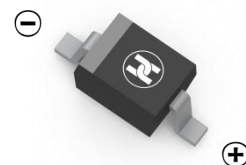
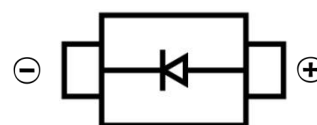


SCHOTTKY BARRIER DIODE**FEATURES**

- Low Forward Voltage
- High Conductance
- Surface Mount device
- Guard Ring Construction for Transient Protection
- For Low Current Rectifier Circuits Applications

**SOD-323****MECHANICAL DATA**

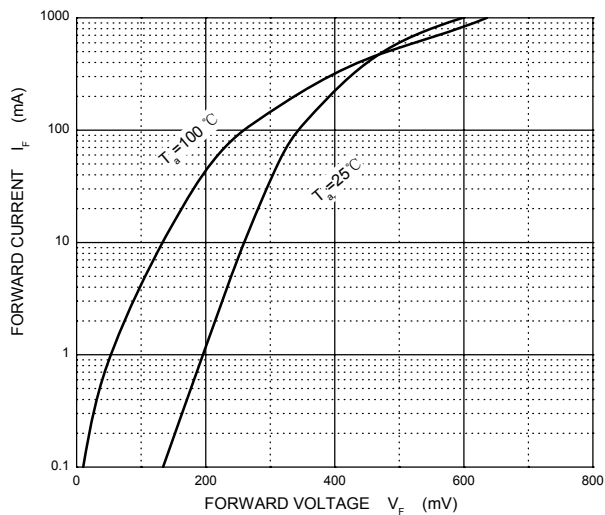
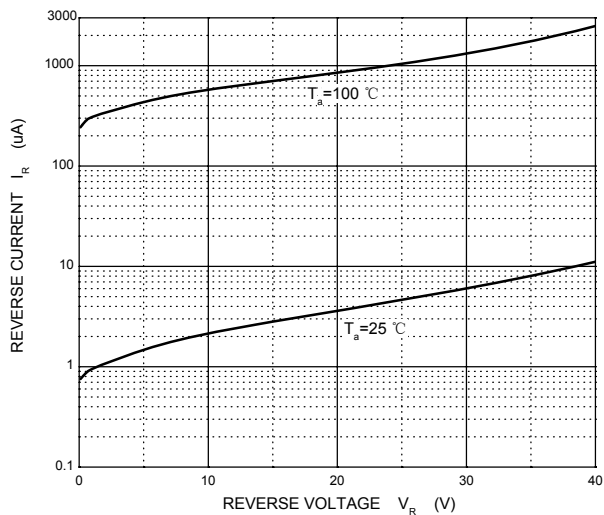
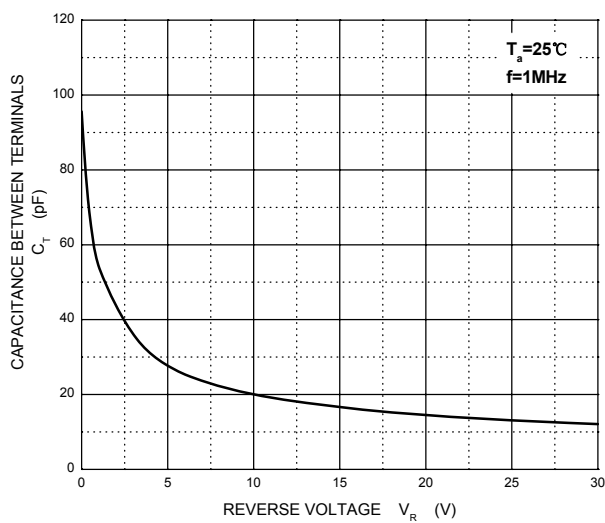
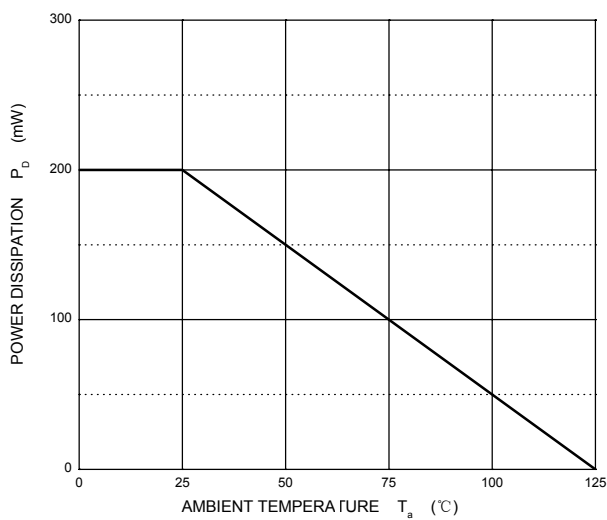
- Case: SOD-323
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.005 grams (approximate)

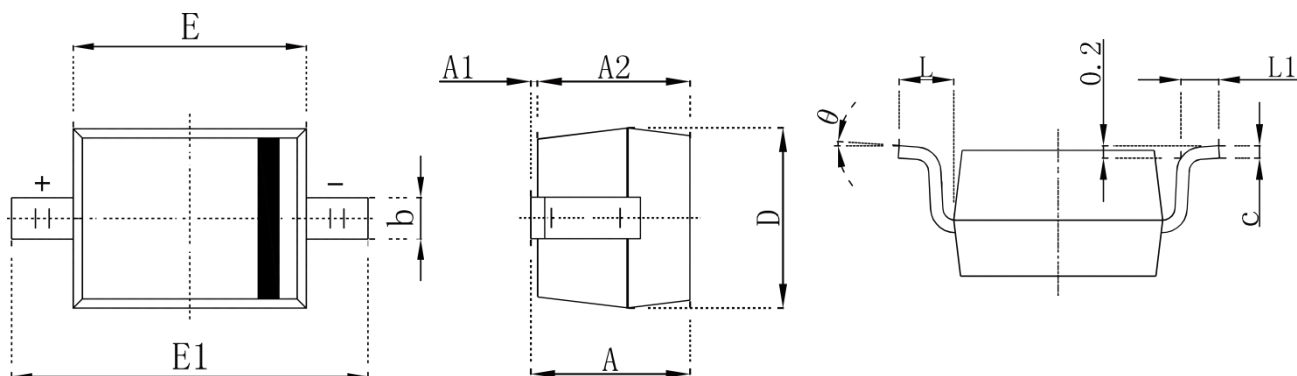
**MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)**

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_R	40	V
RMS reverse voltage reverse voltage (DC)	V_{RMS}	28	V
Forward Current	I_F	500	mA
Non-Repetitive Peak Forward Surge Current @ $t = 8.3 \text{ ms}$	I_{FSM}	5.5	A
Power Dissipation	P_D	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~+150	$^\circ\text{C}$
Voltage rate of change	dv/dt	1000	$\text{V}/\mu\text{s}$

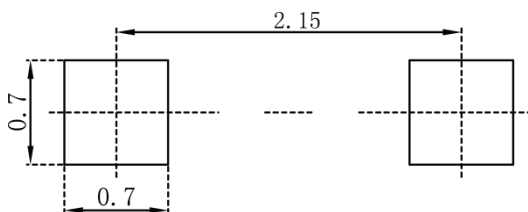
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	40		V	$I_R=20\mu\text{A}$
Forward voltage	V_F		0.51	V	$I_F=0.5\text{A}$
			0.62		$I_F=1\text{A}$
Reverse voltage leakage current	I_R		10	μA	$V_R=20\text{V}$
			20		$V_R=40\text{V}$
Diode capacitance	C_D		170	pF	$V_R=0, f=1\text{MHz}$

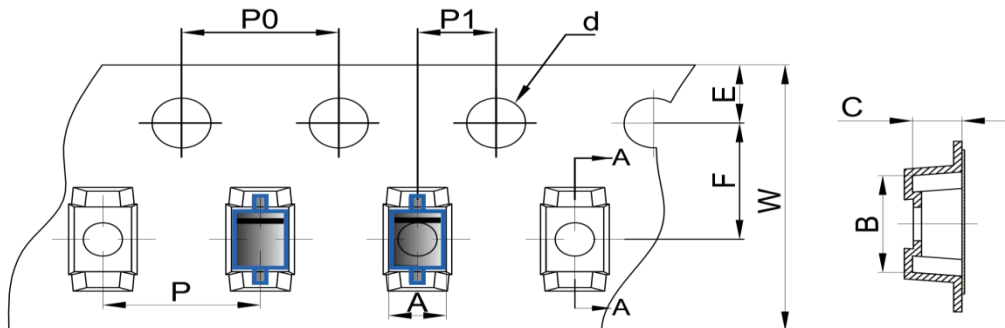
SCHOTTKY BARRIER DIODE**Typical Characteristics****Forward Characteristics****Reverse Characteristics****Capacitance Characteristics****Power Derating Curve**

SCHOTTKY BARRIER DIODE**SOD-323 Package Outline Dimensions**

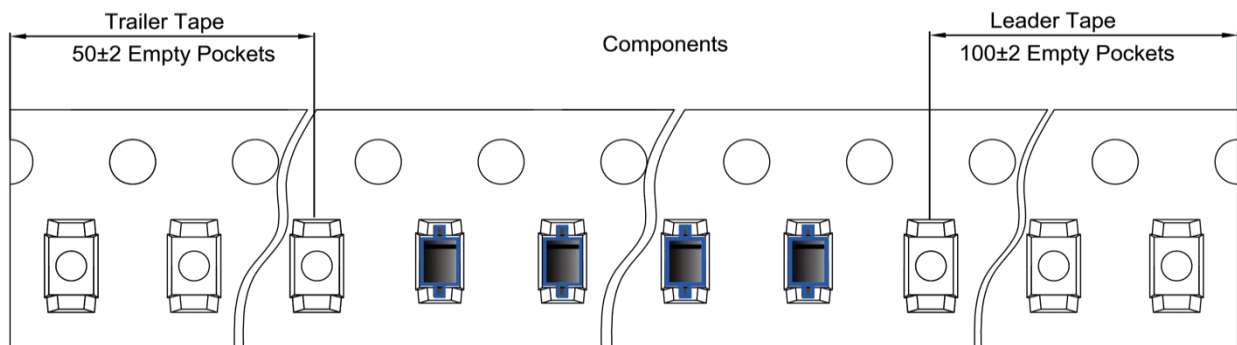
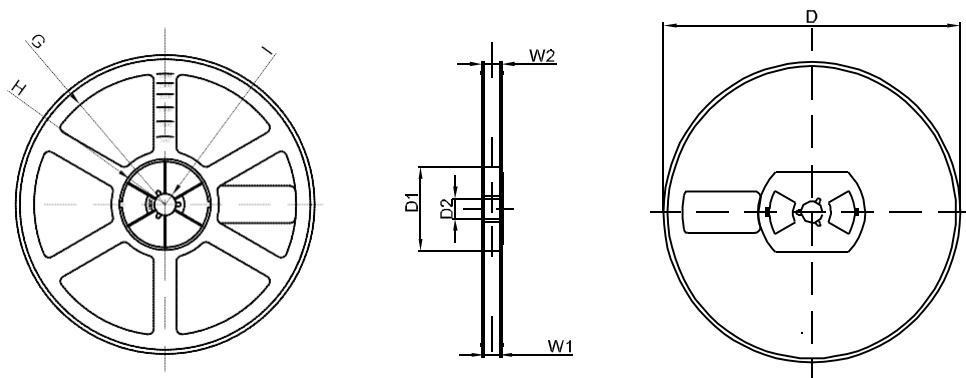
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF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