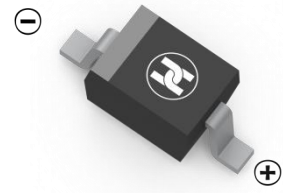
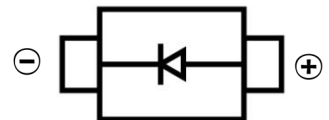


SCHOTTKY BARRIER DIODE
FEATURES

- High Conductance
- Fast Switching
- Surface Mount device
- For General Purpose Switching Applications


SOD-323

MECHANICAL DATA

- Case: SOD-323
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.005 grams (approximate)

Marking: A6
MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R	75	V
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 8.3 \text{ ms}$	I_{FSM}	500	mA
Power Dissipation	P_D	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	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	$V_{(BR)}$	75		V	$I_R = 100\mu\text{A}$
Forward voltage	V_F		0.715	V	$I_F = 1\text{mA}$
			0.855		$I_F = 10\text{mA}$
			1		$I_F = 50\text{mA}$
			1.25		$I_F = 150\text{mA}$
Reverse voltage leakage current	I_R		1	μA	$V_R = 75\text{V}$
			50		$V_R = 75\text{V}, T_J = 150^\circ\text{C}$
			30		$V_R = 25\text{V}, T_J = 150^\circ\text{C}$
Diode capacitance	C_D		2	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Forward recovery voltage	V_{FR}		1.75	V	$I_F = 10\text{mA}, t_r = 20\text{nS}$
Stored Charge	Q_S		45	pC	$I_F = 10\text{mA}$ to $V_R = 5\text{V}$, $R_L = 500\Omega$
Reverse recovery time	T_{rr}		5	nS	$I_F = I_R = 10\text{mA}$ $I_{rr} = 0.1 \times I_R$ $R_L = 50\Omega$

SCHOTTKY BARRIER DIODE

Typical Characteristics

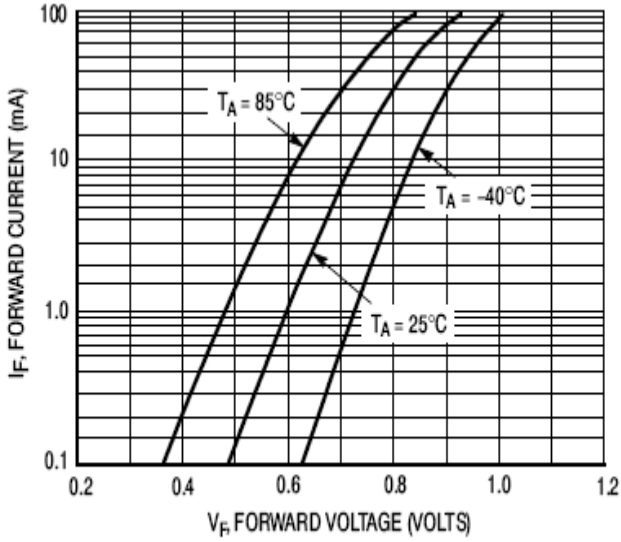


Figure 2. Forward Voltage

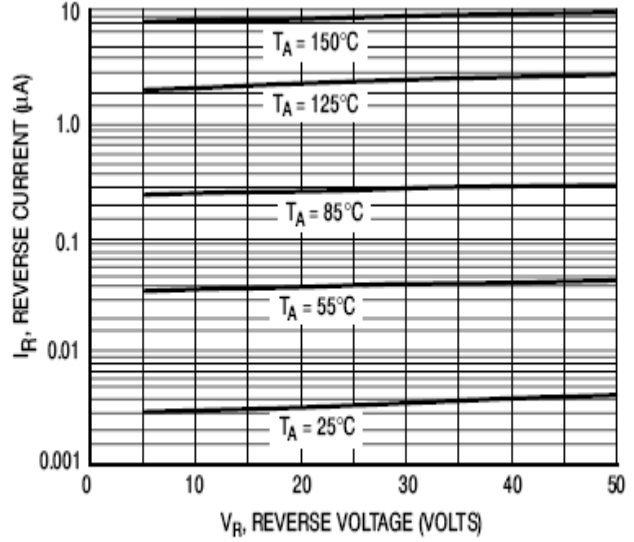


Figure 3. Leakage Current

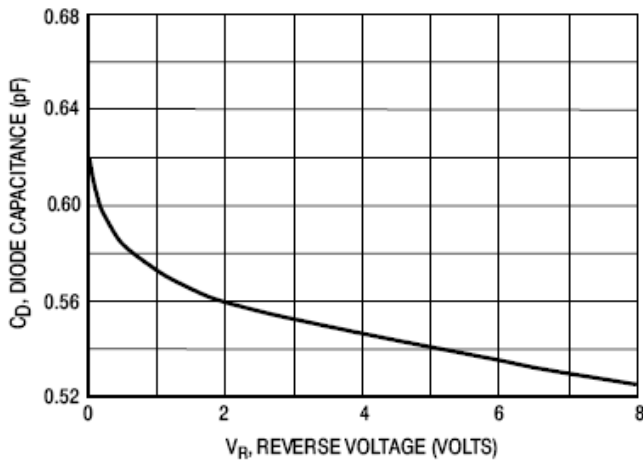
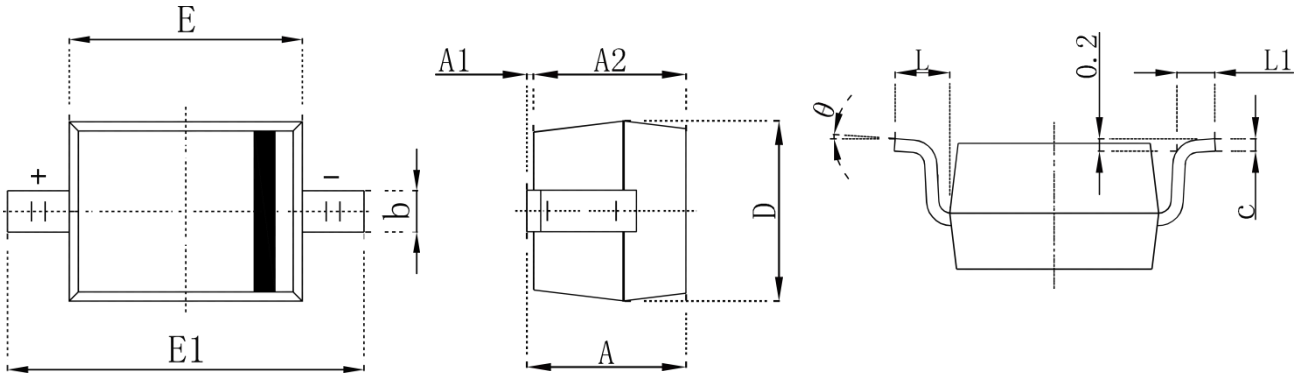


Figure 4. Capacitance

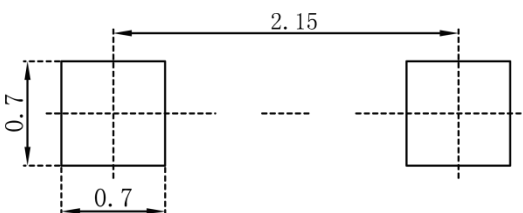
SCHOTTKY BARRIER DIODE

SOD-323 Package Outline Dimensions



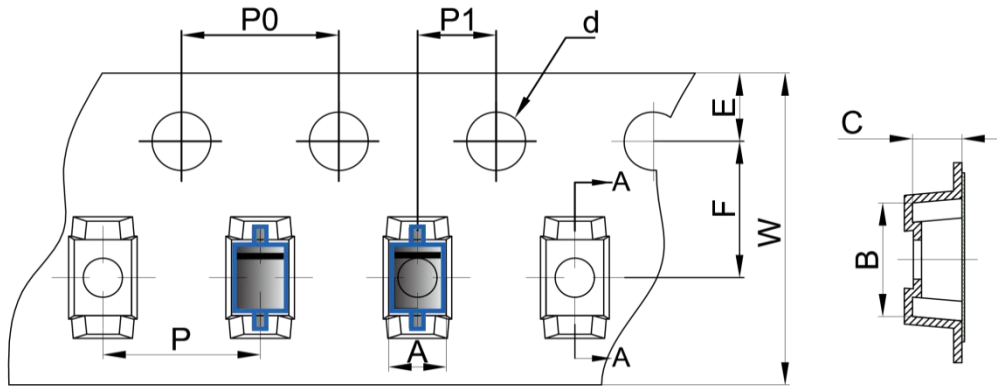
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF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

SOD-323 Suggested Pad Layout

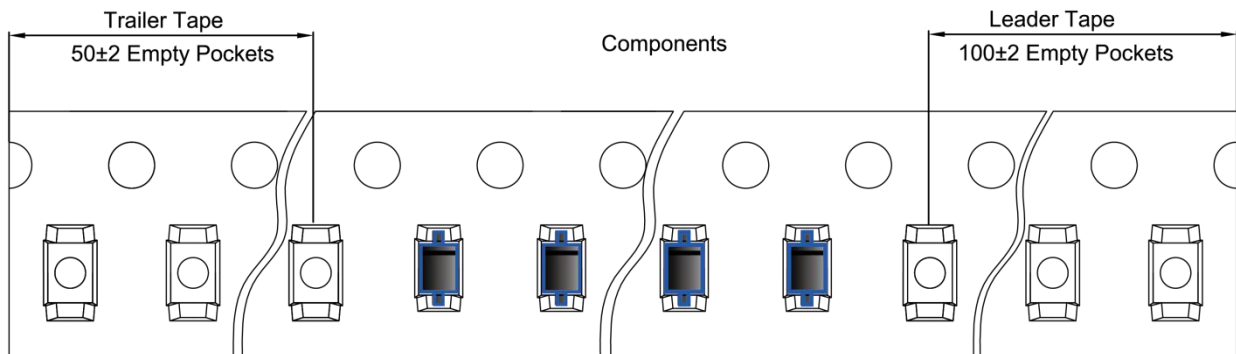
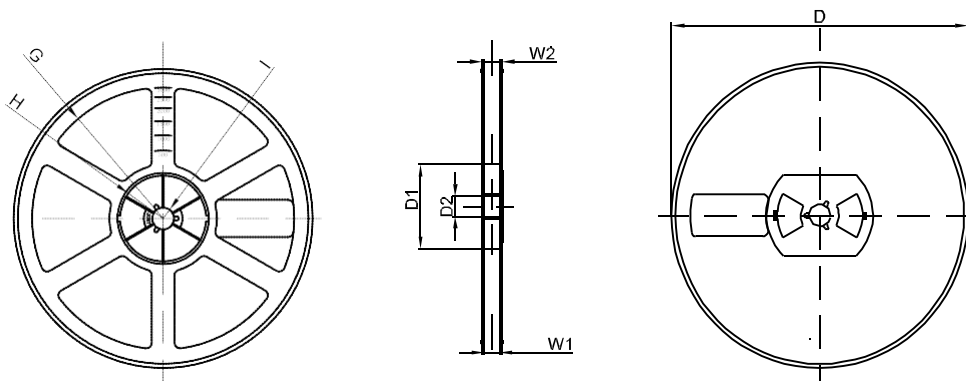


Note:

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