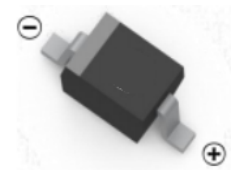
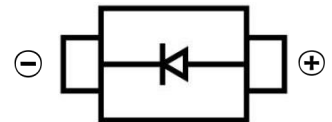


SCHOTTKY BARRIER DIODE
FEATURES

- Low Forward Voltage
- Fast Switching
- Low Capacitance
- PN Junction Guard Ring for Transient and ESD Protection

MECHANICAL DATA

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


SOD-323

MARKING:
SD103AWS:S4
SD103BWS:S5
SD103CWS:S6
MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

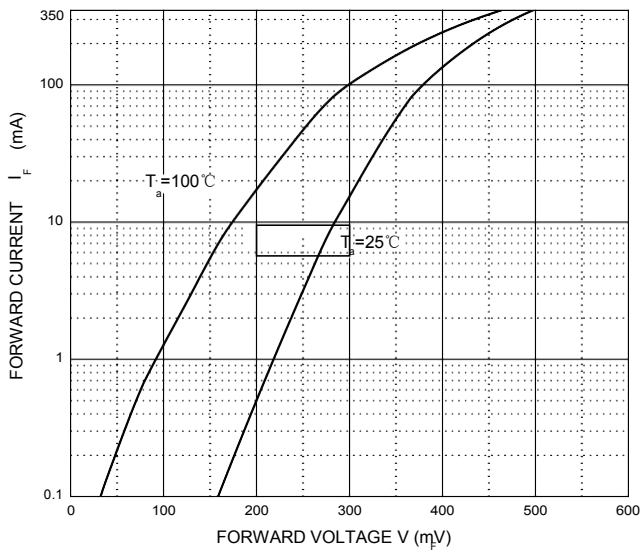
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	40	30	20	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_{FM}	350			mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.0			A
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			$^\circ\text{C/W}$
Junction Temperature	T_j	125			$^\circ\text{C}$
Storage Temperature	T_{STG}	$-55\sim+150$			$^\circ\text{C}$

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

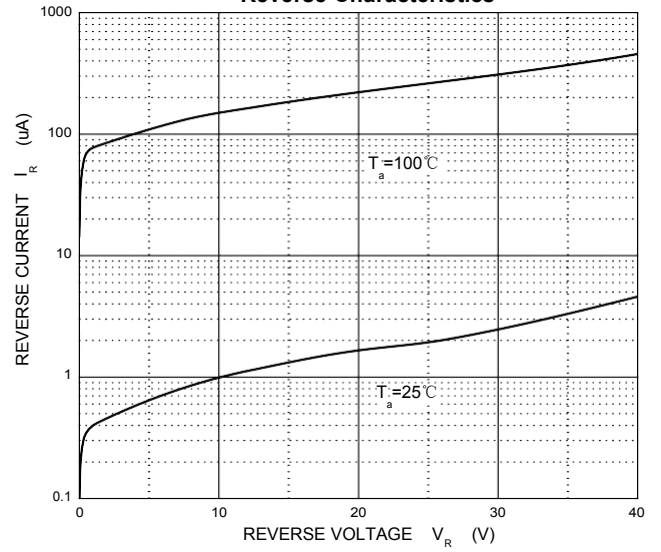
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$				V	
SD103AWS		40				$I_R=100\mu\text{A}$
SD103BWS		30				$I_R=100\mu\text{A}$
SD103CWS		20				$I_R=100\mu\text{A}$
Forward voltage	V_F			0.37 0.60	V	$I_F=20\text{mA}$ $I_F=200\text{mA}$
Reverse current	I_{RM}			5.0	μA	
SD103AWS						$V_R=30\text{V}$
SD103BWS						$V_R=20\text{V}$
SD103CWS						$V_R=10\text{V}$
Capacitance between terminals	C_T			50	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

SCHOTTKY BARRIER DIODE

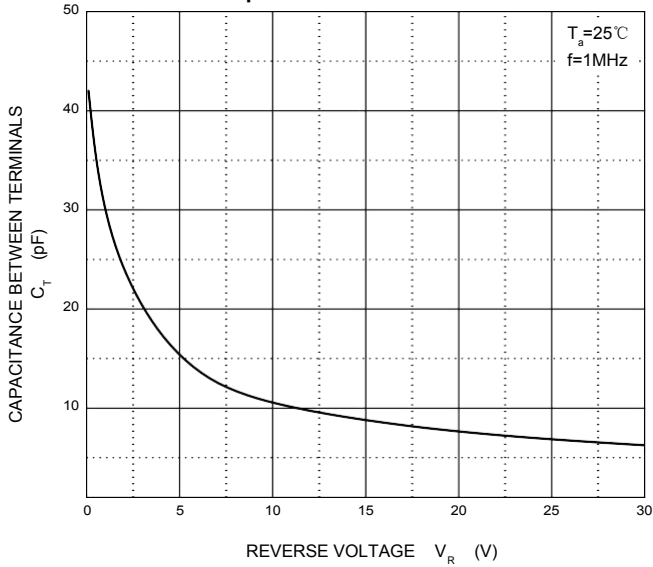
Forward Characteristics



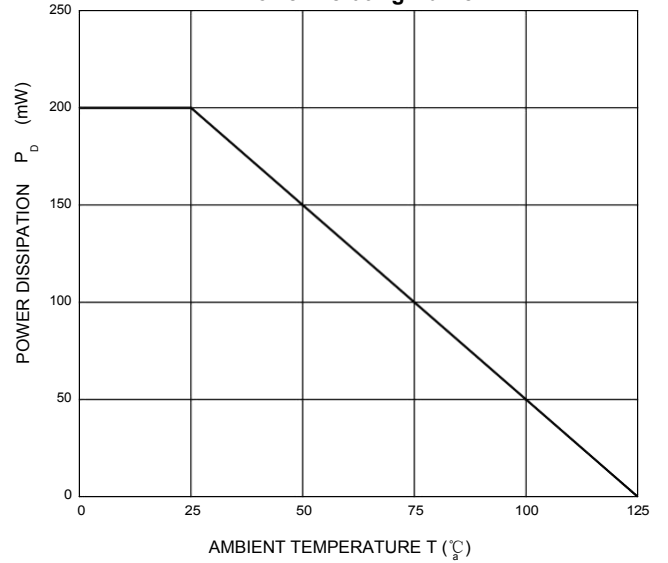
Reverse Characteristics



Capacitance Characteristics

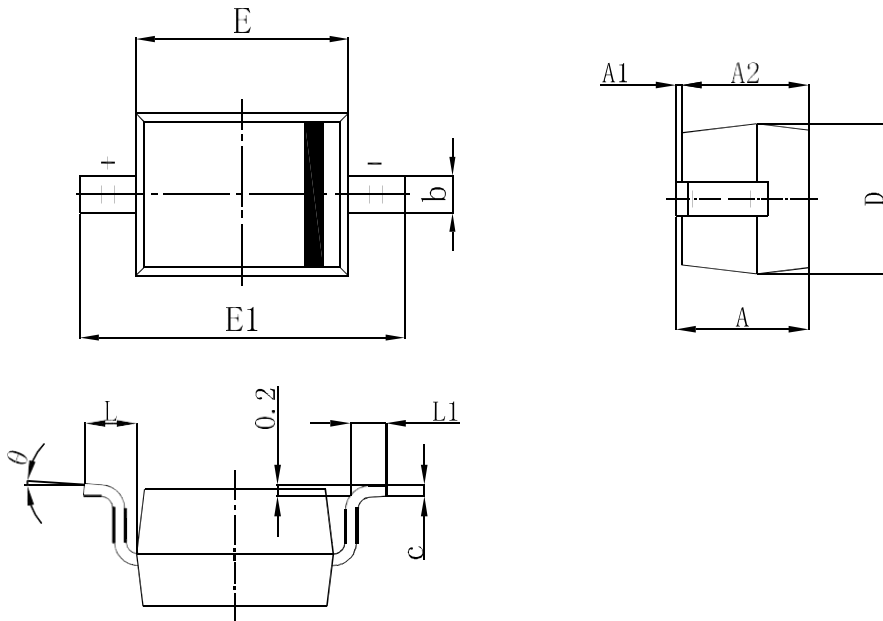


Power Derating Curve



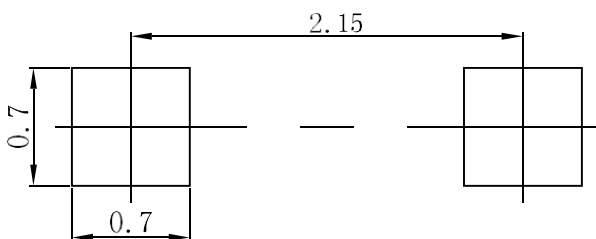
SCHOTTKY BARRIER DIODE

SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



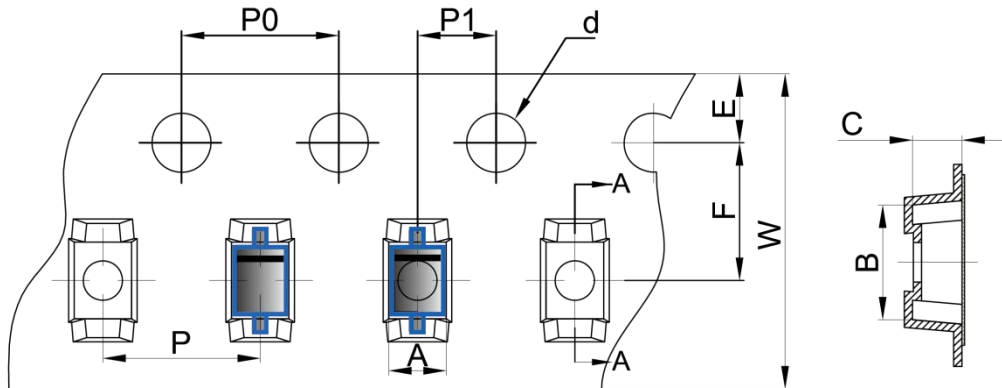
Note:

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

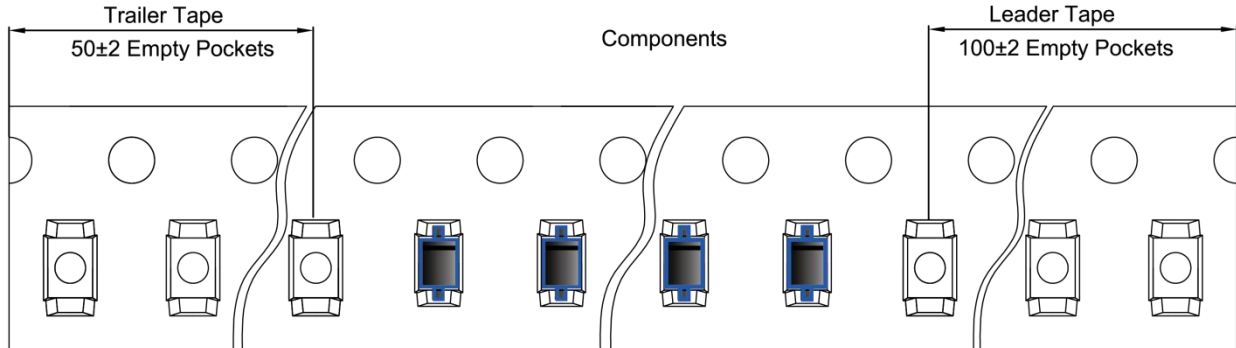
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

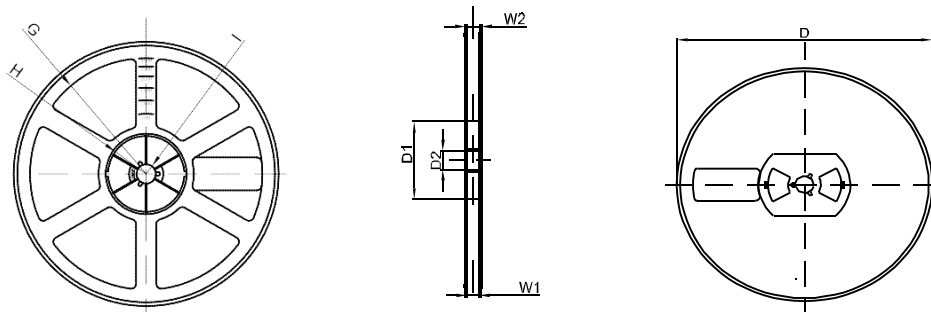


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.30	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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