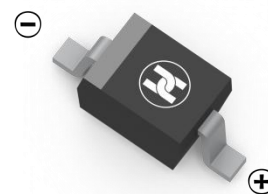


SCHOTTKY BARRIER DIODE

FEATURES

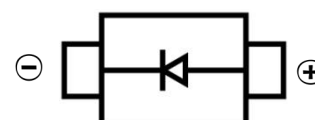
- Low Forward Voltage
- Low Reverse Leakage Current
- Fast Switching
- Surface Mount device



SOD-323

MECHANICAL DATA

- Case: SOD-323
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.005 grams (approximate)



MAXIMUM RATINGS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	200	V
Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Forward Continuous Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 8.3 \text{ ms}$	I_{FSM}	625	mA
Power Dissipation	P_D	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	635	$^{\circ}\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Reverse Breakdown Voltage	V_R	250		V	$I_R = 100 \mu\text{A}$
Forward voltage	V_F		1	V	$I_F = 100 \text{ mA}$
			1.25		$I_F = 200 \text{ mA}$
Reverse voltage leakage current	I_R		0.1	μA	$V_R = 200 \text{ V}$
			100		$V_R = 200 \text{ V}, T_J = 150^{\circ}\text{C}$
Diode capacitance	C_D		5	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	T_{rr}		50	nS	$I_F = I_R = 30 \text{ mA}$ $I_{rr} = 0.1 \times I_R$ $R_L = 100 \Omega$

SCHOTTKY BARRIER DIODE

Typical Characteristics

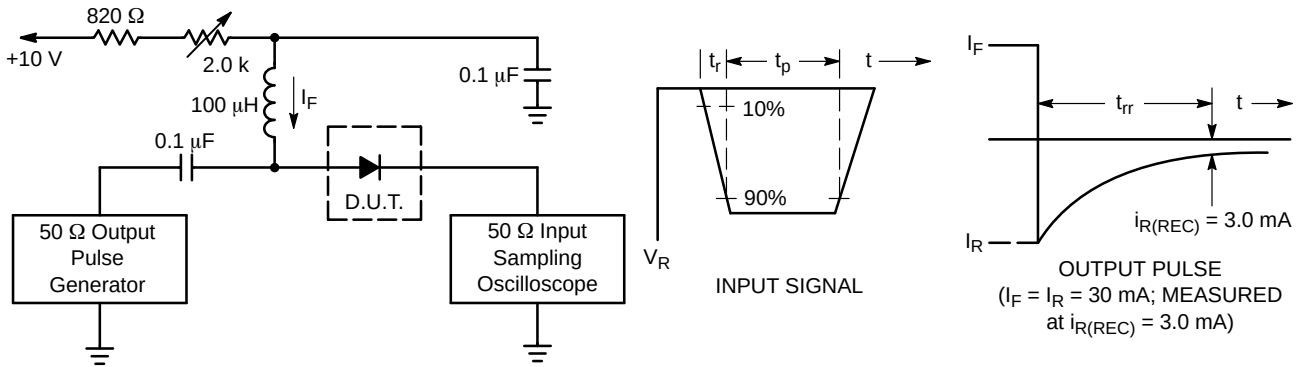


Figure 1. Recovery Time Equivalent Test Circuit

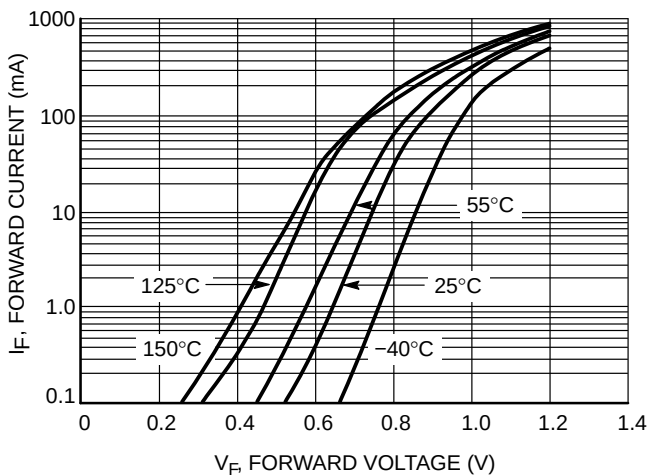


Figure 2. Forward Current

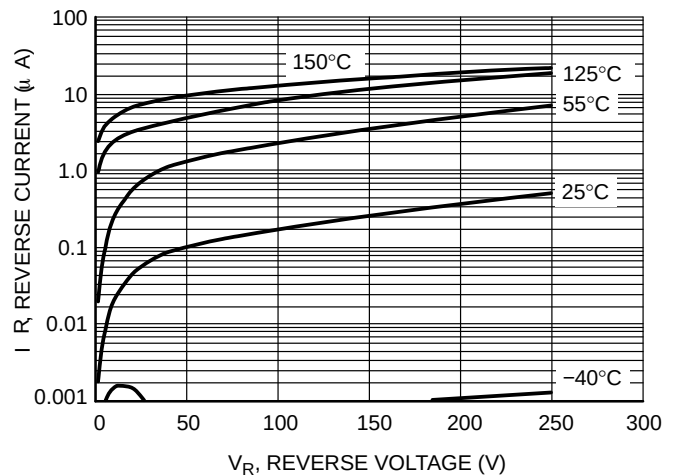


Figure 3. Leakage Current

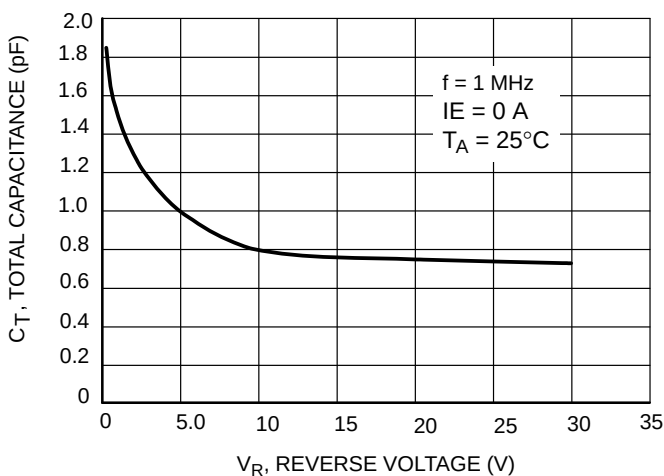


Figure 4. Total Capacitance

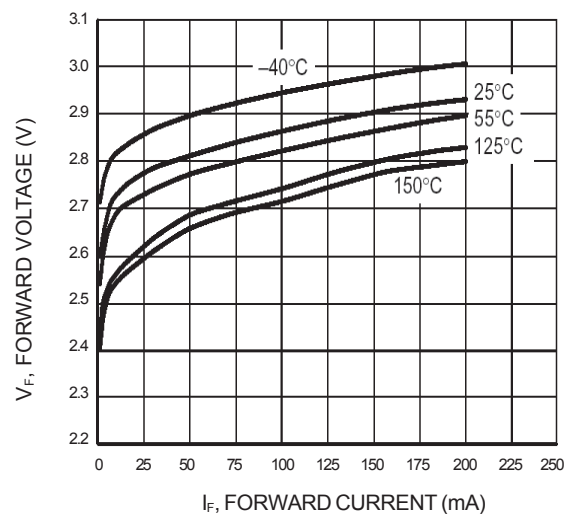
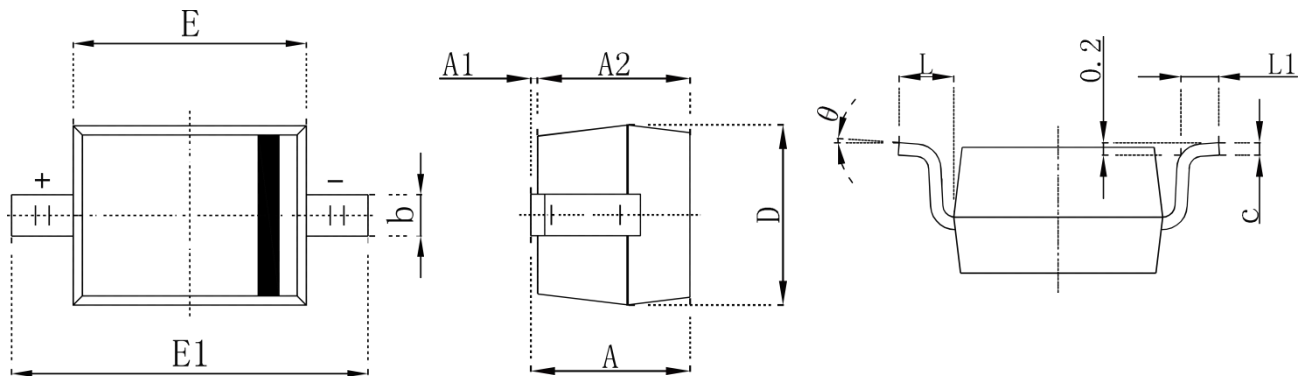


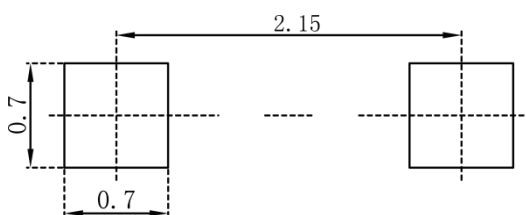
Figure 5. Forward Voltage

SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



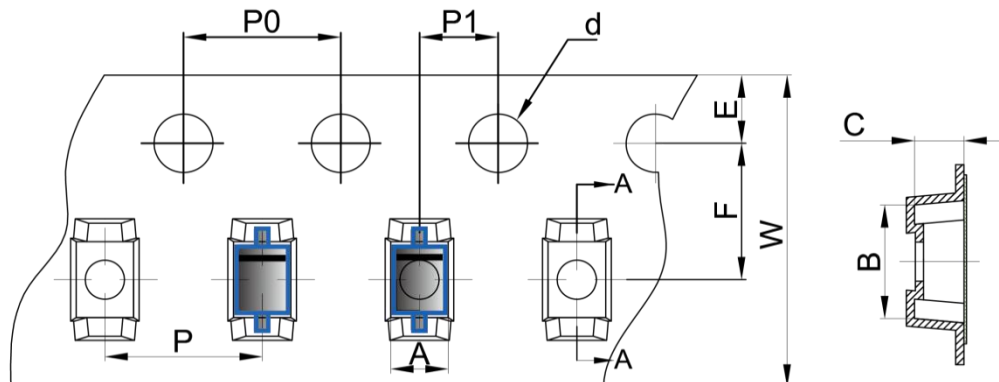
Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

SCHOTTKY BARRIER DIODE

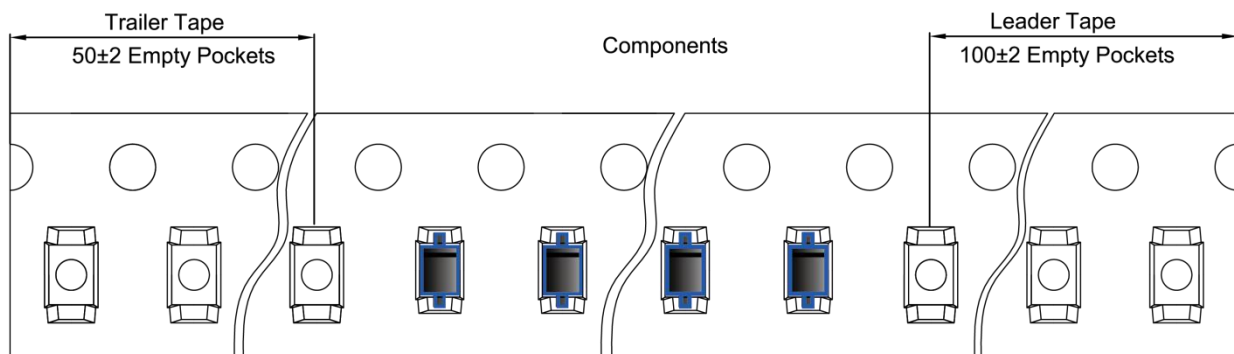
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

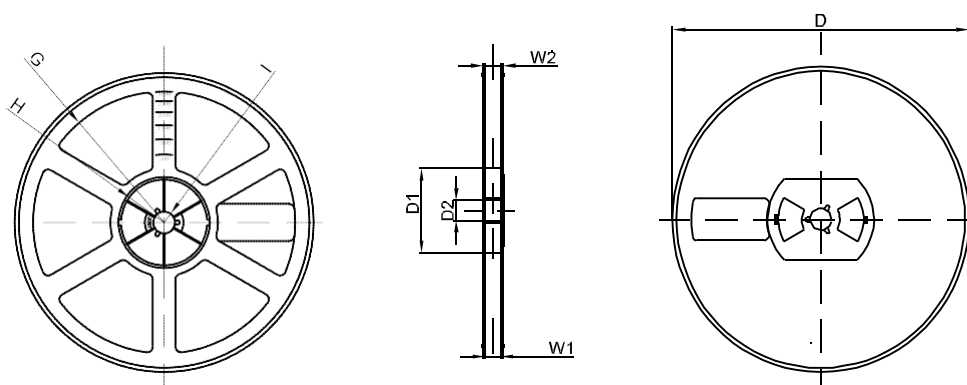


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-323 Tape Leader and Trailer



SOD-323 Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1