

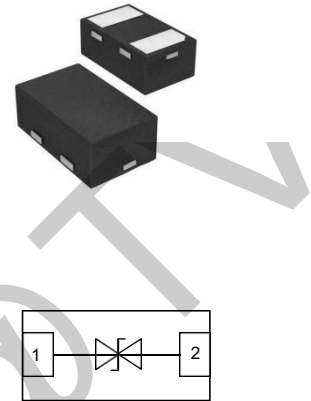
## Features

- Ultra Low Capacitance: 0.30pF typical
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD Air):  $\pm 20\text{kV}$
- IEC 61000-4-2 (ESD Contact):  $\pm 20\text{kV}$
- IEC 61000-4-5 (Lightning 8/20 $\mu\text{s}$ ): 5A

## Mechanical Data

- Package: DFN1006 (1.00 x 0.60 x 0.37mm)
- Lead-free and RoHS compliant
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Finish: Matte Tin

### DFN1006-2L



## Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

## Ordering information

| Order code  | Marking | Package | Packaging option | Base quantity   | Packaging specification |
|-------------|---------|---------|------------------|-----------------|-------------------------|
| DCE0510D2LC | -       | DFN1006 | Tape and reel    | 10000pcs / reel | EIA STD RS-481          |

## Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

| Parameter                                      | Symbol    | Value           | Unit |
|------------------------------------------------|-----------|-----------------|------|
| Peak Pulse Power ( $T_P=8/20\mu\text{s}$ )     | $P_{PP}$  | 110             | W    |
| ESD contact/air discharge (IEC-61000-4-2)      | $V_{ESD}$ | $\pm 20/\pm 20$ | kV   |
| Peak Pulse Current ( $T_P = 8/20\mu\text{s}$ ) | $I_{PP}$  | 5.0             | A    |
| Junction Temperature                           | $T_J$     | -55 to +125     | °C   |
| Operation temperature                          | $T_{OP}$  | -55 to +125     | °C   |
| Storage temperature                            | $T_{STG}$ | -55 to +150     | °C   |

## Electrical Characteristics

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

| Parameter                 | Symbol    | Condition                                     | Min | Typ  | Max  | Unit          |
|---------------------------|-----------|-----------------------------------------------|-----|------|------|---------------|
| Reverse stand-off Voltage | $V_{RWM}$ |                                               | -   | -    | 5.0  | V             |
| Holding Voltage           | $V_{BR}$  | $I_T = 1\text{mA}$                            | 6.0 | 8.5  | 9.5  | V             |
| Reverse Leakage Current   | $I_R$     | $V_{RWM} = 5\text{V}$                         | -   | -    | 0.1  | $\mu\text{A}$ |
| Clamping Voltage          | $V_C$     | $I_{PP} = 1\text{A}, t_p = 8/20\mu\text{s}$   | -   | -    | 10   | V             |
| Clamping Voltage          | $V_C$     | $I_{PP} = 5.0\text{A}, t_p = 8/20\mu\text{s}$ | -   | -    | 22   | V             |
| Junction Capacitance      | $C_J$     | $V_R = 0\text{V}, f = 1\text{MHz}$            | -   | 0.30 | 0.40 | pF            |

## Typical Characteristics

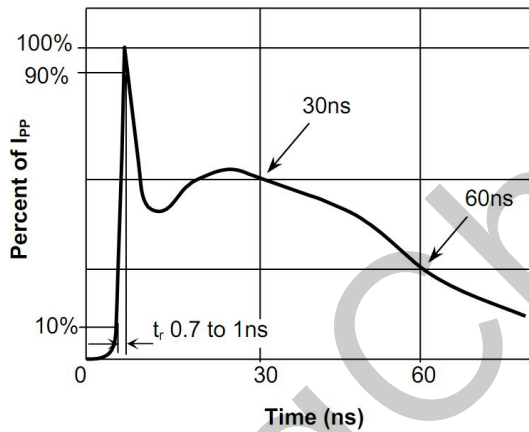


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

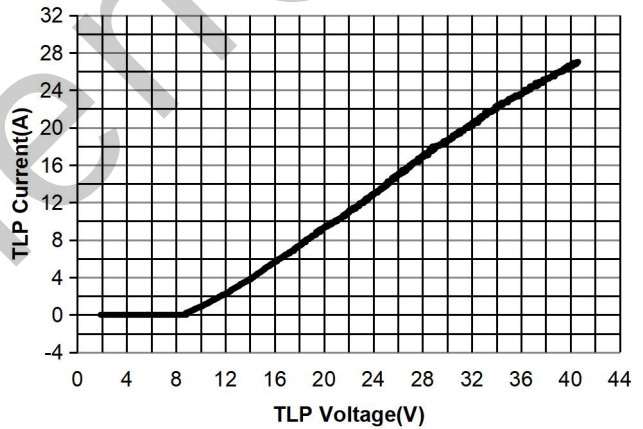


Fig.2 Transmission Line Pulse (TLP)

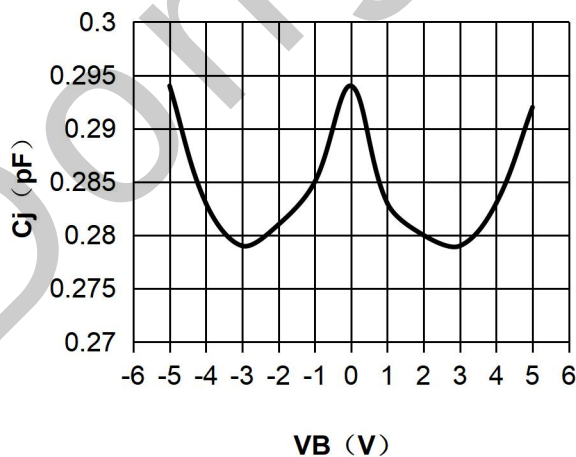


Fig.3 Capacitance vs. Reverse Voltage

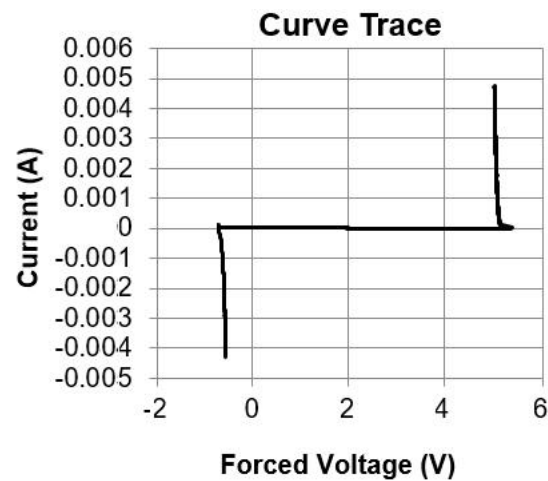
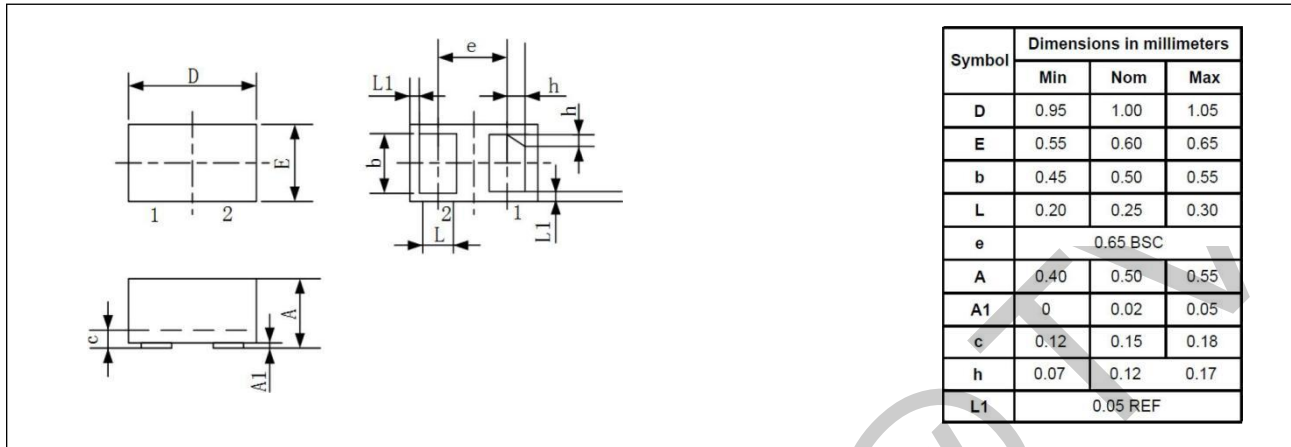
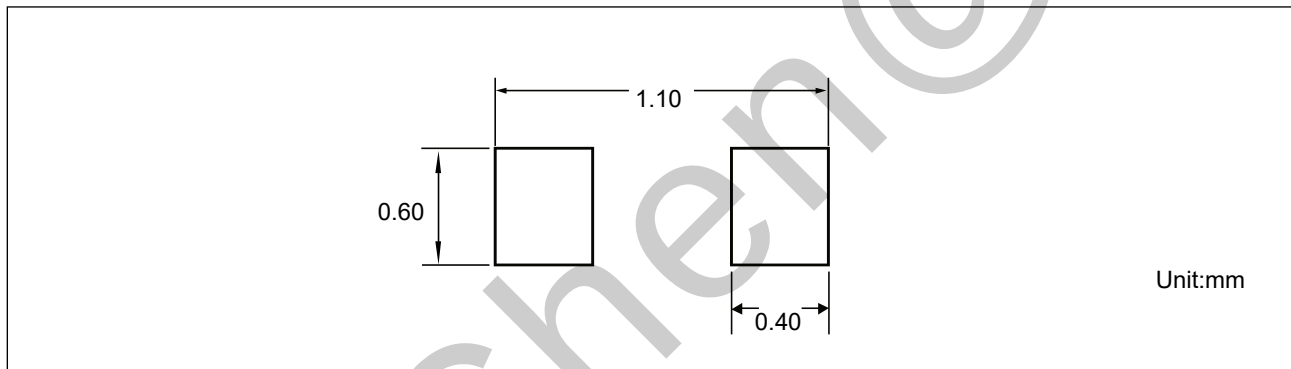


Fig.4 IV Curve

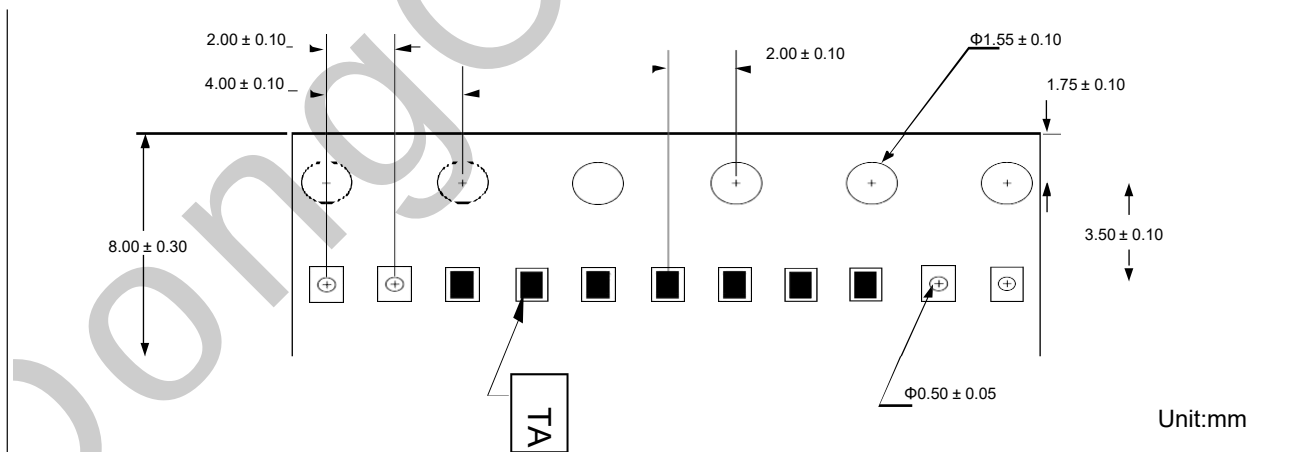
## Package Dimensions



## Pad Dimensions



## Tape and Reel Specification



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### Head Office

#### Contact Information:

DongChen Electronics Co.,Ltd.

Address: 2F., No.407, Sec. 2, Longgang Rd.,Zhongli Dist.,  
Taoyuan City 32097, Taiwan (R.O.C.)

Tel: 03-284-1808

Fax: 03-284-1404

Mail:dc@dongchen.com.tw

Web:www.dongchen.com.tw