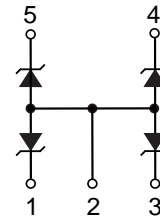
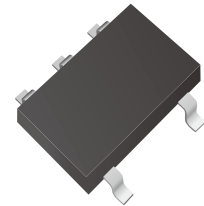


## Ultra Low Capacitance ESD Protection Array

### Features

- Protects four I/O lines
- Low capacitance
- Working voltages: 5V
- Low leakage current
- Low clamping voltage
- Low capacitance for high-speed interfaces
- Lead free in comply with EU RoHS 2011/65/EU directives



### Mechanical Data

- Case: SOT-353
- Flammability Rating: UL 94V-0
- Terminal: Matte tin plated

### Applications

- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- Dual USB port
- IEEE 1394 Firewire Ports
- Notebooks & Handhelds
- Projection TV & Monitors
- Set-top box
- Flat Panel Displays

### Ordering Information

Part Number	Marking	Shipping	Reel
LTE35T05A04LC-TR3	WE+CODE	3000PCS Tape&Reel	7 inches

### Absolute Maximum Ratings

Symbol	Parameter	Value	Unit
P <sub>PP</sub>	Peak Pulse Power (8/20μs)	60	W
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	±20 ±25	kV
T <sub>L</sub>	Lead Soldering Temperature	260(10sec.)	°C
T <sub>J</sub>	Operating Temperature	-55/+125	°C
T <sub>STG</sub>	Storage Temperature	-55/+150	°C



Electrical Characteristics (Tamb=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
$V_{RWM}$	Reverse Working Voltage	Any I/O pin to GND			5.0	V
$V_{BR}$	Reverse Breakdown Voltage	$I_T = 1mA$ Any I/O pin to GND	6.0			V
$I_R$	Reverse Leakage Current	$V_{RWM} = 5V$ Any I/O pin to GND			100	nA
$V_F$	Forward Voltage	$I_F = 10mA$ Any I/O pin to GND			1.2	V
$V_{C1}$	Clamping Voltage 1	$I_{PP} = 1A, t_p = 8/20\mu s$ Any I/O pin to GND			10.0	V
$V_{C2}$	Clamping Voltage 2	$I_{PP} = 4A, t_p = 8/20\mu s$ Any I/O pin to GND			15.0	V
$C_J$	Junction Capacitance	$V_R = 0V, f = 1MHz$ Any I/O pin to GND			0.8	pF

Note: I/O pins are pin 1,3,4,5. Pin 2 is GND.

Characteristic Curves

Fig.1 Power Derating Curve

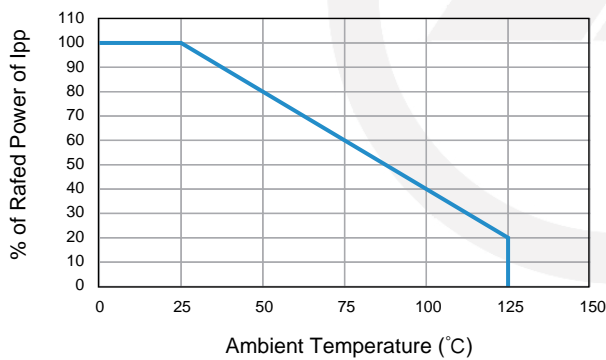


Fig.2 Clamping Voltage vs Peak Pulse Current

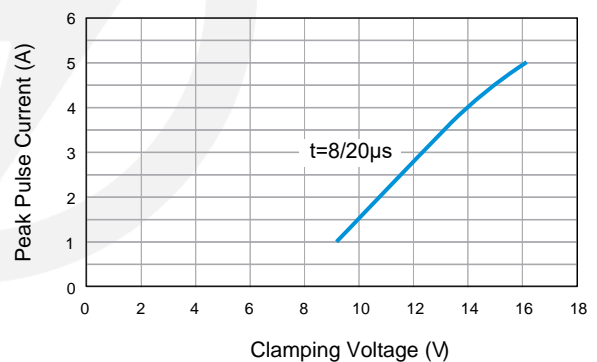


Fig.3 Voltage Sweeping

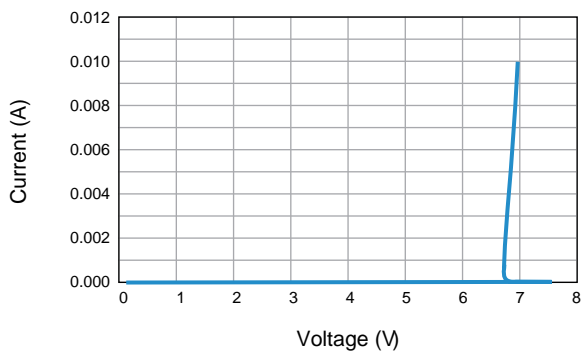
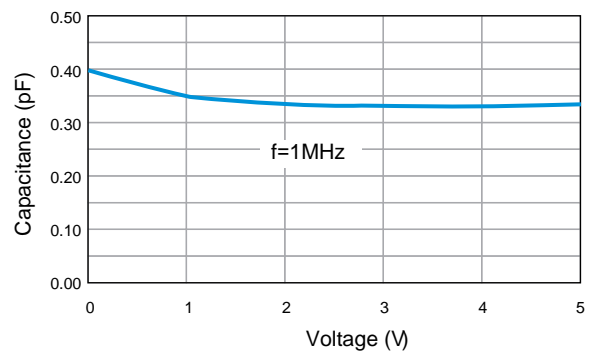
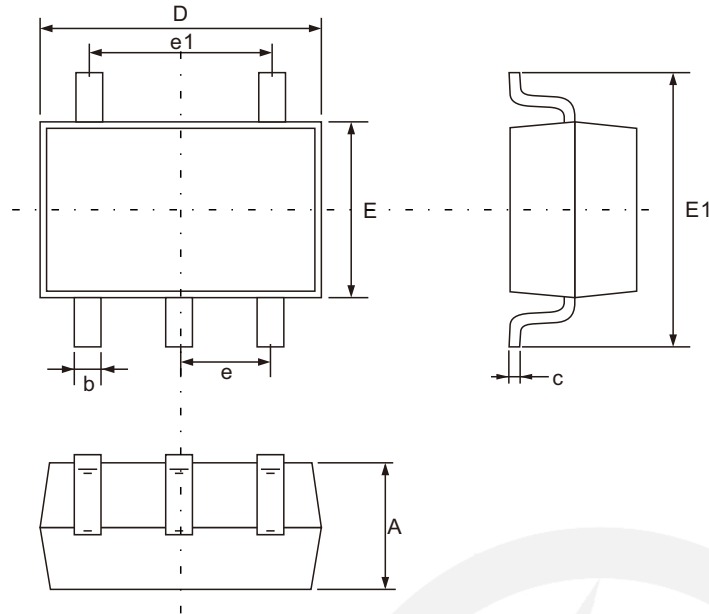


Fig.4 Voltage vs Capacitance





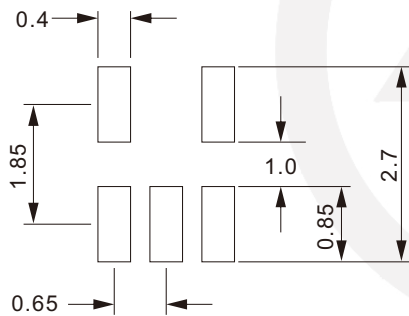
### SOT-353 Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.700	1.100
b	0.100	0.400
c	0.080	0.260
D	1.800	2.200
E	1.150	1.350
E1	1.800	2.400
e	0.650TYP.	
e1	1.200	1.400

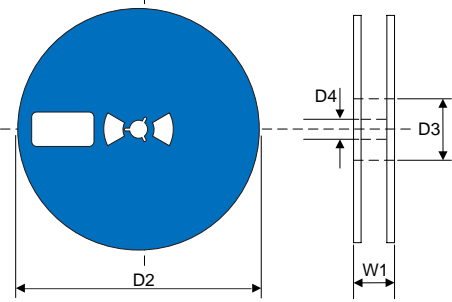
### SOT-353 Suggested Pad Layout



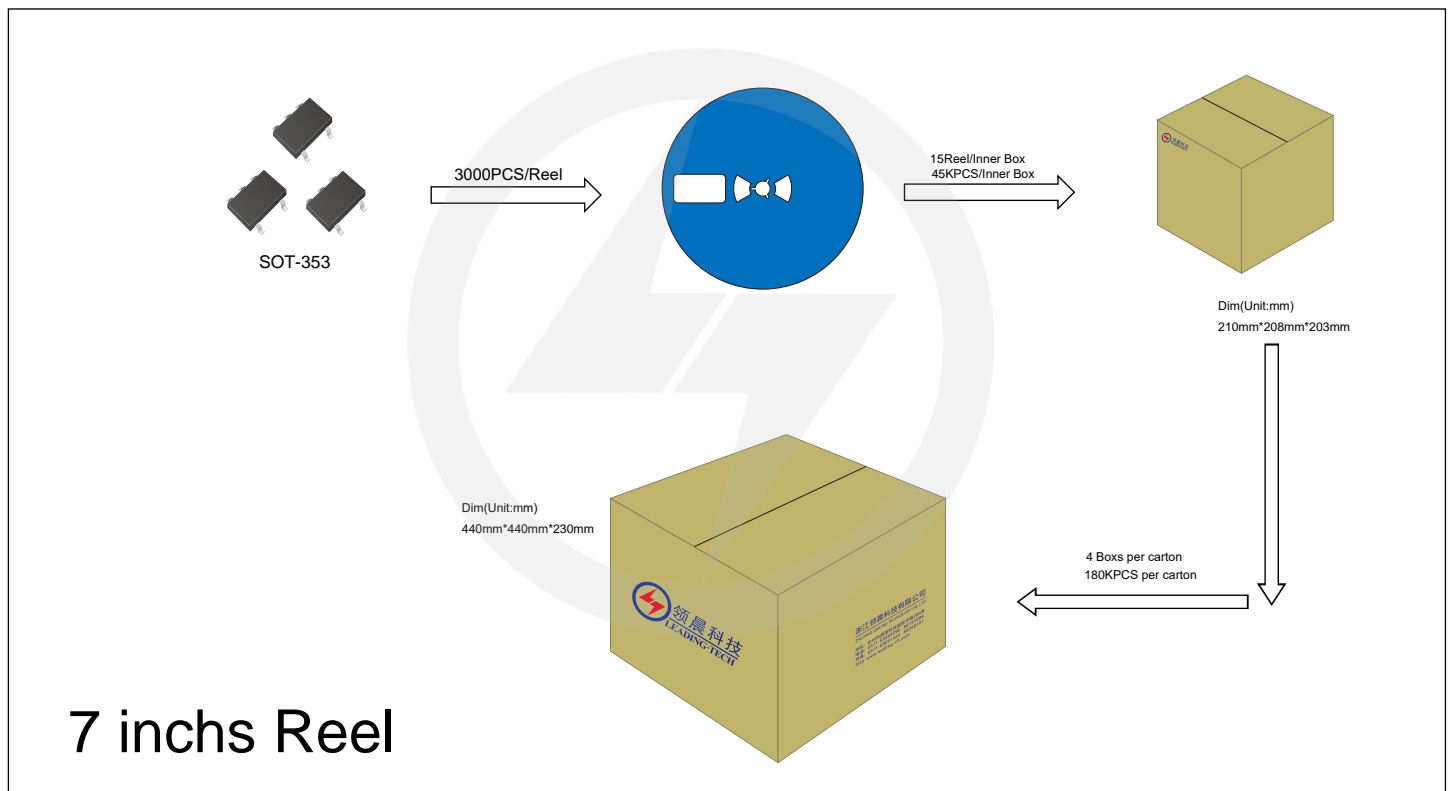
- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.05\text{mm}$
  3. The pad layout is for reference purpose only.

**Reel Dimensions**

**Unit : mm**

<p>7" Reel</p> 	D2	$\Phi 178.0 \pm 2.0$
	D3	$\Phi 50$
	D4	$13.0 \pm 0.5$
	W1	$12 \pm 0.5$
	Quantity: 3000PCS	

**Packaging**





Recommended Soldering Conditions



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	3°C/second max.
Preheat	
-Temperature Min (T <sub>S min</sub> )	150°C
-Temperature Max (T <sub>S max</sub> )	200°C
-Time (min to max) (t <sub>s</sub> )	60-180 seconds
T <sub>S max</sub> to T <sub>L</sub>	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T <sub>L</sub> )	217°C
-Time (t <sub>L</sub> )	60-150 seconds
Peak Temperature (T <sub>P</sub> )	260°C
Time within 5°C of actual Peak Temperature (t <sub>p</sub> )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

## Important Notice and Disclaimer

Leading-Tech reserves the right to make changes to this document and its products and specifications at any time without notice.

Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Leading-Tech makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Leading-Tech assume any liability for application assistance or customer product design.

Leading-tech does not warrant or accept any liability with products which are purchase or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Leading-Tech.

Leading-Tech products are not authorized for use as critical components in life support devices or systems without express written approval of Leading-tech.

## Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2024.5.12	2024.5.12	3.0	New File	/	Ding	