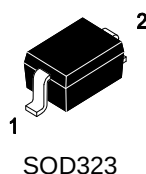




FEATURES

We declare that the material of product compliance with
RoHS requirements and Halogen Free.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	100	V
Forward Current	IF	200	mA
Non-Repetitive Peak forward surgery current @ $t_p = 1.0\mu s$	IFSM	2.0	A

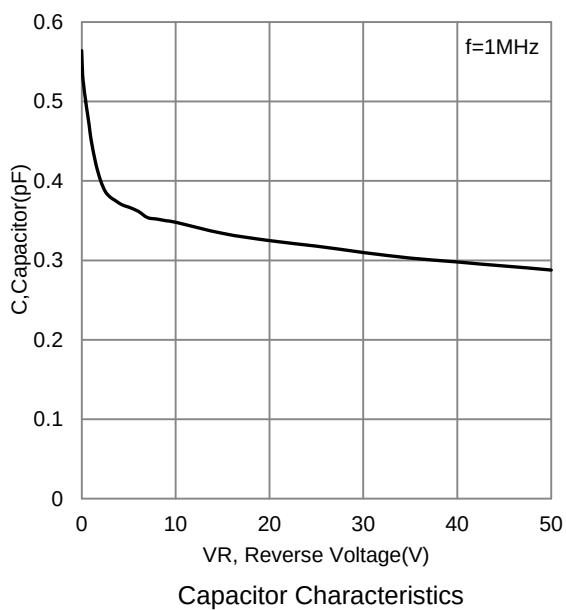
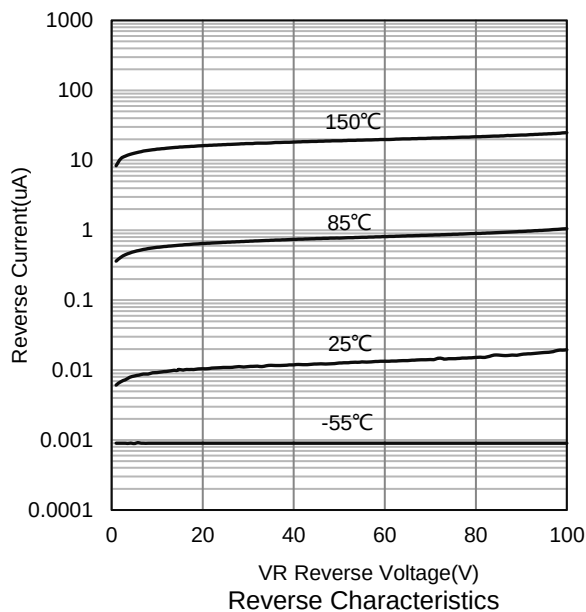
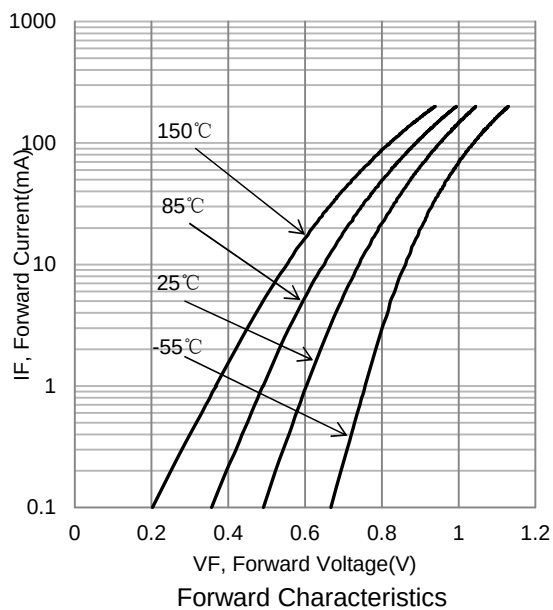
THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ $T_A = 25^\circ C$ Derate above $25^\circ C$	PD	200 1.57	mW mW/ $^\circ C$
Thermal Resistance, Junction-to-Ambient(Note 1)	R θ JA	635	$^\circ C/W$
Thermal Resistance, Junction-to-Case	R θ JC	350	$^\circ C/W$
Junction and Storage temperature	TJ,Tstg	-55~+150	$^\circ C$

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

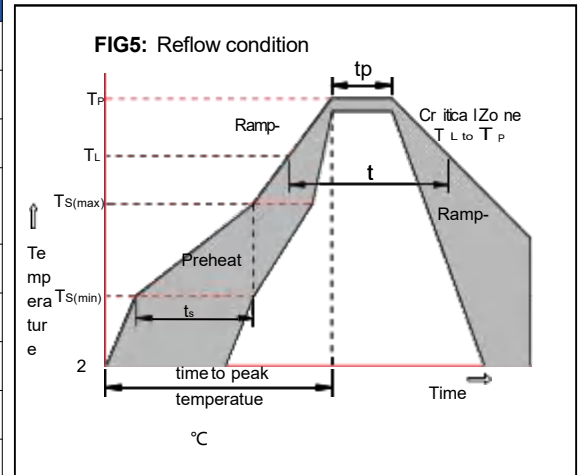
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 100μA)	VBR	100	-	-	V
Reverse Voltage Leakage Current (VR = 20V)	IR	-	-	25	nA
(VR = 75V)		-	-	5	μA
Diode Capacitance (VR = 0, f = 1.0 MHz)	CT	-	-	4	pF
Forward Voltage (IF = 10 mA)	VF	-	-	1	V
(IF = 50 mA)		-	-	1	
Reverse Recovery Time (IF = IR = 10 mA)	trr	-	-	4	ns
Non-Repetitive Peak Forward Current (square wave; Tj=25°C prior to surge t=1 μs)	IFSM	-	-	4	A
(t=1ms)		-	-	1	
(t=1s)		-	-	1	

RATING AND CHARACTERISTIC CURVES



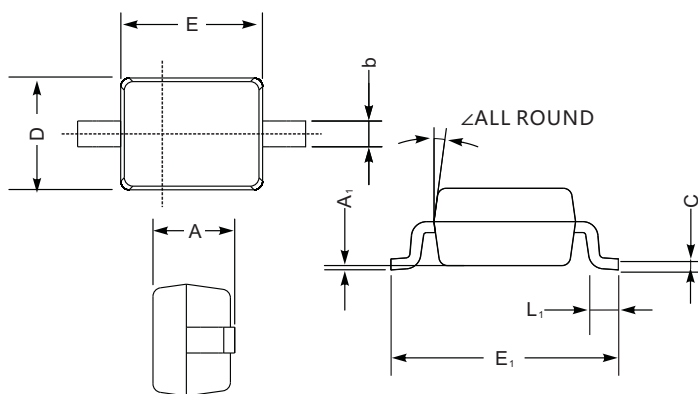
Soldering parameters

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



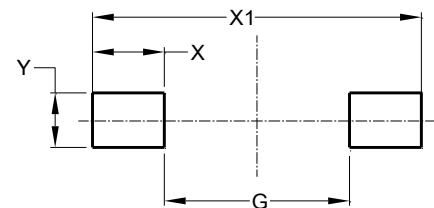
Package Dimensions & Suggested Pad Layout

SOD323



SOD-323 mechanical data

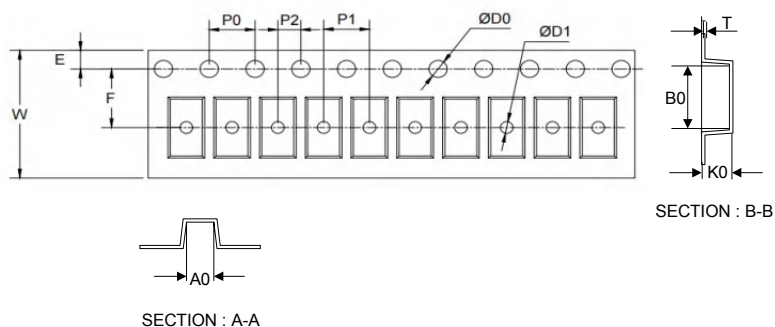
UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	



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

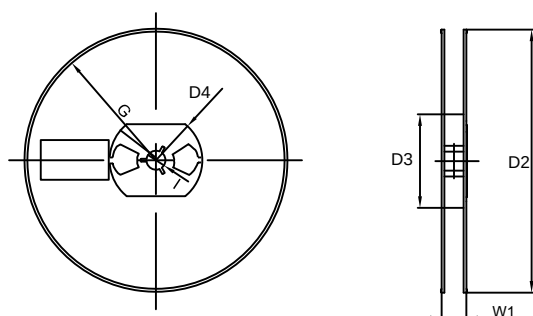
Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	4.00±0.20
P2	2.00±0.20
D0	1.55±0.20
D1	1.00±0.20
E	1.55±0.25
F	3.60±0.20
W	8.00±0.20
A0	2.00±0.20
B0	3.25±0.20
K0	1.35±0.20
T	0.23±0.10
D2	177.0±5.0
D3	55Min.
D4	R24.6±2.0
G	R82.0±2.0
I	13.0±2.0
W1	10.20±3.0

7" Reel



Quantity: 3000PCS