR <4.0 nS)
- Low Turn-on Voltage
- PN Junction Guard Ring for Transient and ESD Protection

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	70	V
反向峰值电压 Peak Repetitive Reverse Voltage	V _{RRM}	70	V
功率消耗 Power Dissipation	P _d	200	mW
工作结温 Operating junction temperature range(note 1)	T _j	-55 to +125	℃
存储温度 Storage temperature range	T _s	-65 to +150	℃
热阻抗 Thermal Resistance from Junction to Ambient	R _{θJA}	625	K/W
持续正向电流 Forward Continuous Current(note 1)	I _F	70	mA
正向(不重复)浪涌电流 Non repetitive Peak Forward Surge Current @ tp=1.0s; TA=25℃	I _{FSM}	100	mA

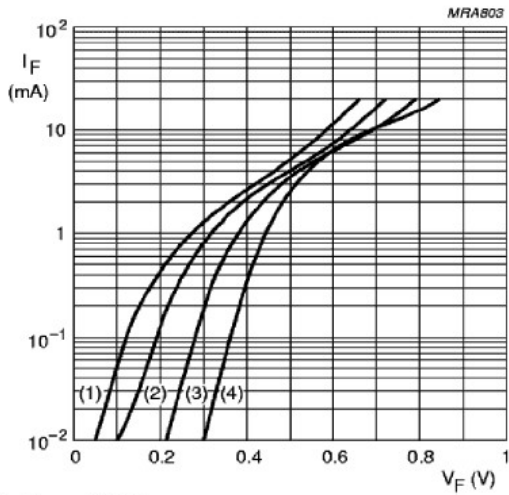
电特性 Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V(BR)	反向电压 Reverse Voltage(note 2)	I _R =10uA	70		V
I _R	反向漏电电流 Reverse Leakage Current	V _R =50V; tp<300us	---	30	nA
V _F	正向电压 Forward Voltage	I _F =1.0mA; tp<300us	---	0.41	V
		I _F =15mA; tp<300us	---	1.00	
TRR	反向恢复时间 Reverse Recovery Time	I _F =I _R =10mA to I _R =10mA	---	5	nS
		R _L =100Ω			
CT	结电容 Capacitance	V _R =0V, f=1MHZ	---	2	pF

Notes: 1. Valid provided that electrodes are kept at ambient temperature.

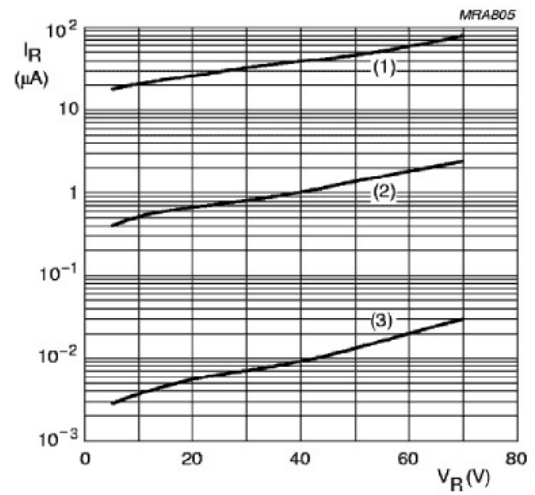
2. Test period<3000us

Typical Characteristics



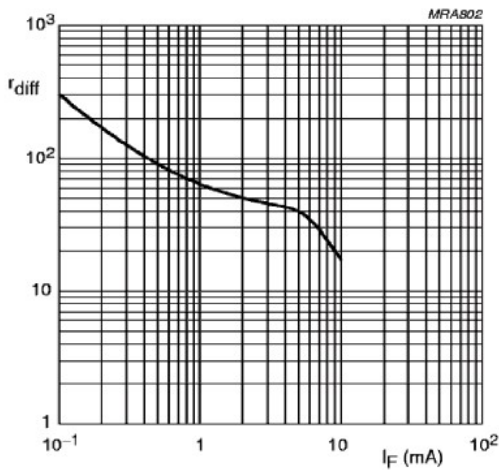
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$.
- (4) $T_{amb} = -40\text{ }^{\circ}\text{C}$.

Forward current as a function of forward voltage; typical values.



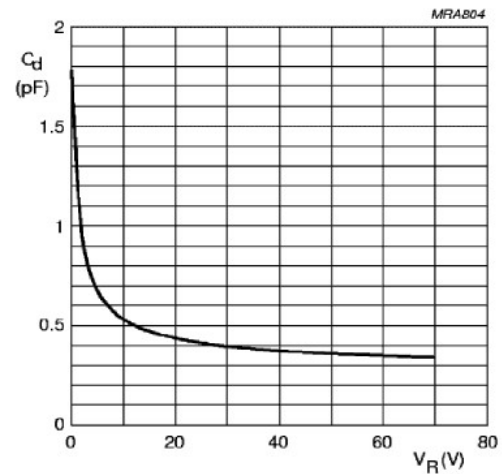
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$.

Reverse current as a function of reverse voltage; typical values.



$f = 10\text{ kHz}$.

Differential forward resistance as a function of forward current; typical values.



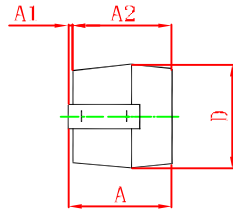
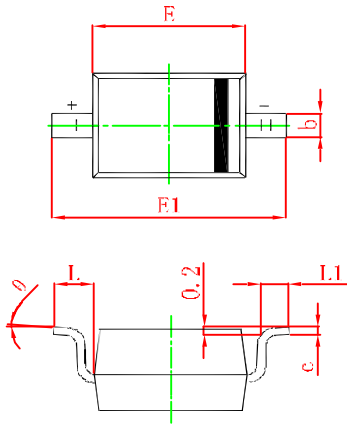
$f = 1\text{ MHz}$; $T_{amb} = 25\text{ }^{\circ}\text{C}$.

Diode capacitance as a function of reverse voltage; typical values.

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°