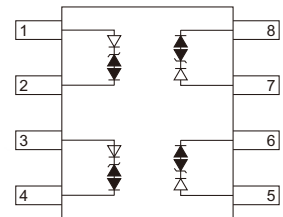
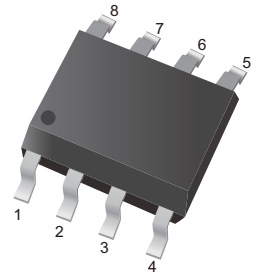


2.8V TVS Array For ESD and Latch-Up Protection
Features

- 600W peak pulse power (8/20 μ s)Protects
- two line pairs (four lines)
- Ultra low leakage: nA level
- Low operating voltage: 2.8V
- Very low capacitance: 2pF
- Ultra low clamping voltage
- JEDEC SO-8 package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: \pm 30kV
 - Contact discharge: \pm 30kV
 - IEC61000-4-5 (Lightning) 30A (8/20 μ s)
- Lead free in comply with EU RoHS 2011/65/EU directives


Mechanical Data

- Case: SO-8
- Lead Finish: Matte Tin
- Moisture Sensitivity: Level 3 per J-STD-020

Applications

- Base Station
- Analog Inputs
- Switch Systems
- 10/100/1000 Ethernet
- WAN/LAN Equipment
- Desktops, Servers, and Notebooks
- Low Voltage Interfaces

Ordering Information

Part Number	Marking	Shipping	Reel
LTE08P028A04L-TR2K5	SLVU2.8-4	2500PCS Tape&Reel	13 inchs

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	600	W
Peak Pulse Current (8/20 μs)	I _{PP}	30	A
ESD per IEC 61000-4-2 (Air)	VESD	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T _J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T _{stg}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			2.8	V	
Breakdown Voltage	V _{BR}	3.0			V	I _T = 2 μA
	V _{SB}	2.8			V	I _{SB} = 50mA
Reverse Leakage Current	I _R		0.001	1	μA	V _{RWM} = 2.8V
Clamping Voltage	V _C			8.5	V	I _{PP} = 5A (8 x 20 μs pulse)
Clamping Voltage	V _C			18	V	I _{PP} = 25A (8 x 20 μs pulse)
Clamping Voltage	V _C			20	V	I _{PP} = 30A (8 x 20 μs pulse)
Junction Capacitance	C _J		2	3	pF	V _R = 0V, f = 1MHz

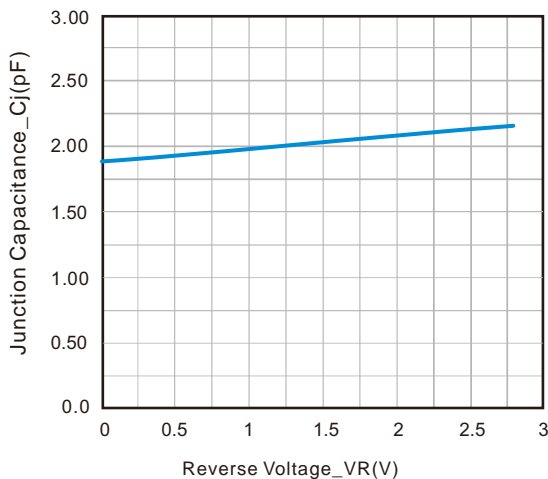
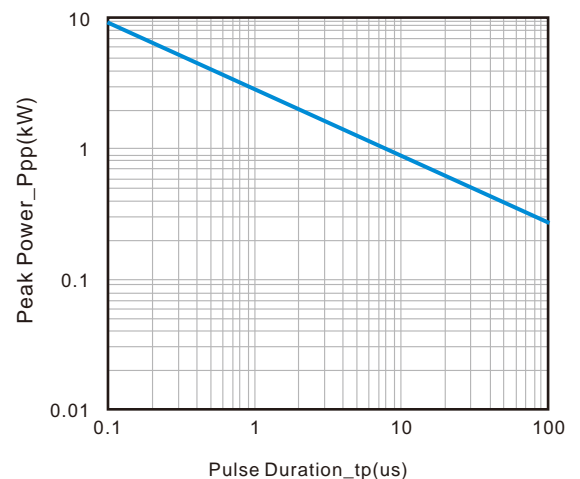
Characteristic Curves
Fig.1 Junction Capacitance vs. Reverse Voltage

Fig.2 Peak Pulse Power vs. Pulse Time


Fig.3 Clamping Voltage vs. Peak Pulse Current

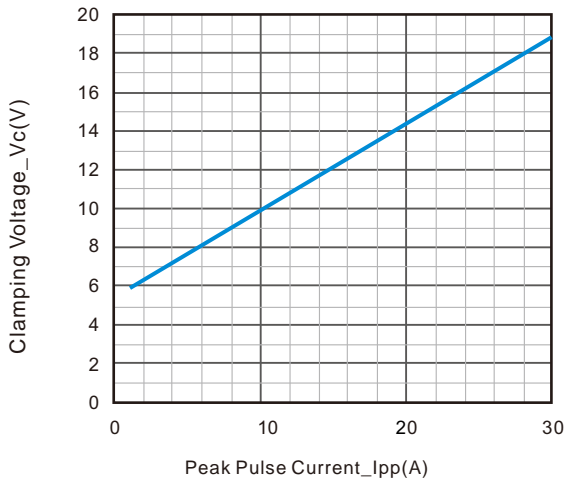


Fig.4 Power Derating Curve

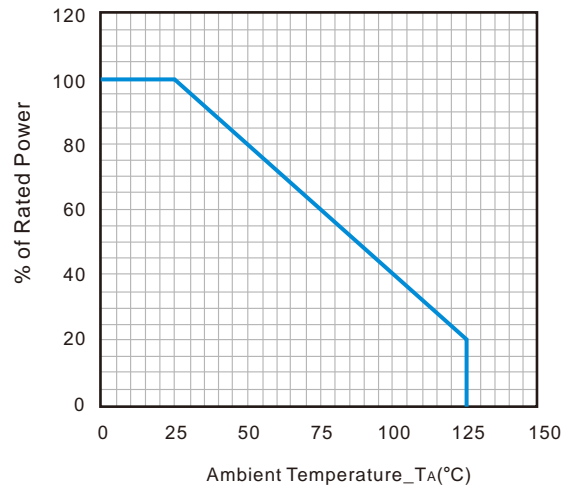
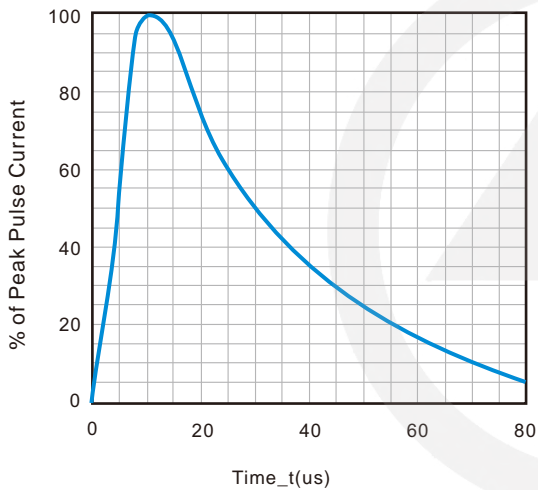
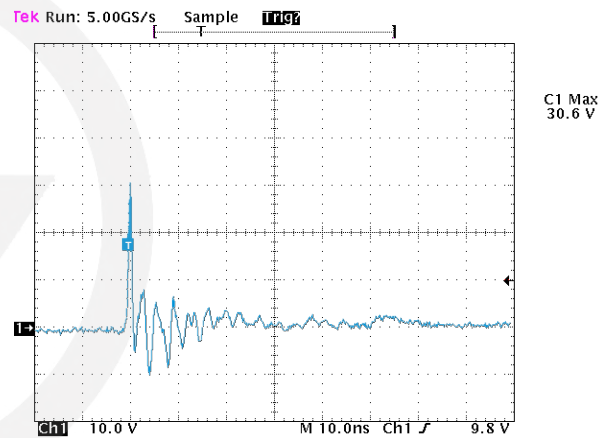


Fig.5 8 X 20µs Pulse Waveform

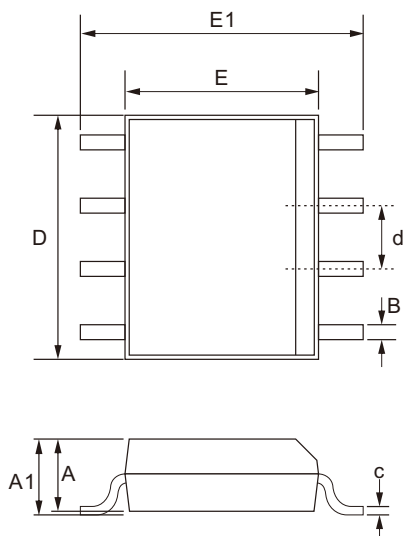


**Fig.6 ESD Clamping Voltage
8 kV Contact per IEC61000-4-2**



Note: Data is taken with a 10x attenuator

SO-8 Package Outline

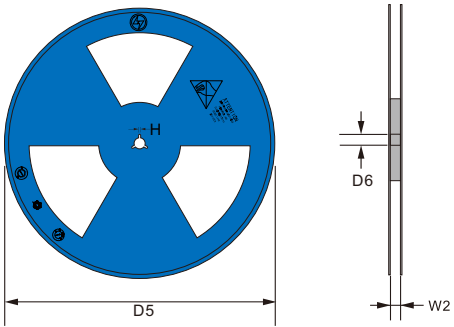


Unit: mm

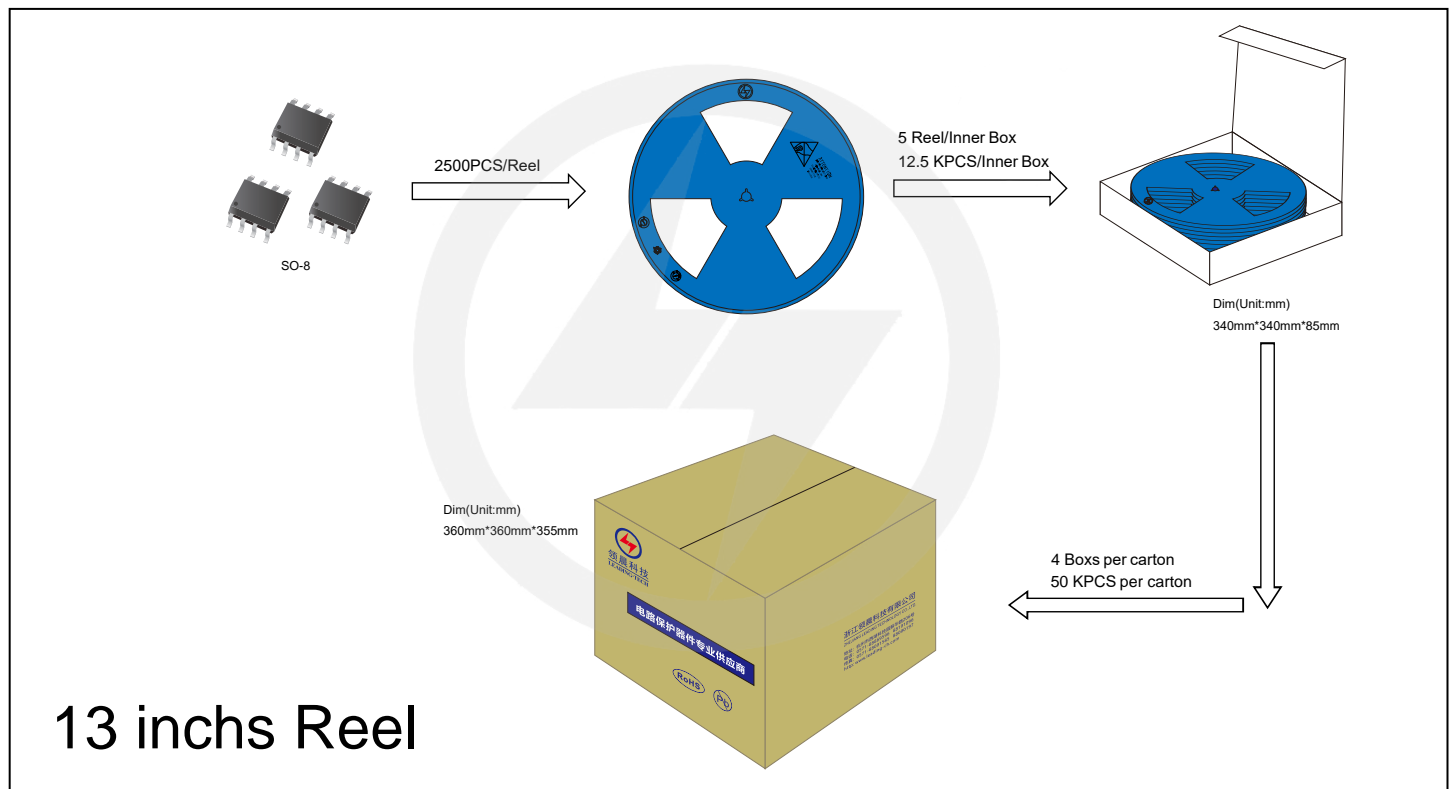
SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.25	1.65
A1	1.35	1.75
B	0.31	0.51
c	0.17	0.25
D	4.80	5.00
E	3.80	4.00
E1	5.80	6.20
d	1.17	1.37

Reel Dimensions

Unit : mm

<p>13" Reel</p> 	D5	$\Phi 330.0 \pm 2.0$
	D6	$\Phi 13.5 \pm 0.5$
	H	2.5 ± 1.0
	W2	12 ± 2.0
	Quantity: 2500PCS	

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	2025.07.08	2025.07.08	3.0	New file	/	Ding	