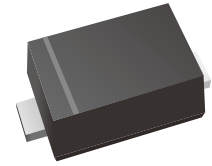


Schottky Barrier Diode

Features

- Extremely fast switching speed
- Extremely low forward voltage
- Low reverse current
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case:SOD-523
- Polarity:Color band denotes cathode end

Ordering Information

Part Number	Marking	Shipping	Reel
LTS52C-30-TR3	C	3000PCS Tape&Reel	7 inches
LTS52C-30-TR10	C	10000PCS Tape&Reel	7 inches

Maximum Ratings($T_a=25^\circ\text{C}$)

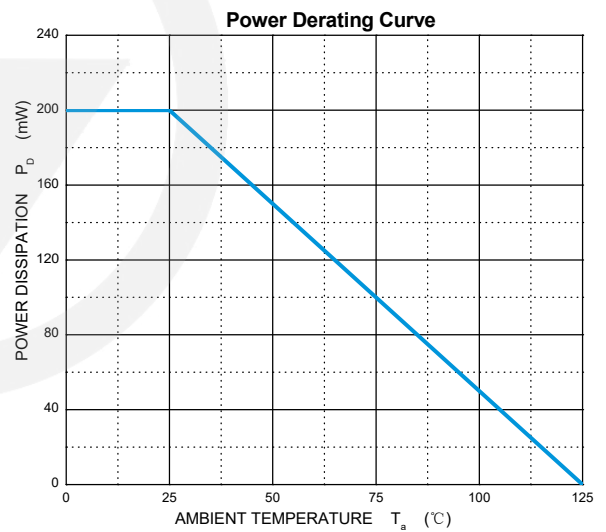
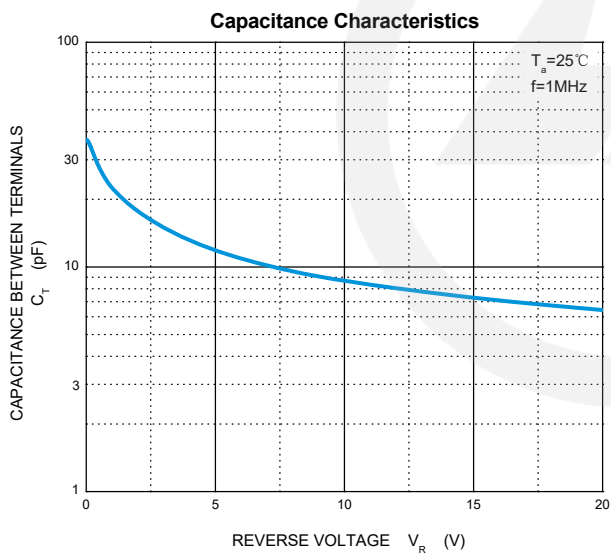
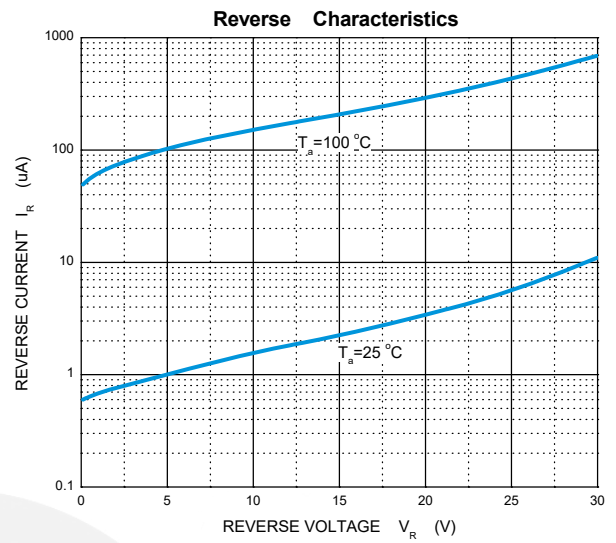
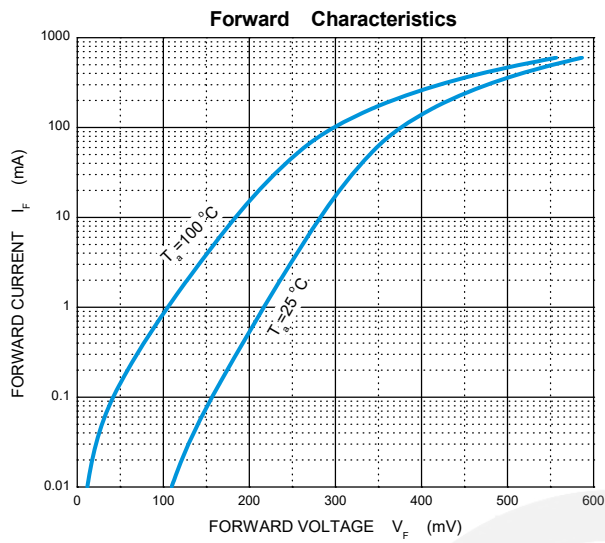
Parameter	Symbol	Limit	Unit
DC reverse voltage	VR	30	V
Mean rectifying current	IO	200	mA
Peak forward surge current	IFSM	1	A
Power Dissipation	Pd	200	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55~+125	°C
Thermal Resistance from Junction to Ambient	RθJA	667	°C/W

Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V _{F1}			0.35	V	I _F =10mA
	V _{F2}			0.5	V	I _F =200mA
Reverse current	I _R			30	μA	V _R =10V

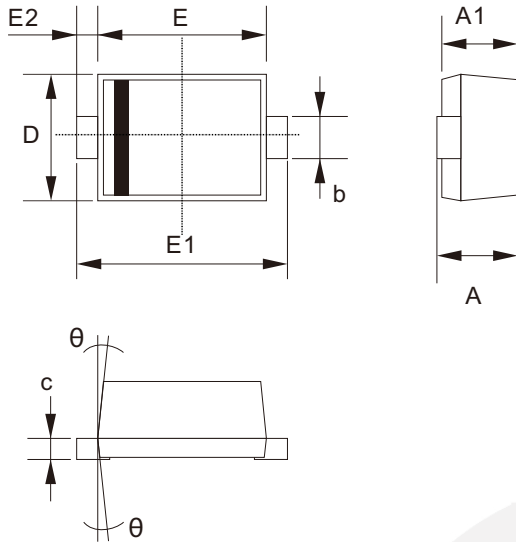


Electrical characteristics Curves



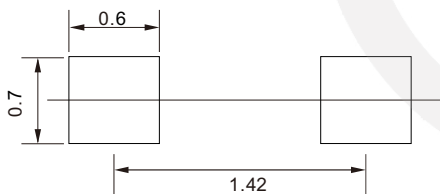
SOD-523 Package Outline

Unit: mm



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.500	0.770
A1	0.500	0.700
b	0.250	0.380
c	0.070	0.200
D	0.700	0.900
E	1.100	1.300
E1	1.500	1.700
E2	0.200 REF	
θ	7° REF	

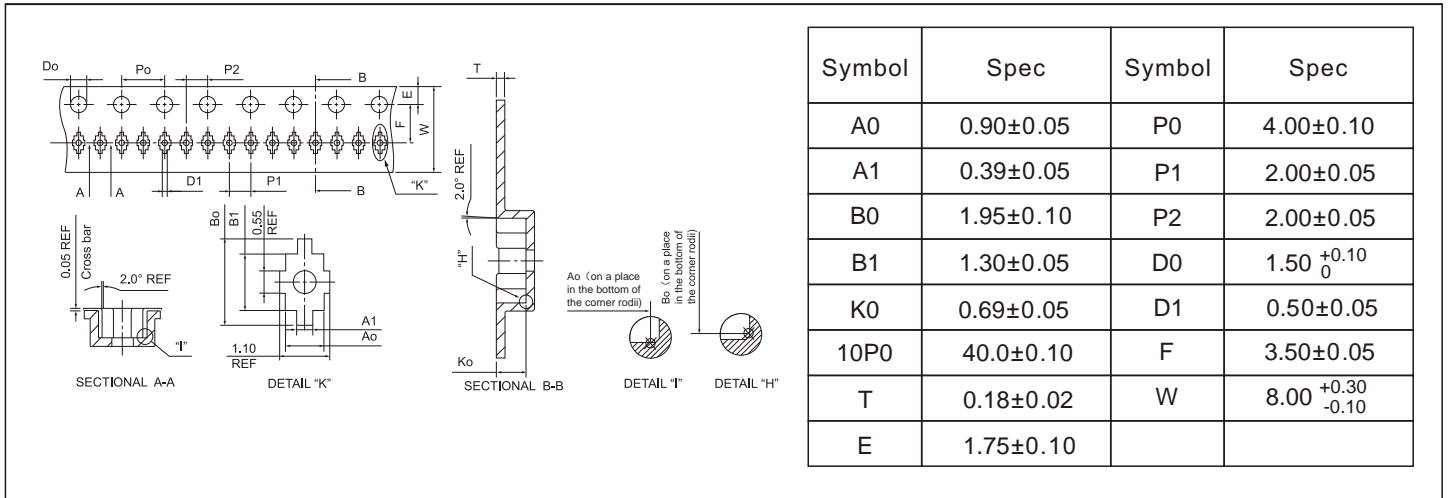
SOD-523 Suggested Pad Layout



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

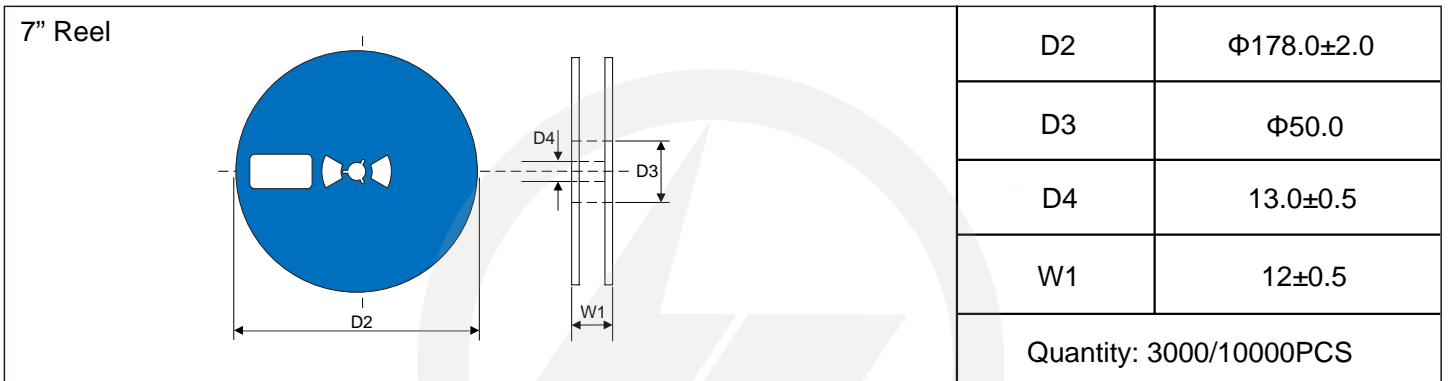
Carrier Tape Dimensions

Unit : mm

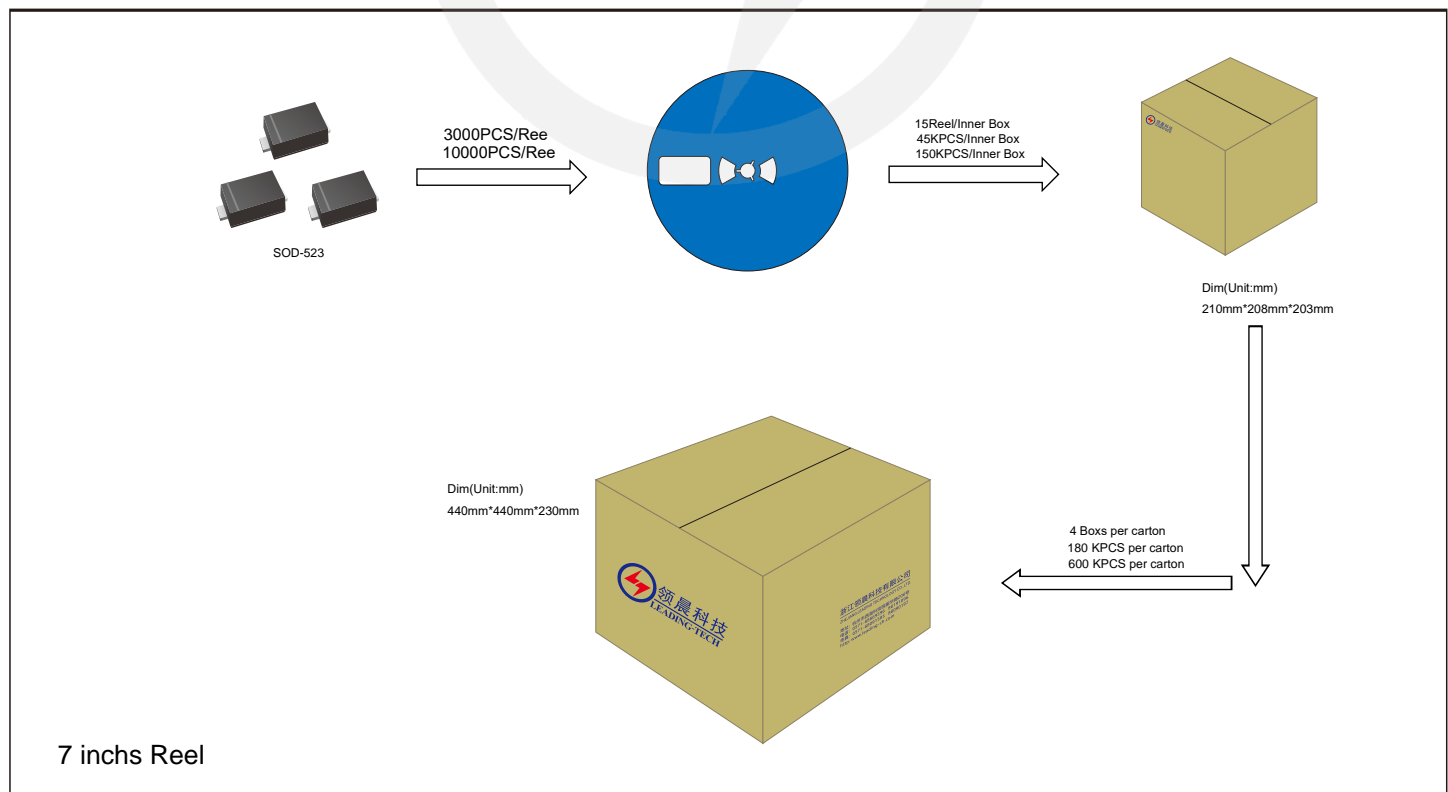


Reel Dimensions

Unit : mm

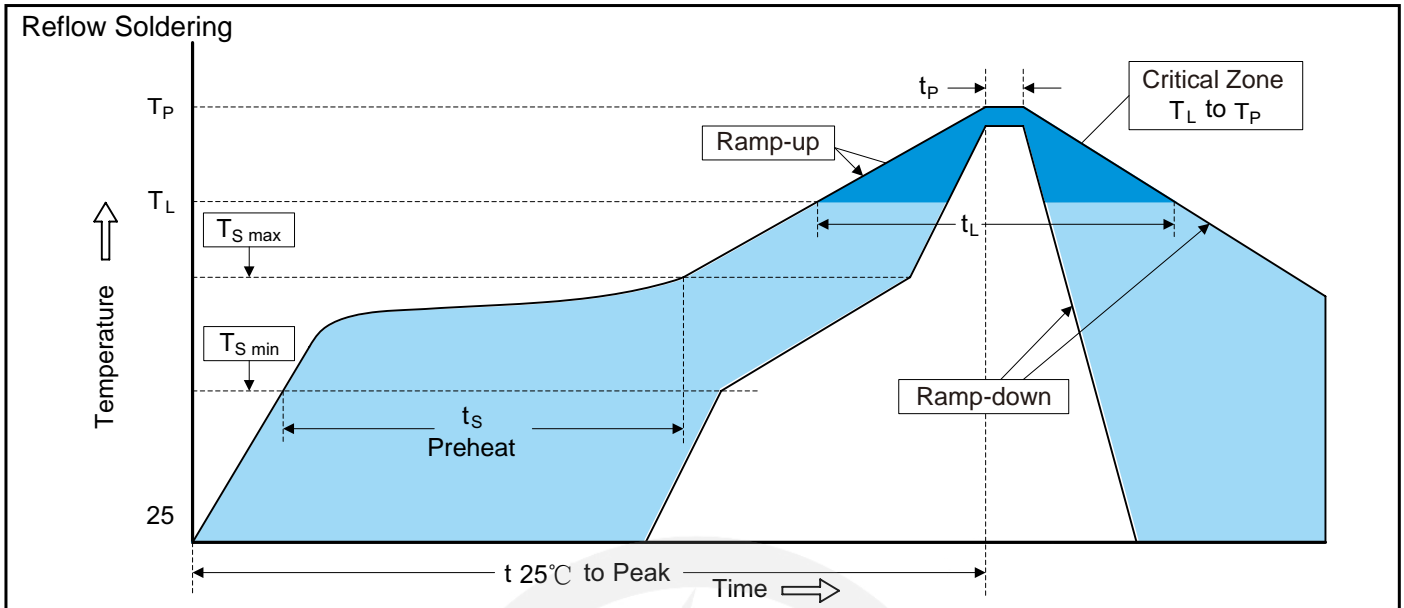


Packaging





Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T _L to T _P)	3°C/second max.
Preheat	
-Temperature Min (T _{S min})	150°C
-Temperature Max (T _{S max})	200°C
-Time (min to max) (t _s)	60-180 seconds
T _{S max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T _L)	217°C
-Time (t _L)	60-150 seconds
Peak Temperature (T _P)	260°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.3.14	2024.3.14	3.0	New File	/	Ding	