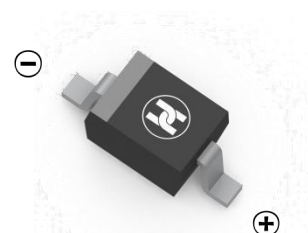
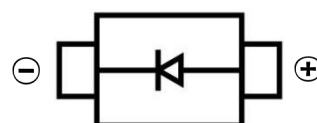


SCHOTTKY BARRIER DIODE
FEATURES

- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection
- 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	Limit	Unit
Peak repetitive peak reverse voltage	V_{RRM}	100	V
Working peak reverse voltage	V_{RWM}		
Forward continuous current	I_F	150	mA
Repetitive peak forward current (Note 1) @ $t_p < 1.0\text{s}$, Duty Cycle < 50%	I_{FRM}	350	mA
Non-repetitive Peak Forward surge current @ $t = 8.3\text{ms}$	I_{FSM}	750	mA
Power dissipation	P_D	200	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{STG}	-40~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage(Note 2)	V_R	$I_R = 100\mu\text{A}$	100			V
Reverse voltage leakage current	I_R	$V_{R1} = 1.5\text{V}$			0.3	μA
		$V_{R2} = 10\text{V}$			0.8	
		$V_{R3} = 50\text{V}$			2	
		$V_{R4} = 75\text{V}$			5	
Forward voltage(Note 2)	V_F	$I_{F1} = 0.1\text{mA}$			0.25	V
		$I_{F2} = 10\text{mA}$			0.45	
		$I_{F3} = 250\text{mA}$			1	
Diode capacitance	C_T	$V_R = 0, f = 1\text{MHz}$		20		pF
		$V_R = 1\text{V}, f = 1\text{MHz}$		10		

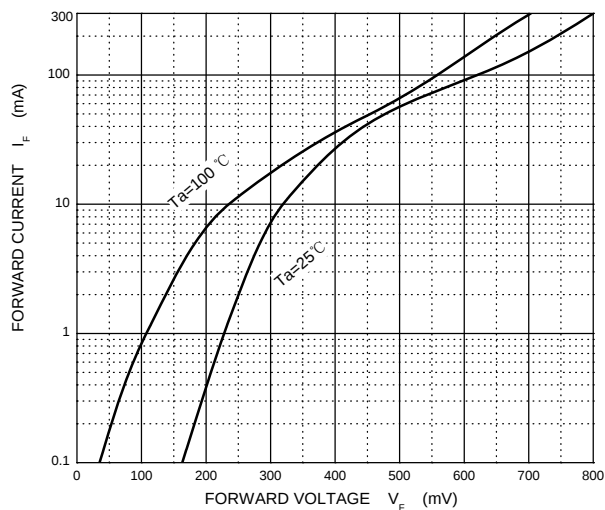
Notes: 1. Part mounted on FR-4 board with recommended pad layout.

2. Short duration pulse test used to minimize self-heating effect.

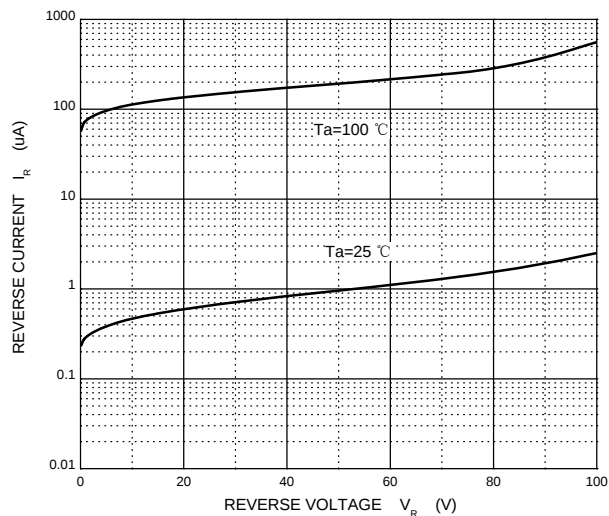
SCHOTTKY BARRIER DIODE

Typical Characteristics

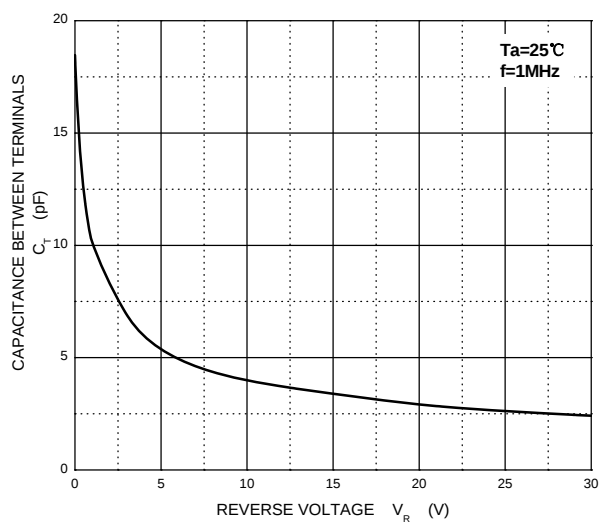
Forward Characteristics



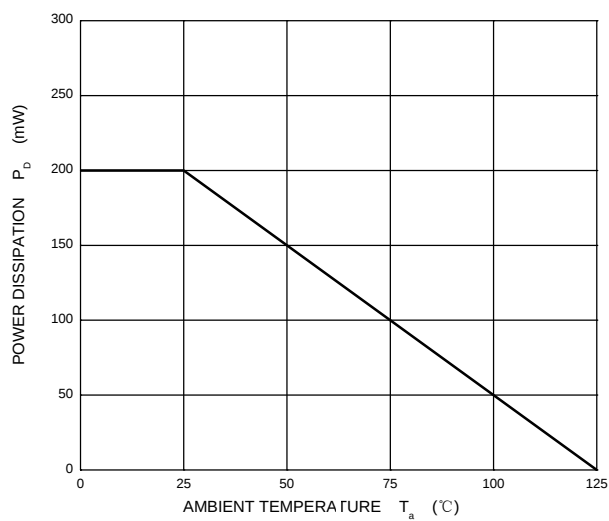
Reverse Characteristics

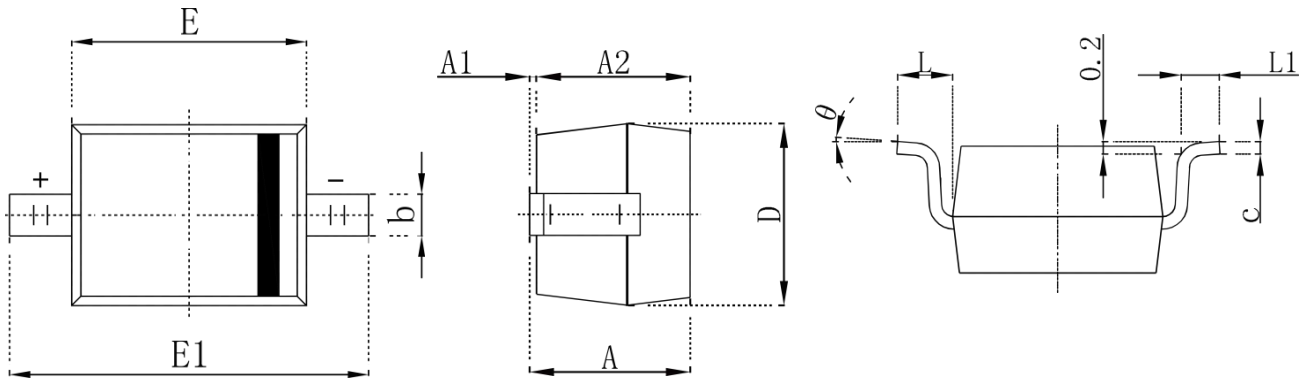


Capacitance Characteristics

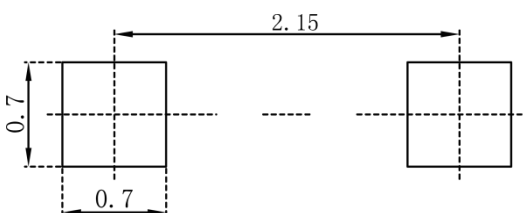


Power Derating Curve

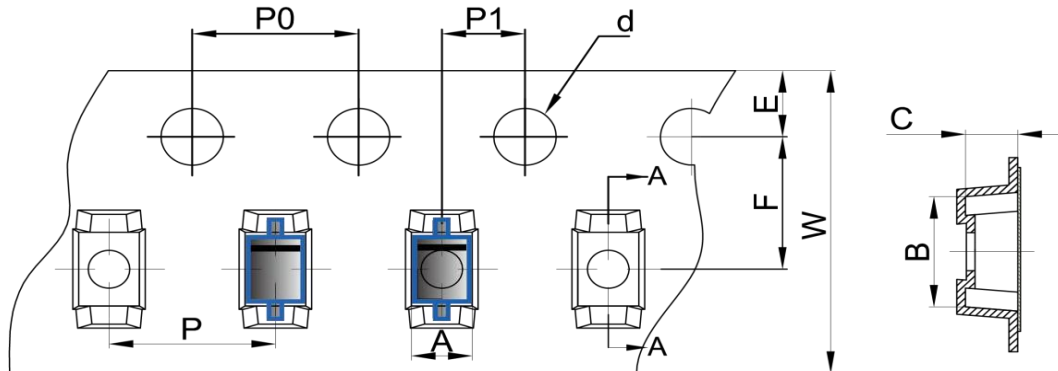


SCHOTTKY BARRIER DIODE
SOD-323 Package Outline Dimensions


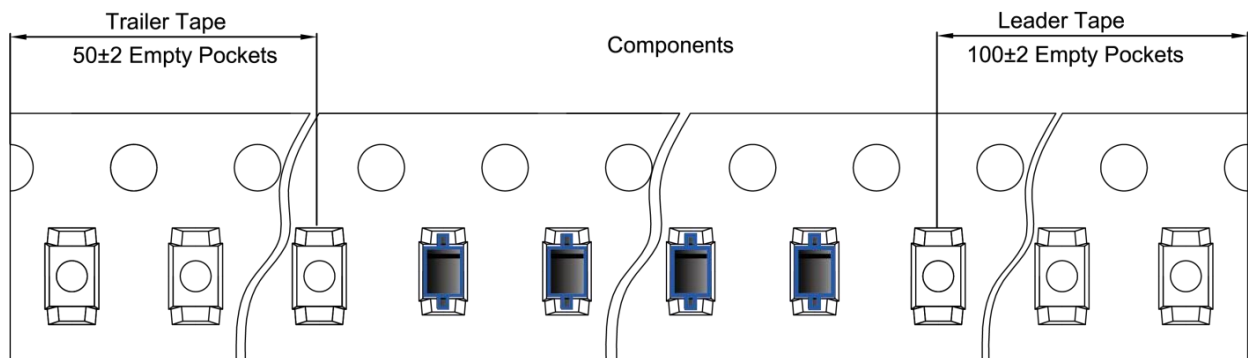
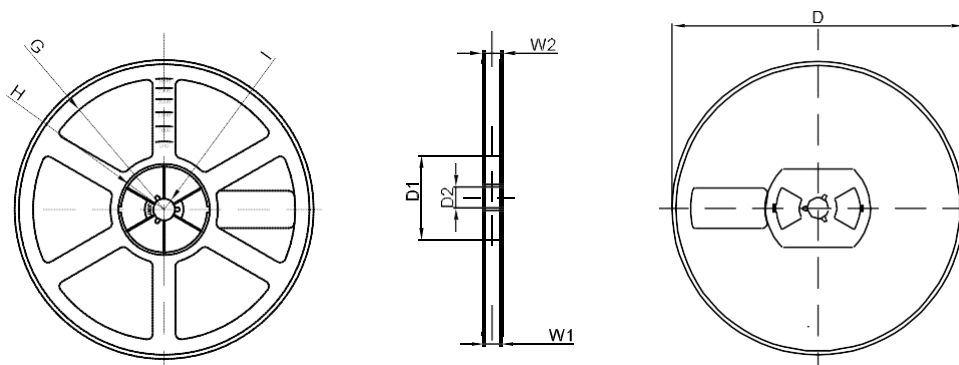
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF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