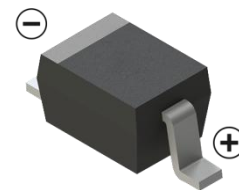
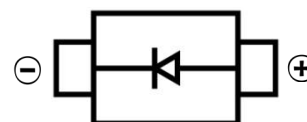


**SWITCHING DIODE**
**FEATURES**

- Fast Switching
- High Conductance
- 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
- Weight: 0.008 grams (approximate)
- Marking:T4


**MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

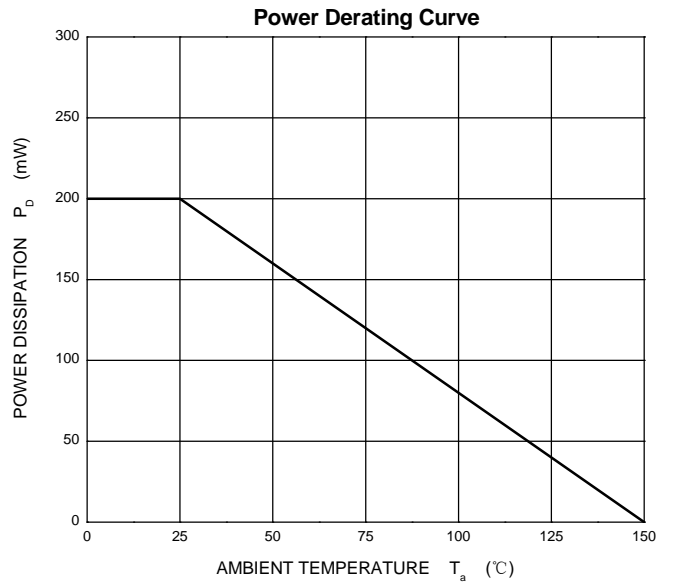
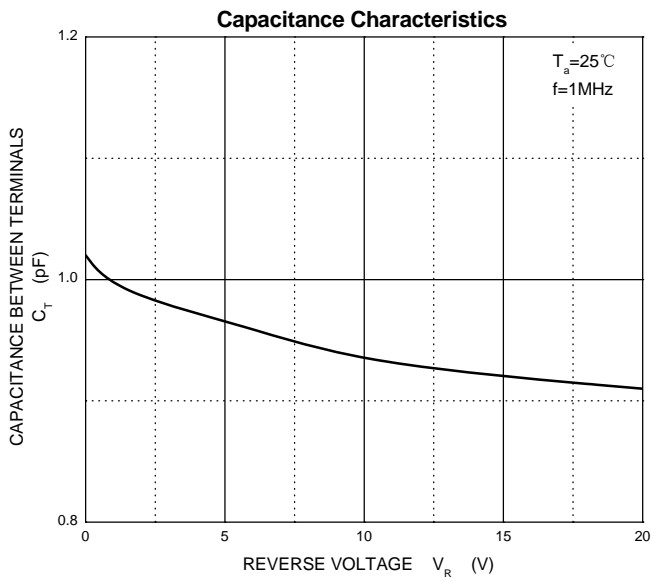
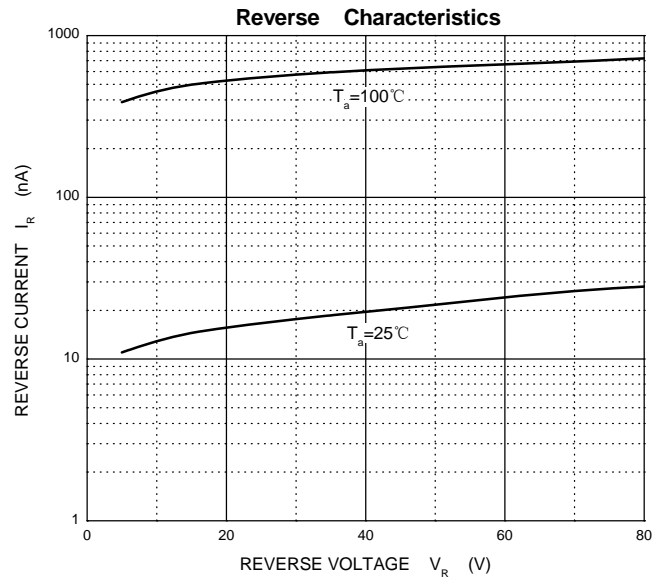
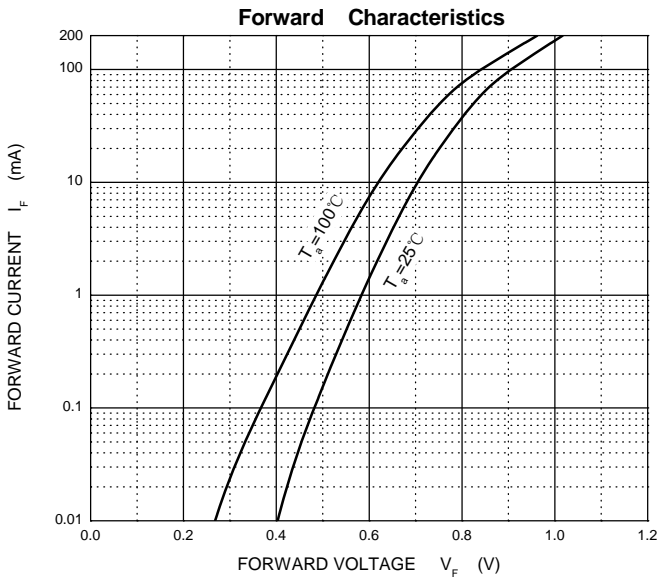
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
DC Blocking Reverse Voltage	V <sub>R</sub>	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	V
Forward Current	I <sub>F</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	100	mA
Non-Repetitive Peak Forward Surge Current @t@=8.3ms	I <sub>FSM</sub>	2.0	A
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>		0.65	V	I <sub>F</sub> = 1 mA
			0.70	V	I <sub>F</sub> = 5 mA
			0.80	V	I <sub>F</sub> =10mA
			0.90	V	I <sub>F</sub> =50mA
			1	V	I <sub>F</sub> =100mA
Reverse voltage leakage current	I <sub>R</sub>		1	uA	V <sub>R</sub> =80V
Diode capacitance	C <sub>D</sub>		3	pF	V <sub>R</sub> =0V,f=1MHz
Reverse recovery time	T <sub>rr</sub>		4	nS	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1×I <sub>R</sub> R <sub>L</sub> =100Ω

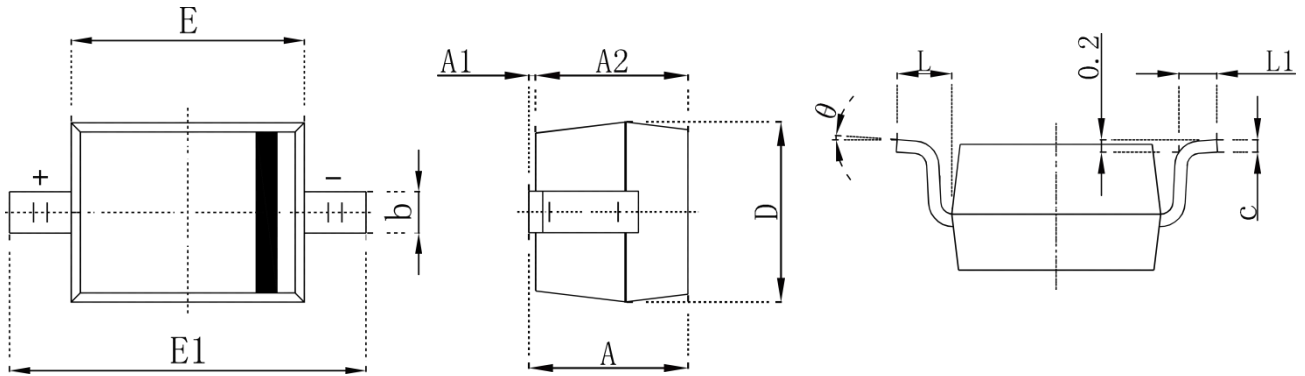
SWITCHING DIODE

Typical Characteristics



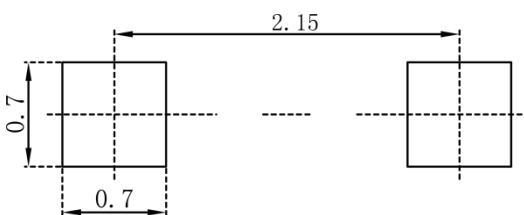
SWITCHING DIODE

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



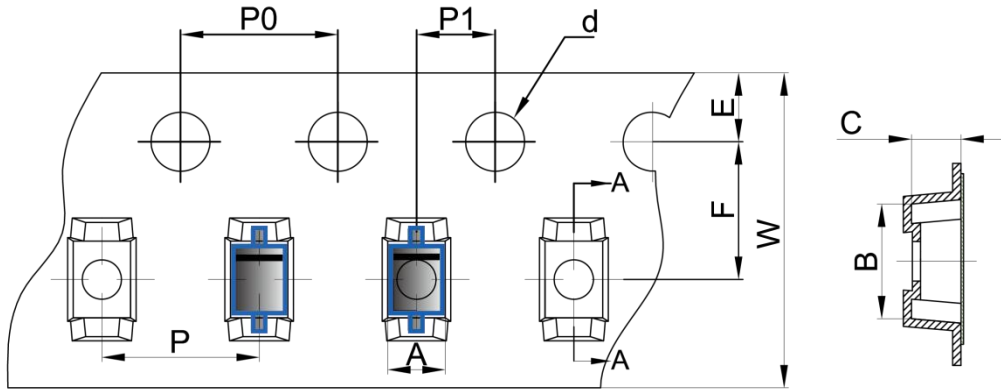
Note:

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

SWITCHING DIODE

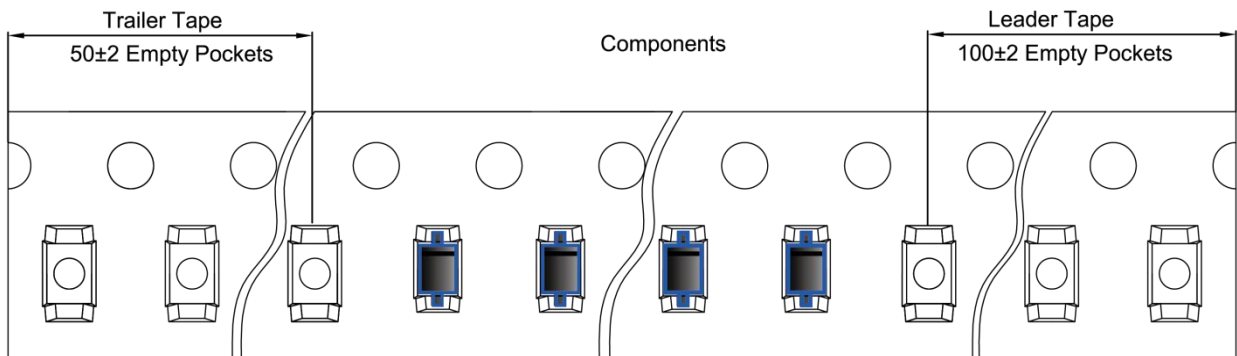
**SOD-323 Tape and Reel**

**SOD-323 Embossed Carrier Tape**

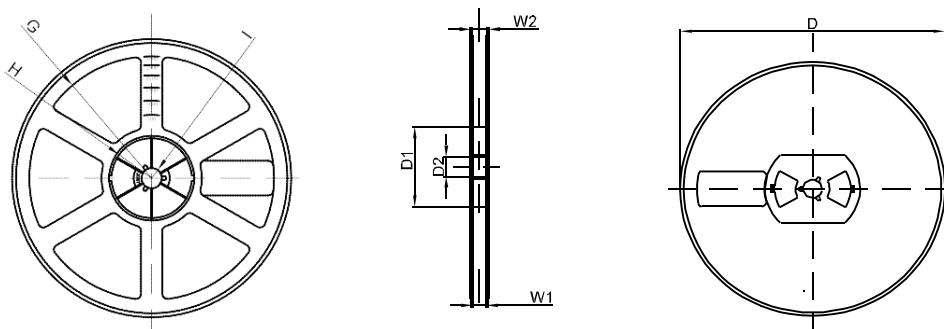


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**SOD-323 Tape Leader and Trailer**



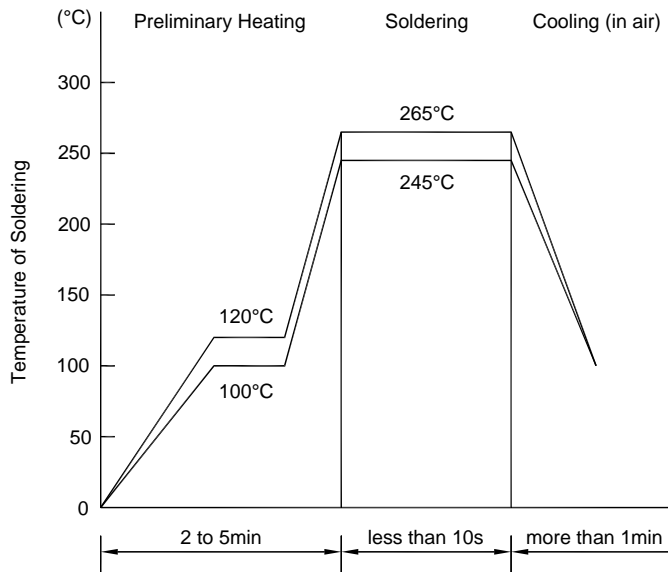
**SOD-323 Reel**



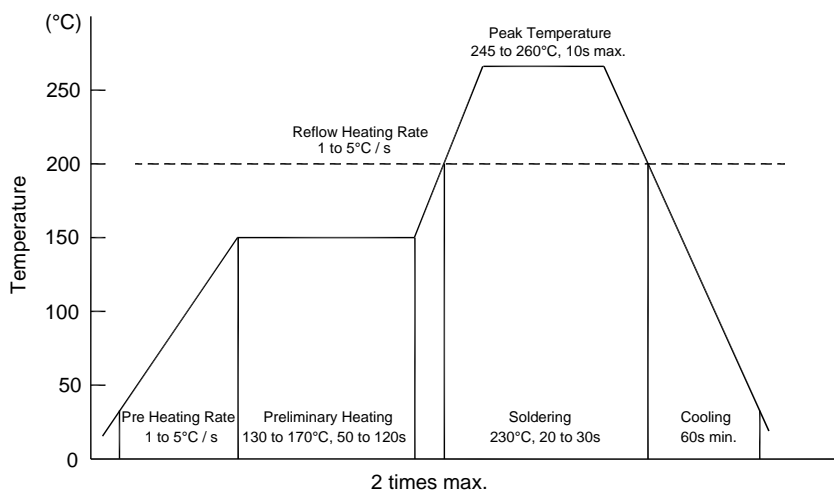
DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1

**SWITCHING DIODE**

• **Recommended condition of flow soldering**



• **Recommended condition of reflow soldering**



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

• **Condition of hand soldering**

Temperature: 370 °C

Time: 3s max.

Times: one time

• **Remark:** Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)