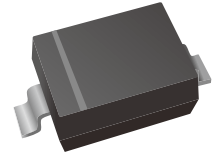


Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop
- Lead free in comply with EU RoHS 2011/65/EU directive



Mechanical Data

- Case: SOD-323
- Mounting Position: Any
- Polarity: Color band denotes cathode end

Ordering Information

Part Number	Marking	Shipping	Reel
LTS40B5-TR3	5	3000PCS Tape&Reel	7 inches
LTS40B5-TR12	5	12000PCS Tape&Reel	13 inches

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse voltage	V_R	30	V
Mean rectifying current	I_O	30	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	200	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	125	°C
Storage temperature range	$R_{\theta JA}$	-55 to +150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	V_F	$I_F = 1.0\text{mA}$			0.37	V
Maximum reverse current	I_R	$V_R = 30\text{V}$			0.5	μA
Capacitance between terminals	C_T	$V_R = 10\text{V}, f = 1\text{MHz}$		6		pF



Characteristics Curves

Fig.1 Forward Characteristics

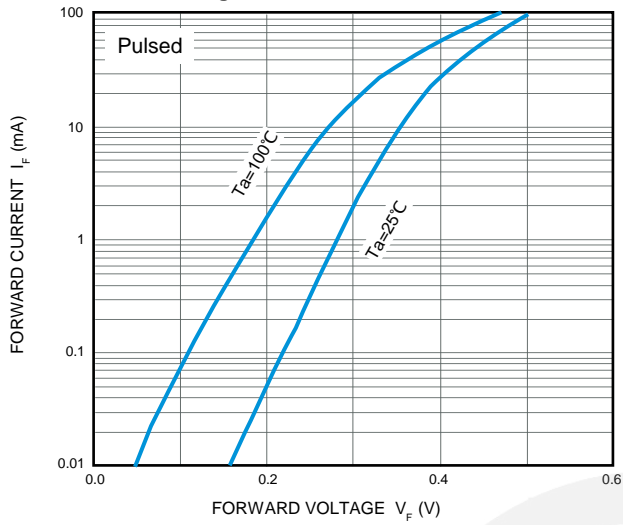


Fig.2 Reverse Characteristics

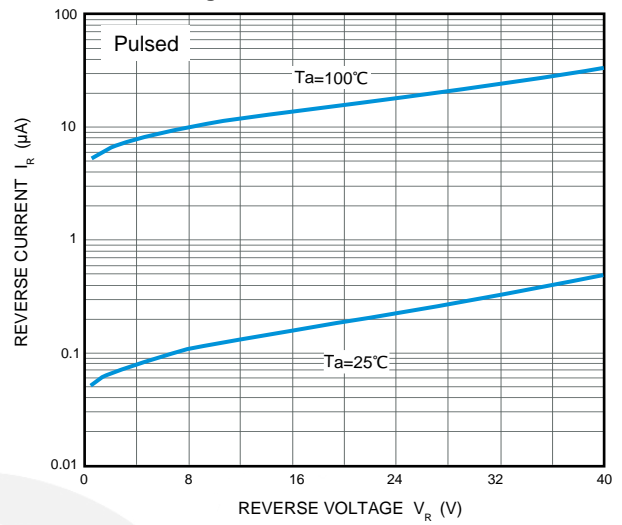


Fig.3 Capacitance Characteristics

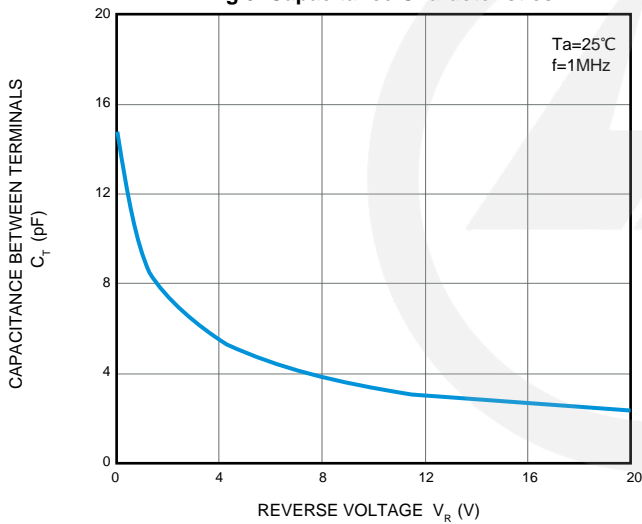
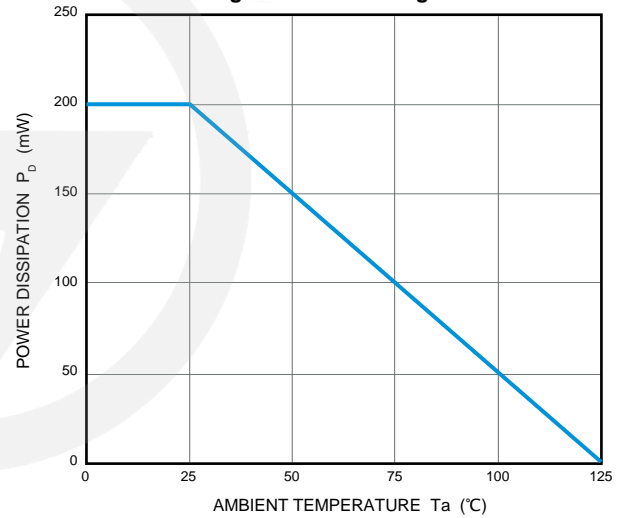
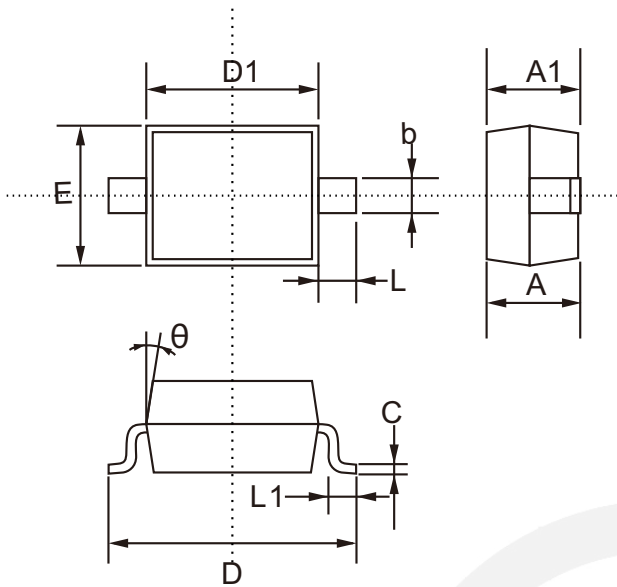


Fig.4 Power Derating Curve



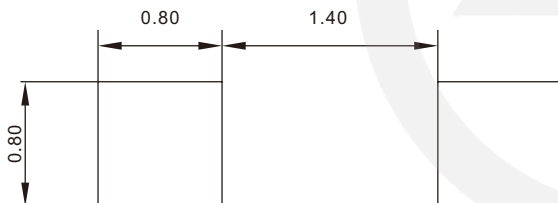
SOD-323 Package Outline

Unit: mm



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.800	1.100
A1	0.800	0.900
b	0.250	0.400
C	0.080	0.177
D	2.300	2.800
D1	1.400	1.800
E	1.150	1.400
L1	0.100	0.400
L	0.475 TYP.	
θ	8°	

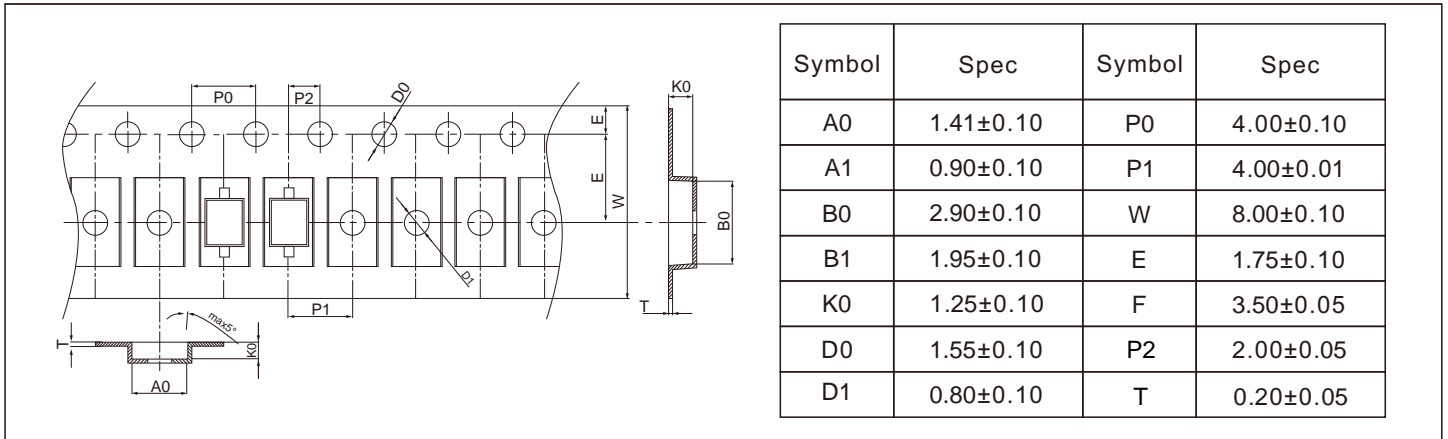
SOD-323 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$
 3. The pad layout is for reference purpose only.

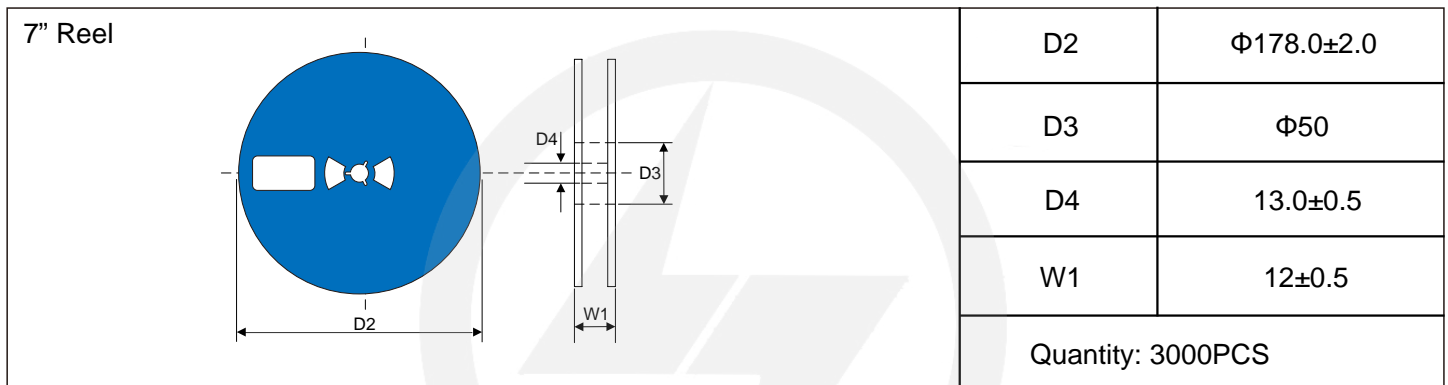
Carrier Tape Dimensions

Unit : mm



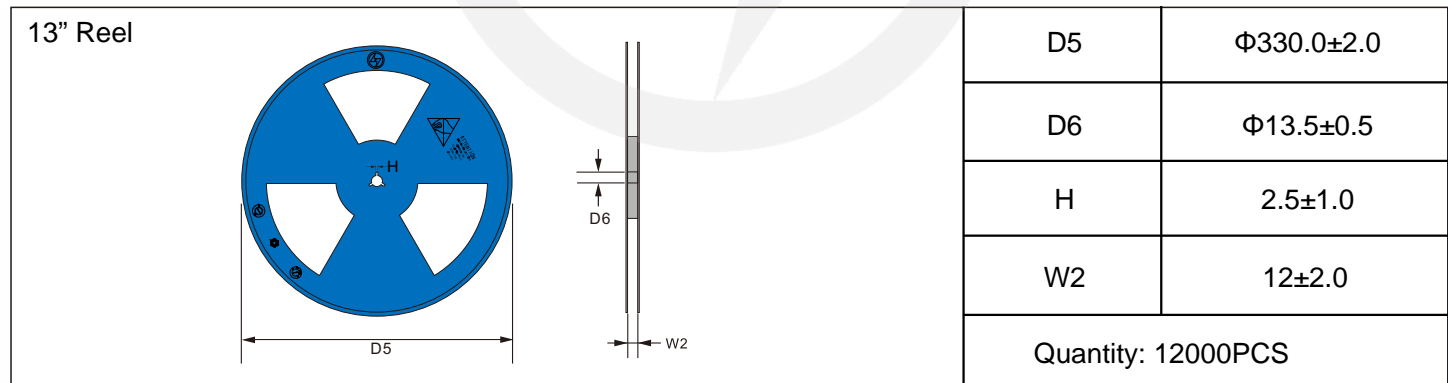
Reel Dimensions

Unit : mm

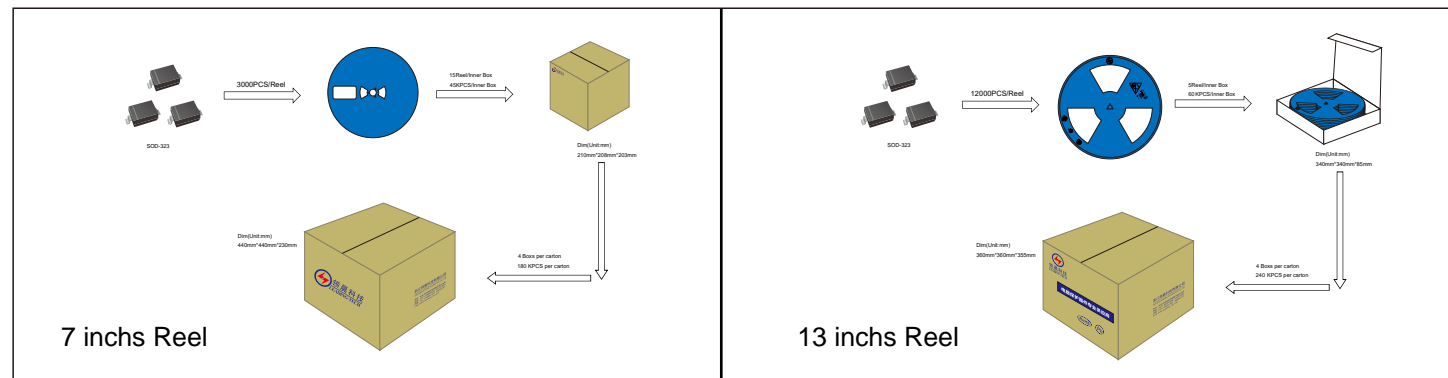


Reel Dimensions

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	2024.08.19	2024.08.19	3.0	New File	/	Ding	
02	2025.06.12	2025.06.12	3.1	Update packaging information	/	Ding	