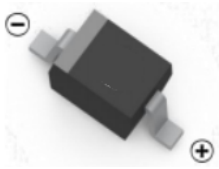
SCHOTTKY BARRIER DIODE

FEATURES

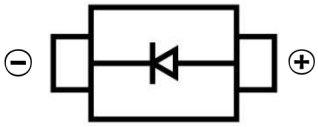
- Low Forward Voltage
- Fast Switching
- Low Capacitance
- PN Junction Guard Ring for Transient and ESD Protection



SOD-323

MECHANICAL DATA

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



MARKING:

SD103AWS:S4
SD103BWS:S5
SD103CWS:S6

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

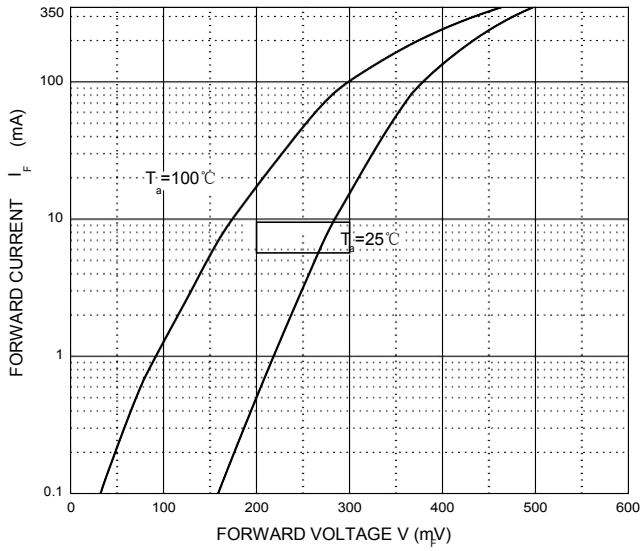
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_{FM}	350			mA
Non-repetitive Peak Forward Surge Current @t=8.3ms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

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

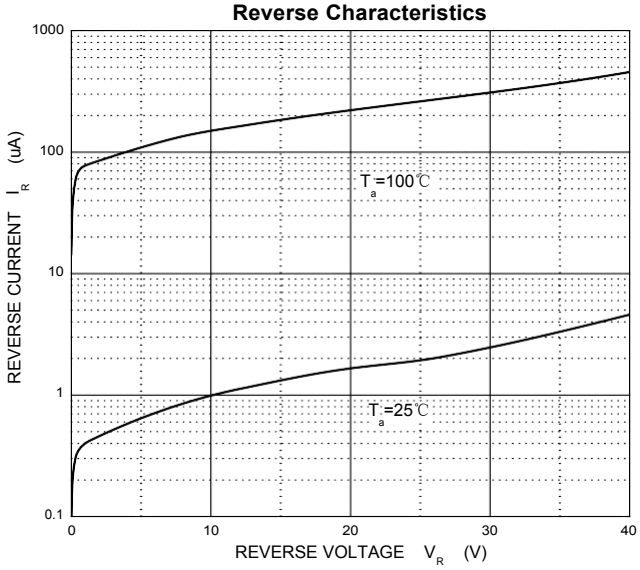
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage SD103AWS SD103BWS SD103CWS	$V_{(BR)}$	 40 30 20			V	 I_R=100μA I_R=100μA I_R=100μA
Forward voltage	V_F			0.37 0.60	V	I_F=20mA I_F=200mA
Reverse current SD103AWS SD103BWS SD103CWS	I_{RM}			5.0	μA	 V_R=30V V_R=20V V_R=10V
Capacitance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

SCHOTTKY BARRIER DIODE

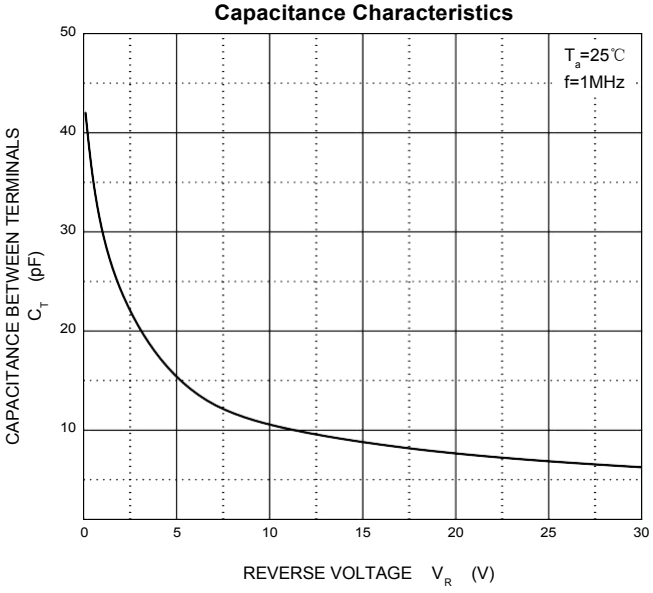
Forward Characteristics



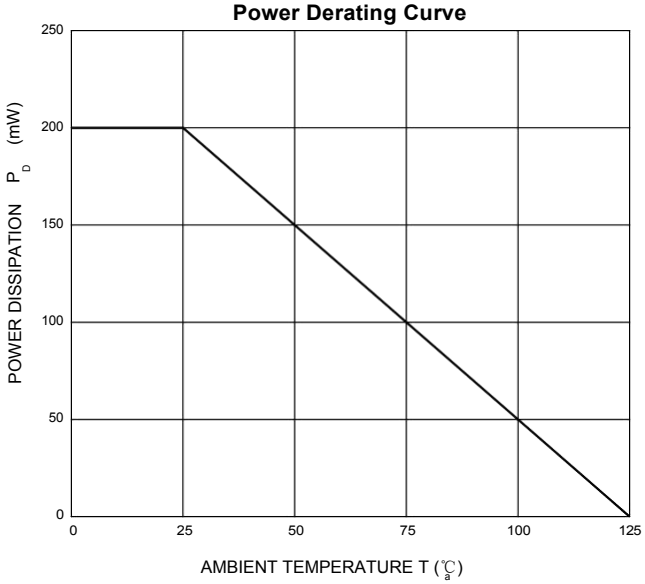
Reverse Characteristics



Capacitance Characteristics

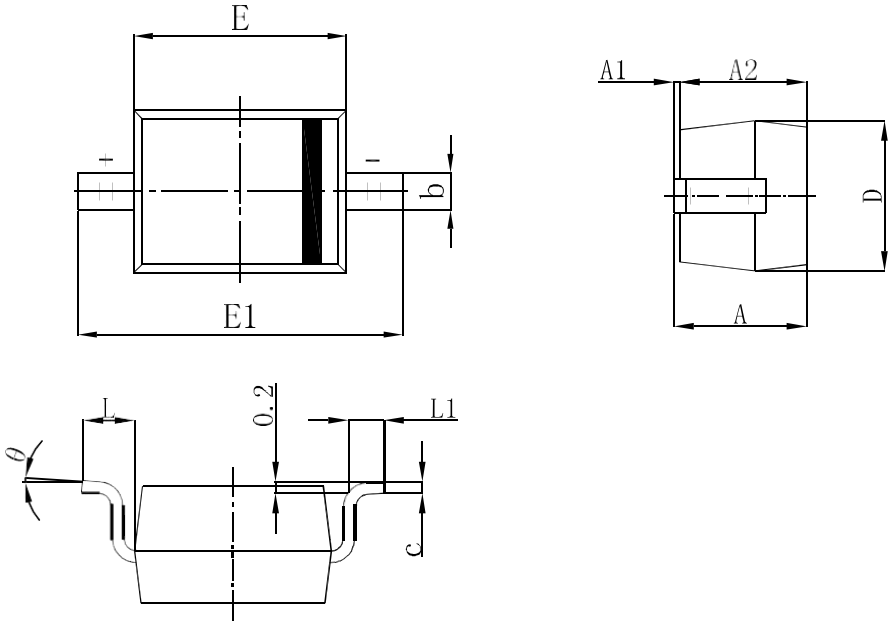


Power Derating Curve



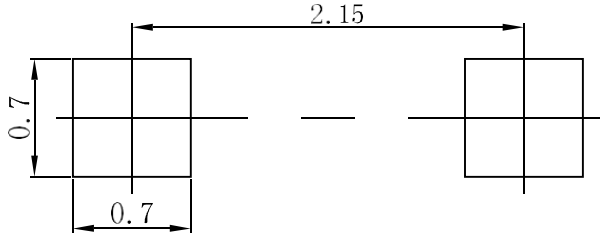
SCHOTTKY BARRIER DIODE

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	0.500REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout

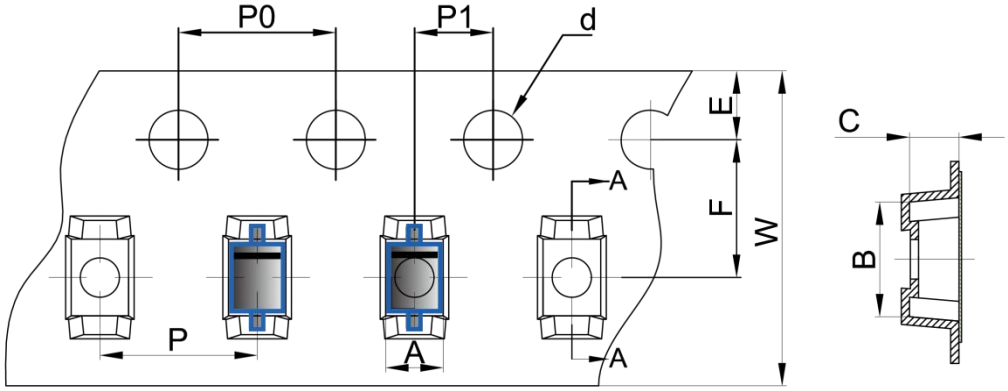


Note:

1. Controlling dimension: in millimeters
2. General tolerance: ±0.05mm
3. The pad layout is for reference purposes only

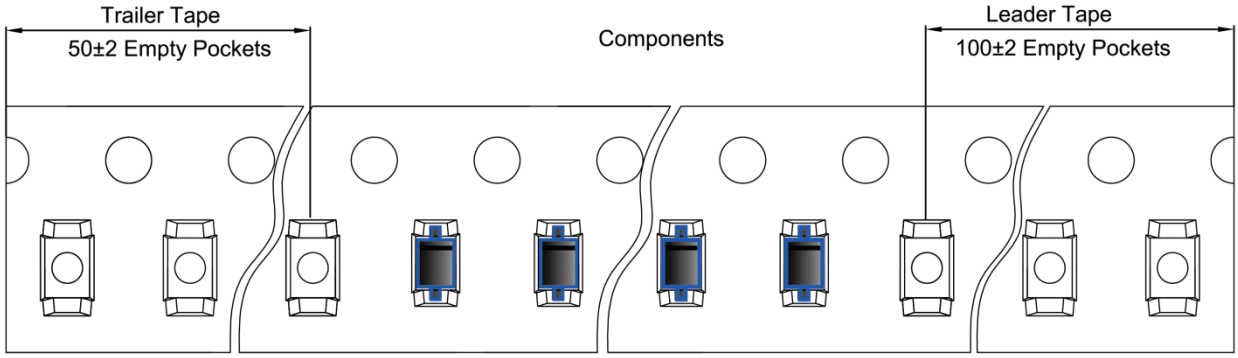
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

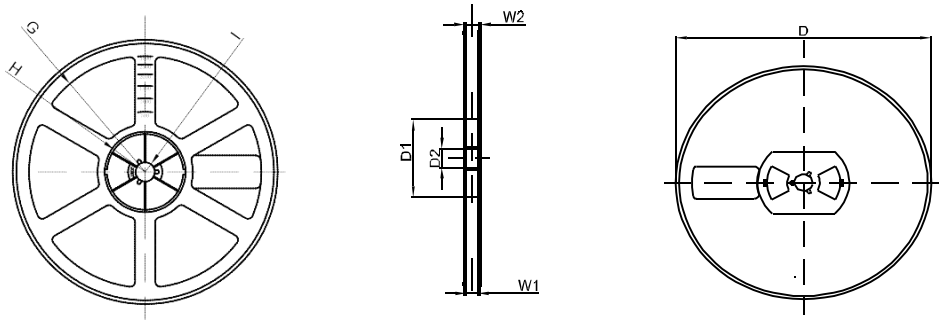


	DIMENSIONS ARE IN MILLIMETER									
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.30	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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