

FEATURES

Low current rectifier schottky diode
Low voltage, low inductance
For power supply

VOLTAGE RANGE

45 Volts

CURRENT

0.1 A



SOD- 323

4

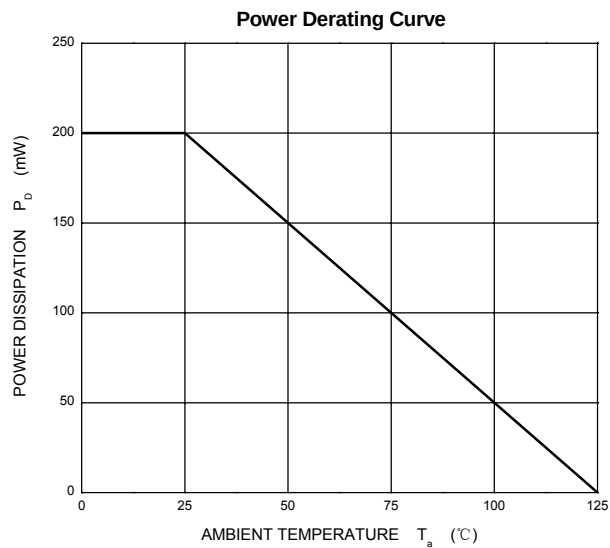
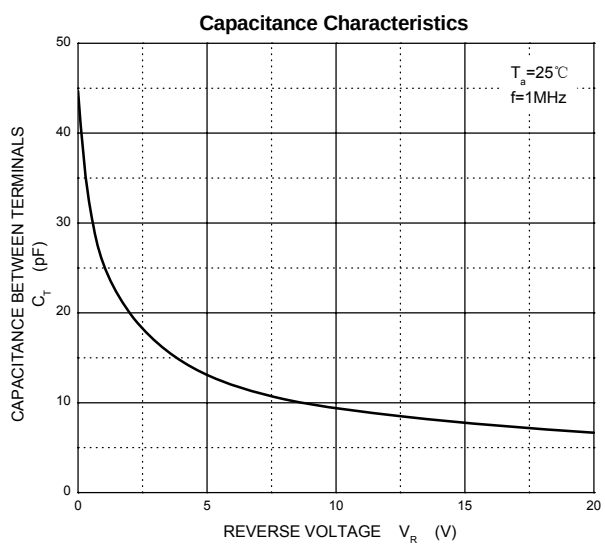
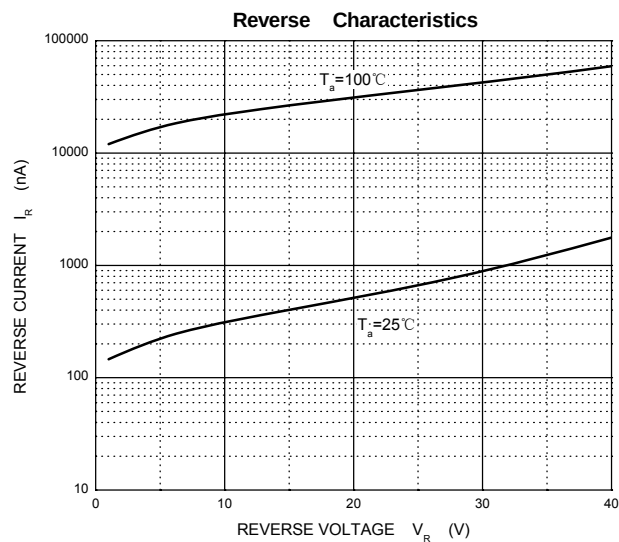
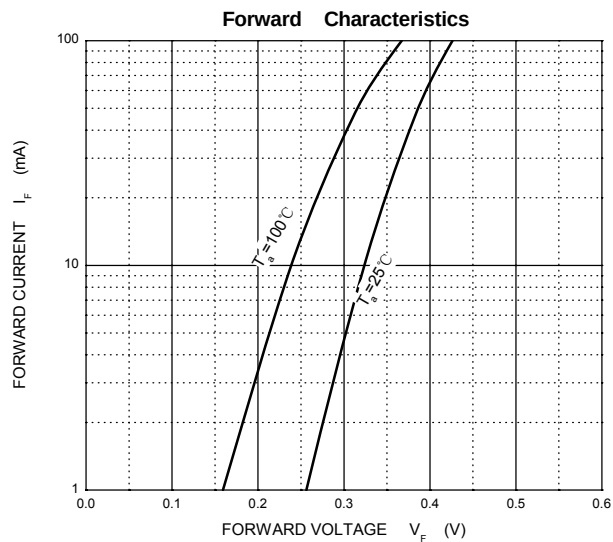
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.1	A
Peak forward surge current	I_{FSM}	1	A
Power dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction temperature	T_J	-40 ~ +125	°C
Storage temperature	T_{stg}	-55~+150	°C

Electrical Ratings @Ta=25°C

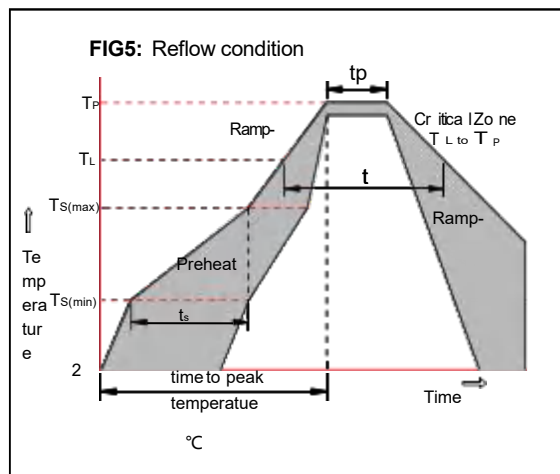
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			0.55 0.34	V	$I_F=100mA$ $I_F=10mA$
Reverse current	I_R			30	μA	$V_R=10V$
Capacitance between terminals	C_T		6		pF	$V_R=10V, f=1MHZ$

RATING AND CHARACTERISTIC CURVES



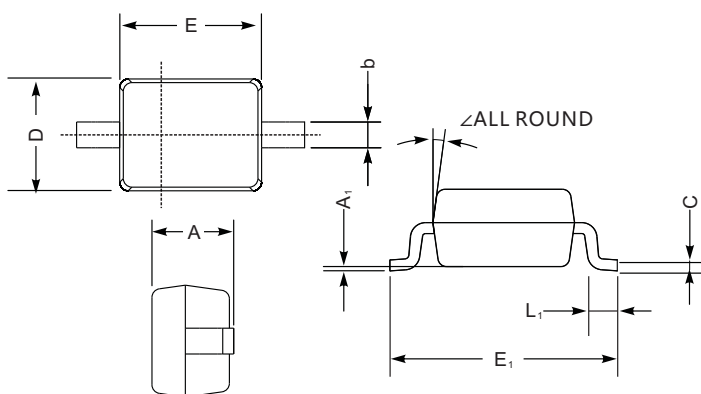
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max ($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3 °C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6 °C/sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C



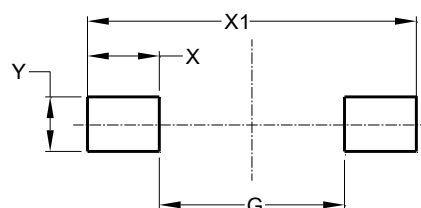
Package Dimensions & Suggested Pad Layout

SOD323



SOD-323 mechanical data

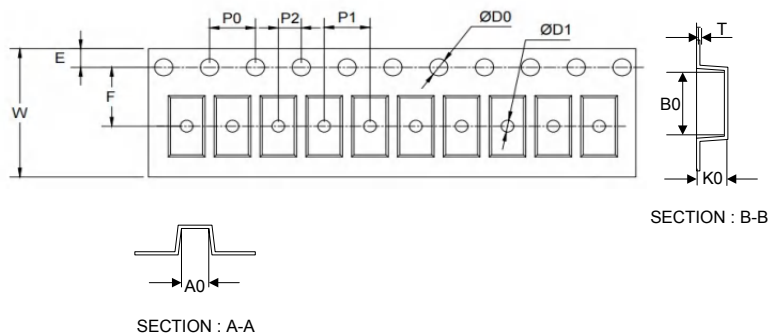
UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	



Dimensions	Value (in mm)
G	1.40
X	1.20
X1	3.80
Y	1.00

Tape & reel specification

Tape



Symbol	Dimension (mm)
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P0	4.00±0.20
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P1	4.00±0.20
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P2	2.00±0.20
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D0	1.55±0.20
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D1	1.00±0.20
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E	1.55±0.25
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F	3.60±0.20
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W	8.00±0.20
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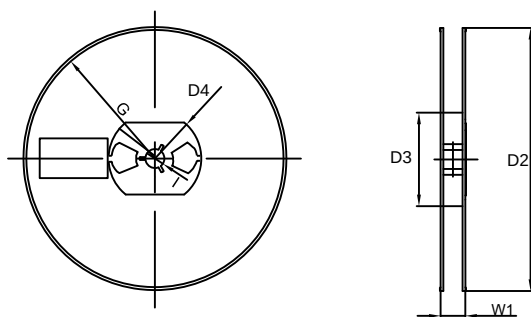
A0	2.00±0.20
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B0	3.25±0.20
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K0	1.35±0.20
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T	0.23±0.10
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7" Reel



D2	177.0±5.0
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D3	55Min.
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D4	R24.6±2.0
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G	R82.0±2.0
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I	13.0±2.0
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W1	10.20±3.0
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Quantity: 3000PCS