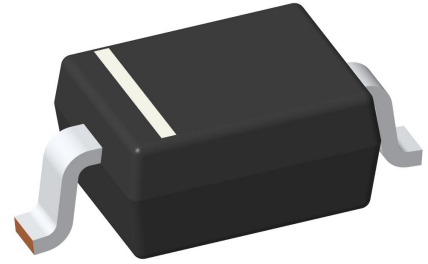


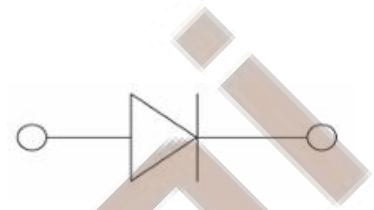
General Characteristics

VR	IO	VF(Max)	IFSM	TjMax
80V	100mA	1.2V	2A	150℃



Features

- SOD323 Package
- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 3
- High temperature soldering guaranteed 260℃/10seconds at terminals



Applications

- Extreme fast switches
- Automotive



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1SS355	SOD-323	A	3000

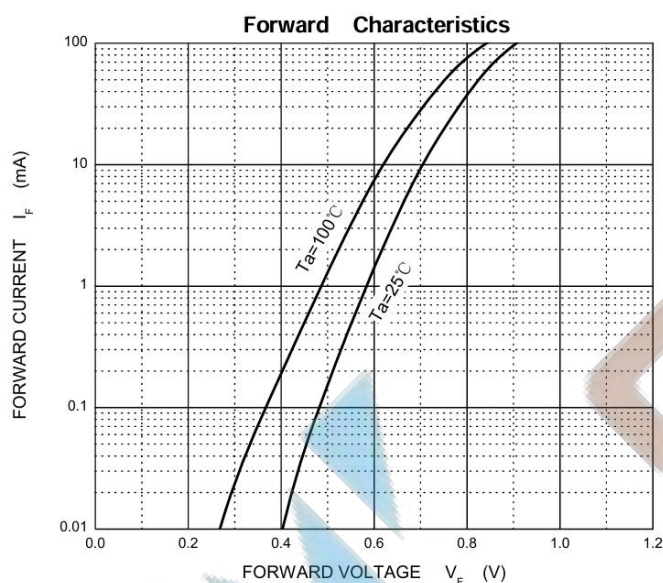
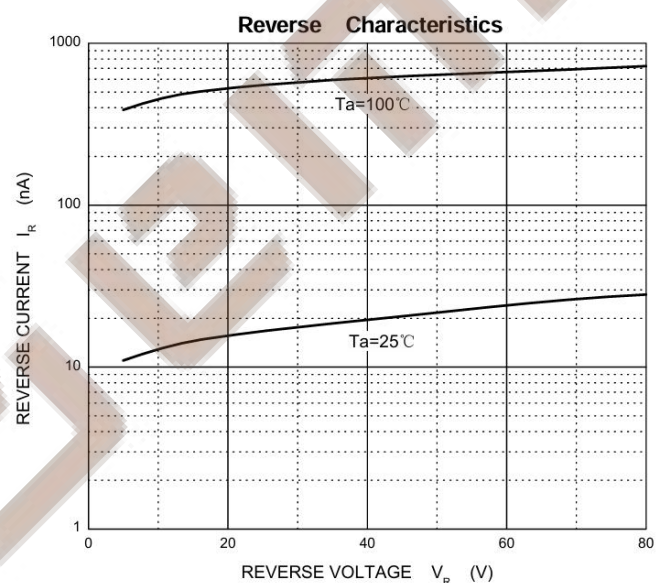
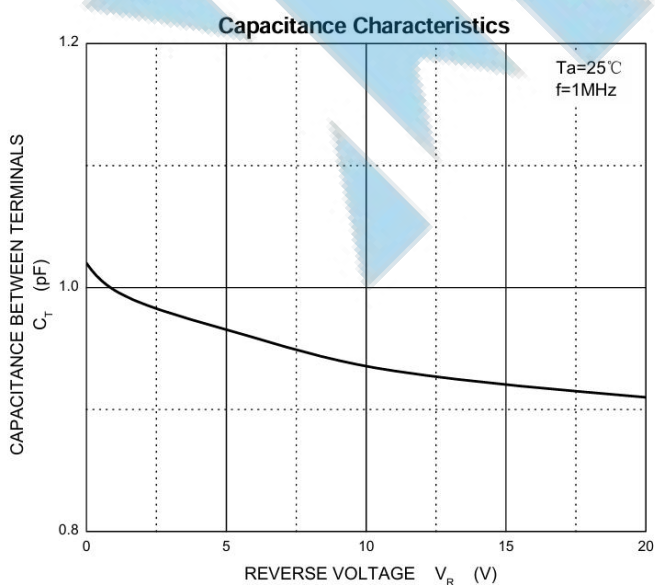
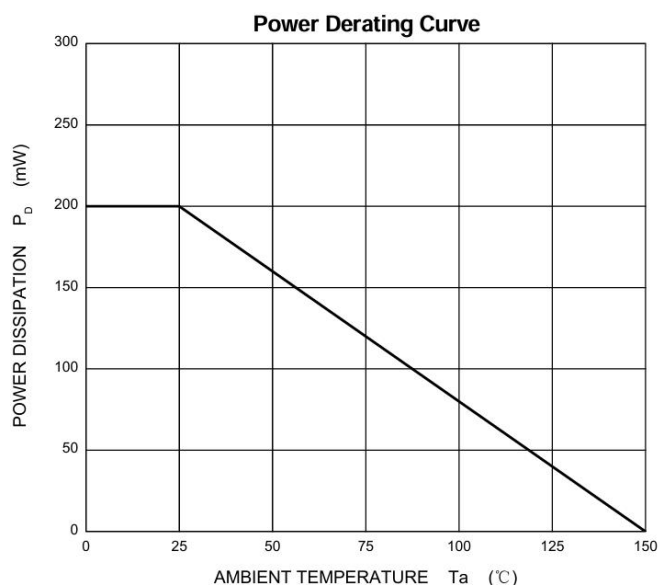
Absolute Maximum Ratings (Ta=25℃ unless otherwise noted)

Parameters	Symbol	Value	Unit
Non-repetitive peak reverse voltage	VRM	90	V
DC blocking voltage	VR	80	V
Peak forward current	IFM	225	mA
Average rectified output current	IO	100	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	IFSM	2.0	A
Power Dissipation	PD	200	mW
Thermal Resistance from Junction to Ambient	RθJA	625	℃/W
Operation Junction and Storage Temperature Range	Tj, Tstg	-55~150	℃

Electrical Characteristics (Ta=25°C, unless otherwise noted)

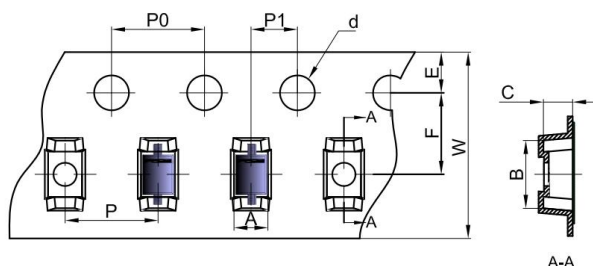
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Type	Max	
Reverse Leakage Current	IR	VR=80V			0.1	uA
Forward Voltage	VF	IF=100mA			1.2	V
Reverse Recovery Time	TRR	IF= IR=10mA; RL=100 Ω ;VR=6V			4	nS
Capacitance	CT	VR=0.5V, f=1MHZ			3	pF

Typical Characteristics



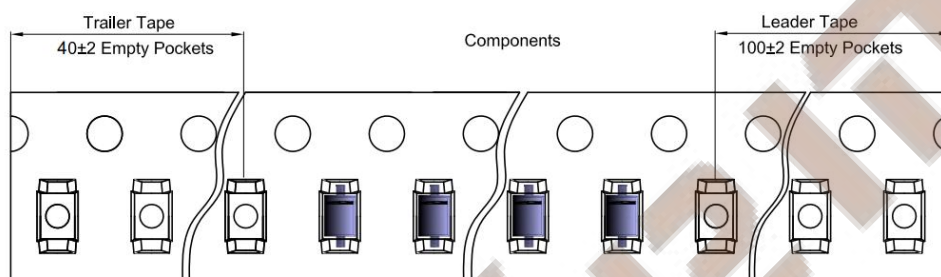
Package Information

Carrier Dimension(mm)

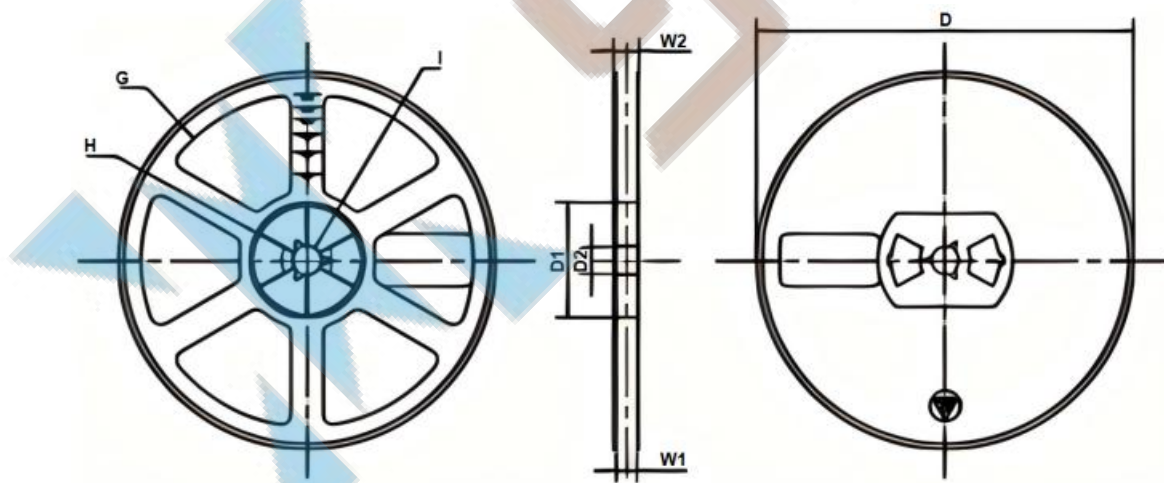


Dimensions are in millimeter

Pkg Type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.46	2.90	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	±0.05	±0.05	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.06/-0.1



Reel Dimension(mm)



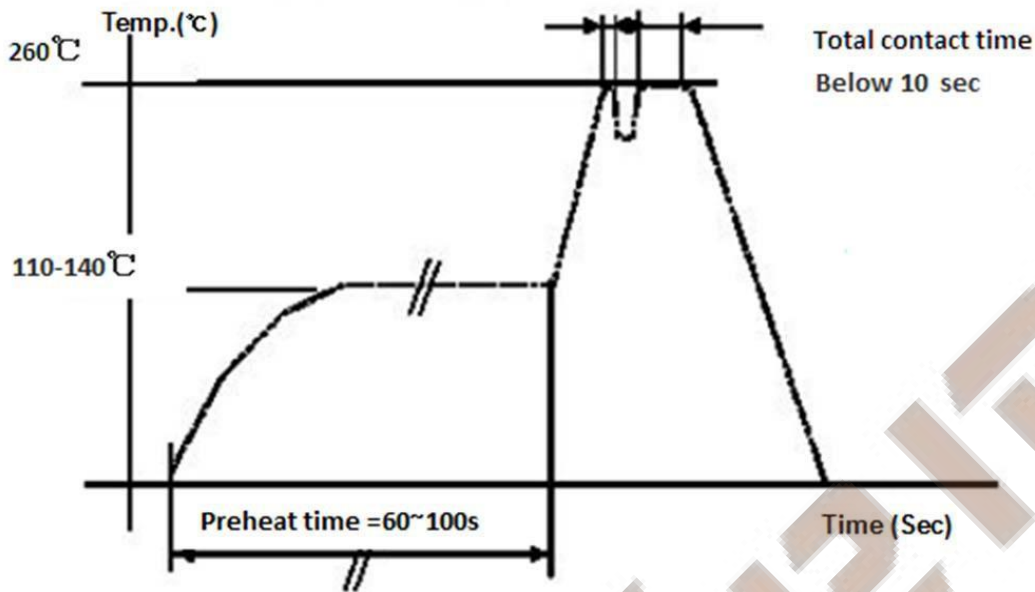
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Φ178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	±2	±1	±1	±1	±1	±1	±1	±1

Package Specifications

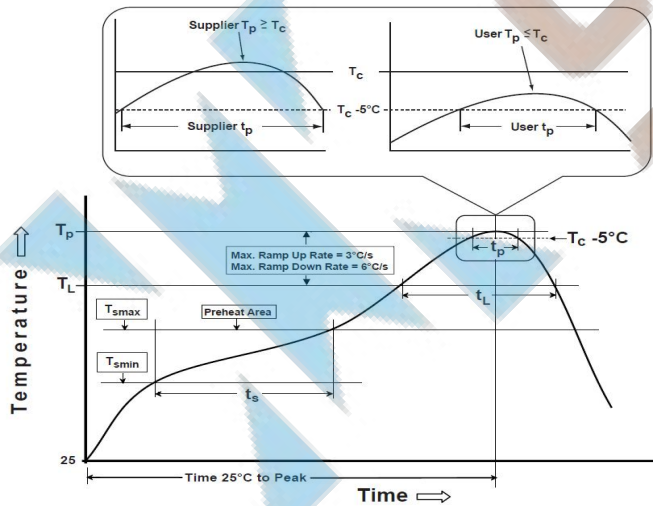
Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SOD-323	7'	178	3	210*208*203	45	440*400*230	180

Recommended Soldering Profile for Rectifier Diodes (Pb Free)

a) Wave Soldering Profile



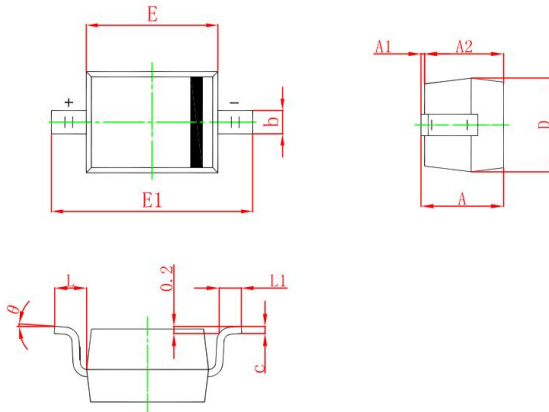
b) Reflow Soldering Profile (Pb Free Application), refer to IPC/JEDEC J-STD-020



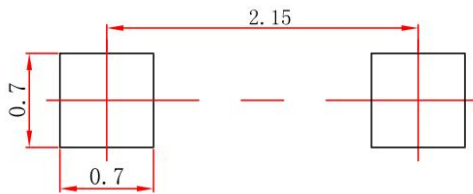
Preheat/Soak Temperature Min (T _{smin}) Temperature Max (T _{smax}) Time (ts) from (T _{smin} to T _{smax})	50 °C 200 °C 60-120 seconds
Melting Point of Solder (Sn Ag Cu)	217°C
Ramp-up Rate to 217°C(Melting Point of Solder)	3°C/sec
Time at Temp.>217°C (Melting Point of Solder)	60~150 Sec
Peak Temperature	255±5°C
Time within 5°Cbelow Peak Temp.	20~40 Sec
Cooling Rate	6°C/sec (max)
Time from 25°C to Peak Temp.	8min (max)

c) Manual Soldering

When using an electric soldering iron for manual soldering, it is recommended that the temperature does not exceed 300°C and the soldering time is less than 10 seconds.

Package Mechanical Data


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	2.550	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°

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.

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