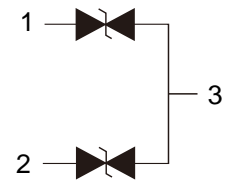
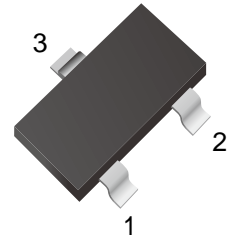


Standard Capacitance TVS Array

Features

- ESD protection > 40kV
- 350Watts Peak Pulse Power per (tp=8/20μs)
- Working voltage: 24V
- Low clamping voltage
- Unidirectional & bidirectional configurations
- IEC COMPATIBILITY(EN61000-4)
 - IEC61000-4-2(ESD) ± 30kV(air), ± 30kV(contact)
 - IEC61000-4-5(Surge):7A,8/20us-level
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case:SOT-23
- Flammability Rating: UL 94V-0
- Approx. Weight: 8.1mg

Ordering Information

Part Number	Marking	Shipping	Reel
LTE23T24C02W-TR3	C24	3000PCS Tape&Reel	7 inches
LTE23T24C02W-TR12	C24	12000PCS Tape&Reel	13 inches

Absolute Maximum Rating

Parameters	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	PPP	350	W
Operating temperature	T _{OPT}	-55-+150	°C
Storage temperature range	T _{STG}	-55-+150	°C

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

PART NUMBER (Note 1)	Marking	V _{RWM} (V) (max.)	V _{BR} (V) (min.)	I _T (mA)	V _{c@1A} (V) (max.)	V _c (V) (max.) (@A)	I _R (uA) (max.)	C _j (pF) (max.)	
LTE23T24C02W	C24	24	26.7	1	35	50	7	0.3	25

Characteristic Curves

Fig.1 Junction Capacitance vs Reverse Voltage

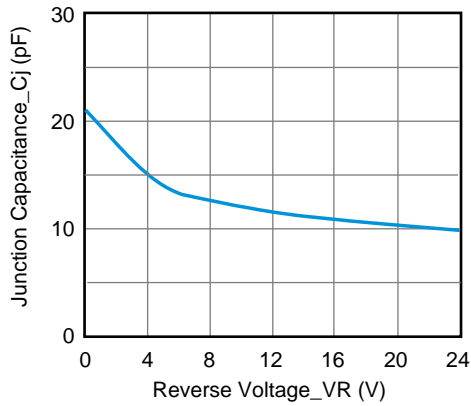


Fig.2 Peak Pulse Power vs Pulse Time

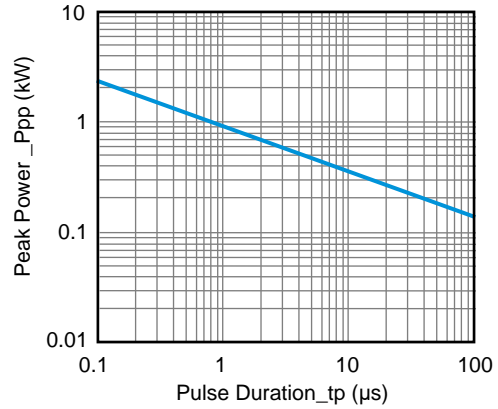


Fig.3 Clamping Voltage vs Peak Pulse Current

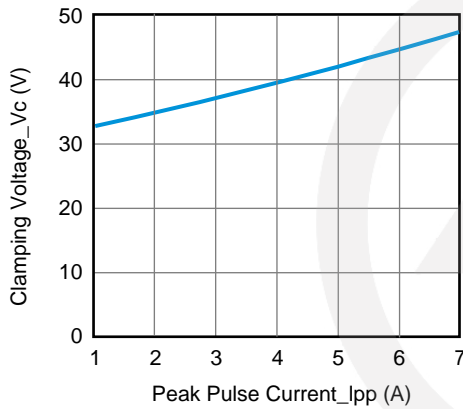
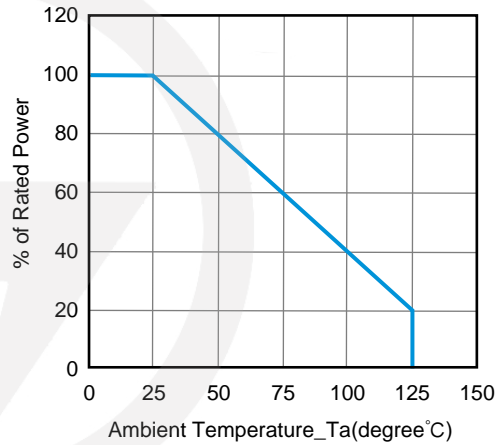


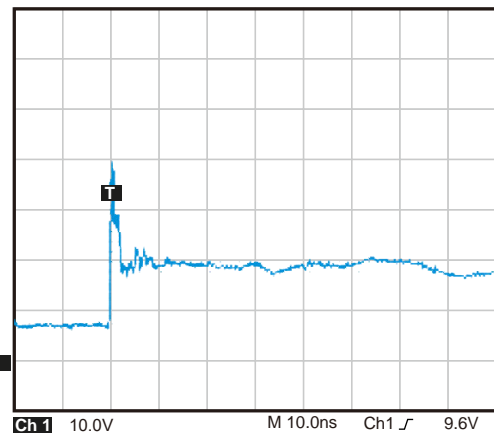
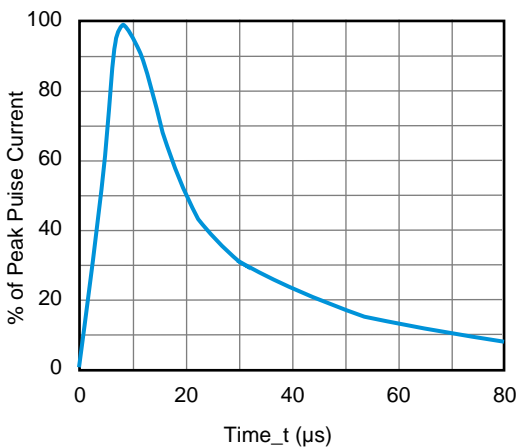
Fig.4 Power Derating Curve



**Fig.6 ESD Clamping Voltage
8 kV Contact per IEC61000-4-2**

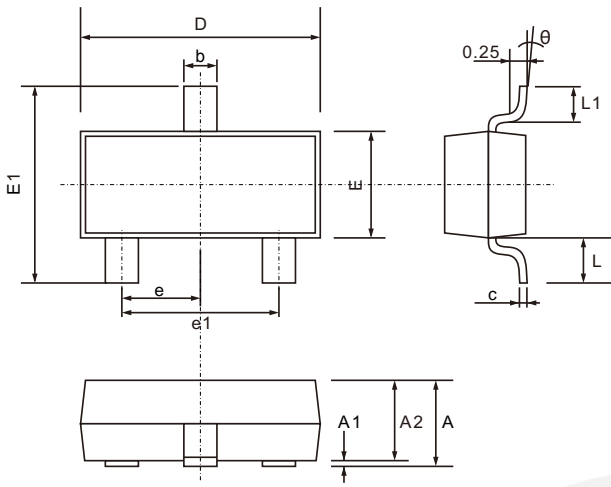
Tek Run:5.00GS/s Sample Trig?
[.....T.....]

Fig.5 8 X 20μs Pulse Waveform



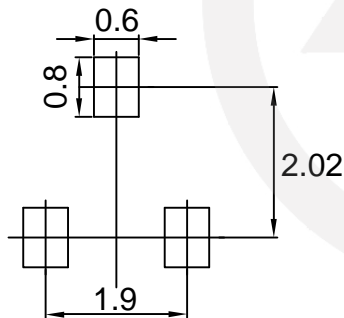
SOT-23 Package Outline

Unit: mm



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.200
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.200
D	2.700	3.100
E	1.200	1.400
E1	2.200	2.600
e	0.950 TYP.	
e1	1.750	2.050
L	0.550 TYP.	
L1	0.300	0.500
θ	0°	8°

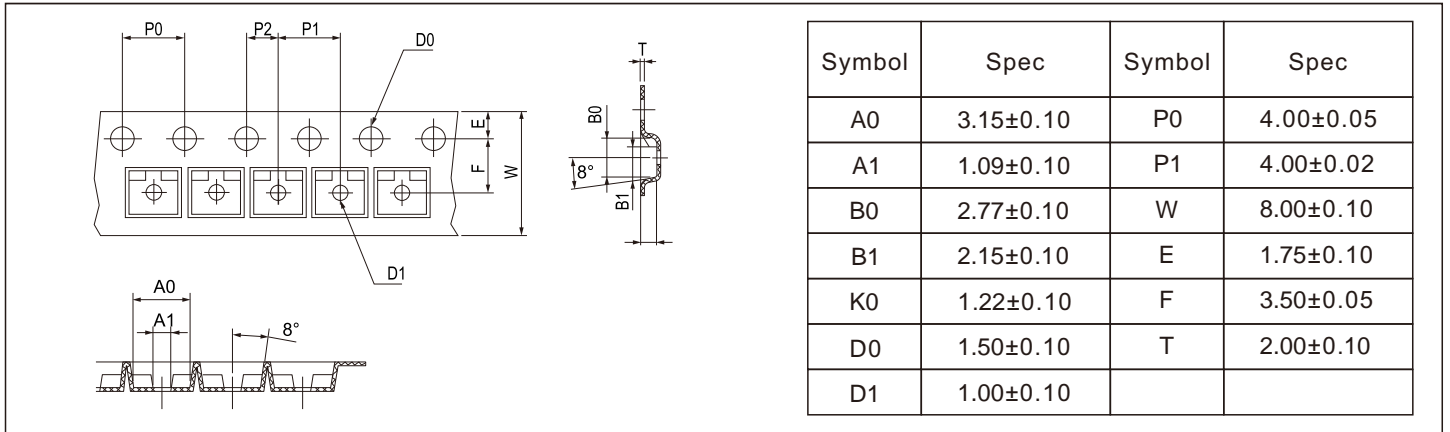
SOT-23 Suggested Pad Layout



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

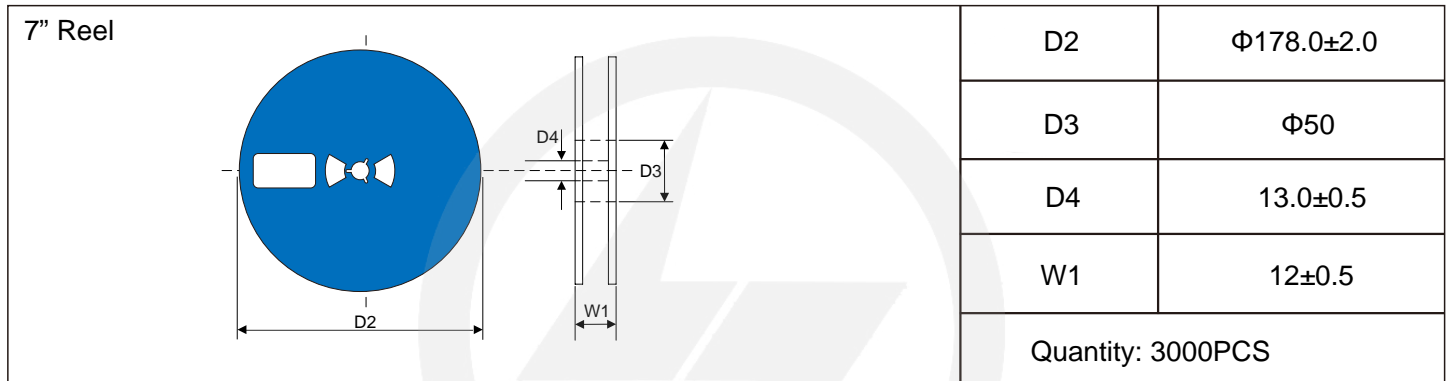
Carrier Tape Dimensions

Unit : mm



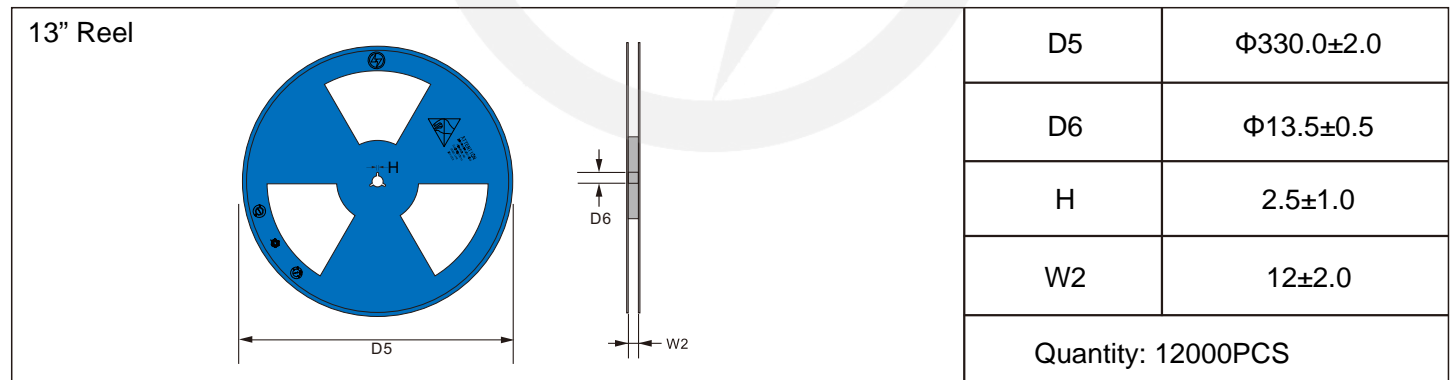
Reel Dimensions

Unit : mm

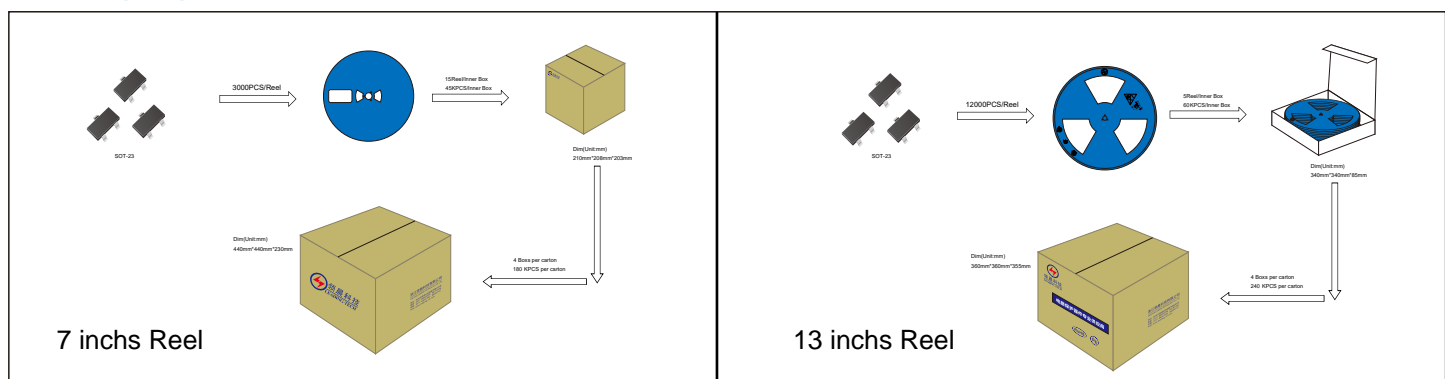


Reel Dimensions

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	2025.01.16	2025.01.16	3.0	New file	/	Ding	
02	2026.03.06	2026.03.06	3.1	Package outline E1(max)=2.6mm	/	Ding	