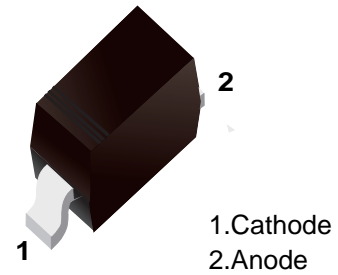


## Schottky Diode

### ■ Features

- Extremely Fast Switching Speed
- Low Forward Voltage
- Pb-Free Package is Available



■ Simplified outline(SOD-323)



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_{RM}$	30	V
Forward Current	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	300	
Non-Repetitive Peak Forward Current (t < 1s)	$I_{FSM}$	600	
Power Dissipation -Derate above 25°C	$P_d$	200	mW
		1.57	mW/°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{stg}$	-55 to 150	

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_R$	$I_R = 10 \mu A$	30			V
Forward voltage	$V_F$	$I_F = 0.1 \text{ mA}$			0.24	
		$I_F = 1 \text{ mA}$			0.32	
		$I_F = 10 \text{ mA}$			0.4	
		$I_F = 30 \text{ mA}$			0.5	
		$I_F = 100 \text{ mA}$			0.8	
Reverse voltage leakage current	$I_R$	$V_R = 25 \text{ V}$			2	$\mu A$
Junction capacitance	$C_j$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$			10	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10 \text{ mA}, I_{R(REC)} = 1 \text{ mA}$			5	ns

## Typical Characteristics

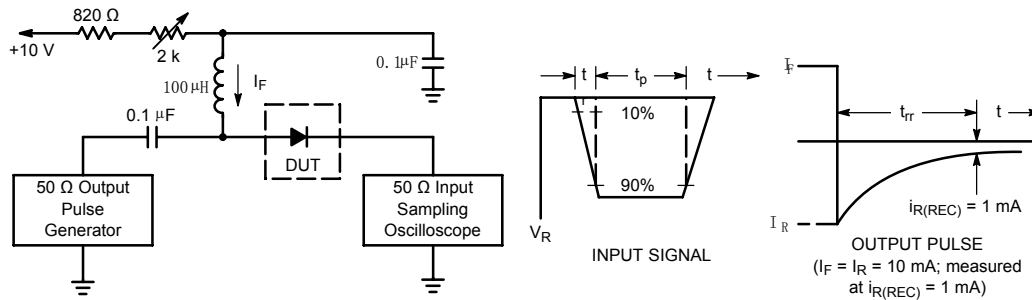


Figure 1. Recovery Time Equivalent Test Circuit

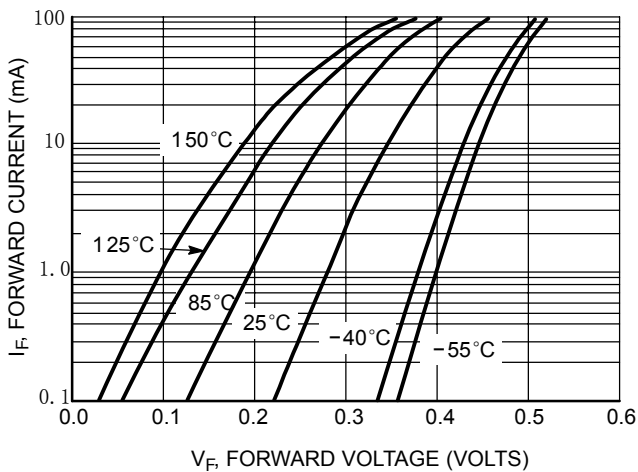


Figure 2. Forward Voltage

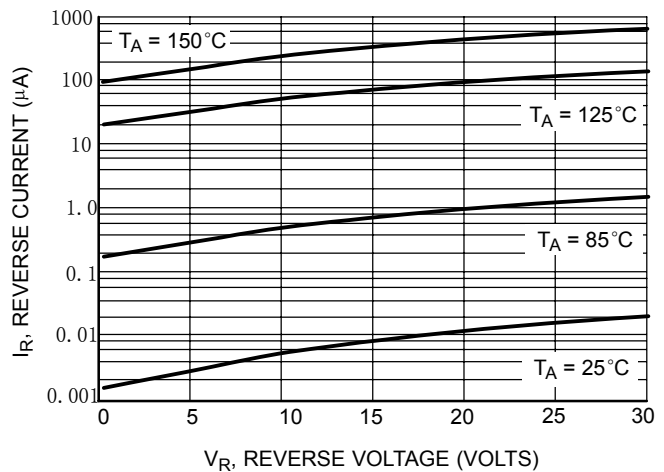


Figure 3. Leakage Current

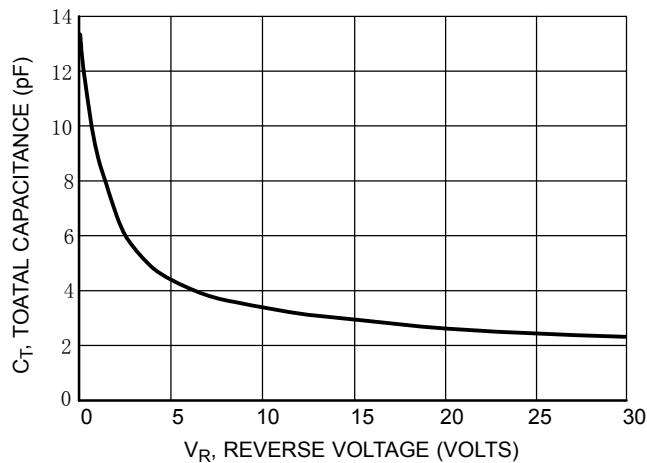
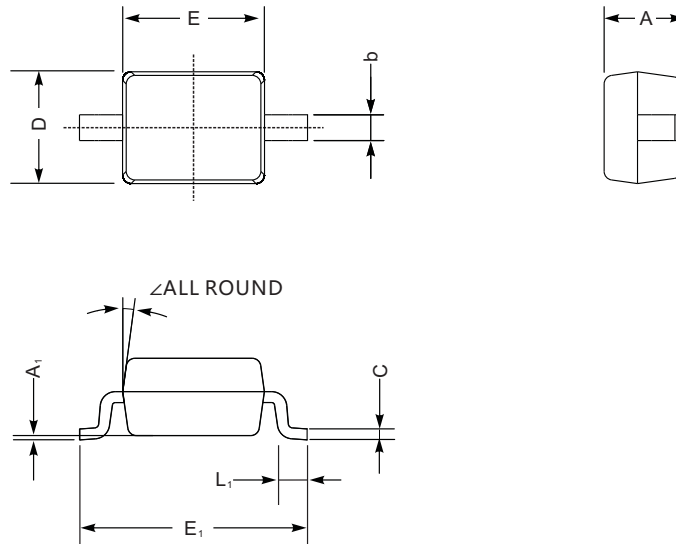


Figure 4. Total Capacitance

## ■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

## ■ The recommended mounting pad size

