

## LTPD/CAPD Series Low Voltage **Printer** Mechanisms



Designing mobile devices is increasingly challenging. Customers expect each new product generation to be smaller and faster, with long battery life. To be competitive, device manufacturers must reduce product size and increase speed. Time to market is crucial and reliability is non-negotiable.

New low voltage LTPD/CAPD series printer mechanisms tackle these challenges with dramatic advances in design flexibility, reliability, and printing performance.

### Small

LTPD/CAPD series mechanisms free up critical design real estate. The new mechanisms provide a smaller overall form factor, innovative angled paper guide requiring less depth, and a smaller pitch flexible print circuit (FPC) cable.

### Fast

LTPD/CAPD series mechanisms are fast, rated for up to 100 mm/second print speeds. This gives mobile devices a much needed performance boost.

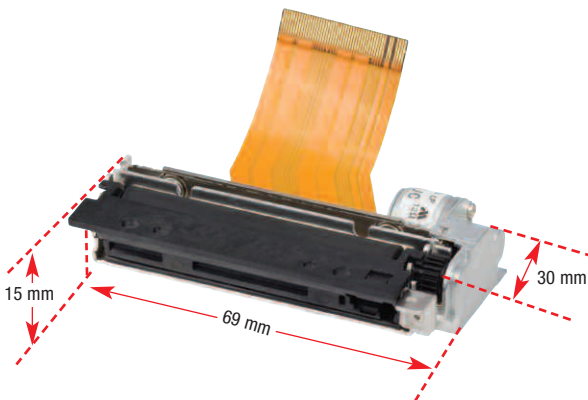
### Reliable

LTPD/CAPD series mechanisms offer a minimum of 50 km of total printing and 100 million pulses. CAPD models offer a new built-in auto-cutter design, improving cutter reliability. The result: reliable media output, every time.

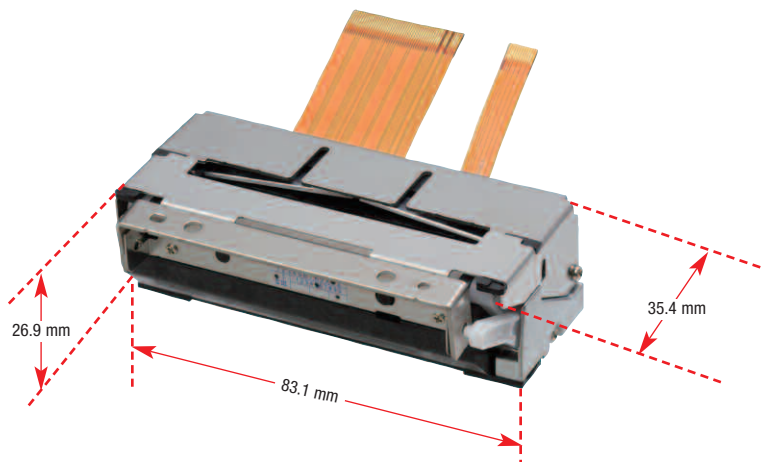
### Flexible

LTPD/CAPD series mechanisms offer a wide array of form factor choices to provide versatility and flexibility for smoother integration. Options include EZ-OP clamshell-style and auto-loading models, ASIC and interface board solutions, and both horizontal and vertical mechanical orientation designs.

- **2" and 3" print width models**
- **High speed printing (up to 100 mm/second)**
- **Choice of horizontal and vertical orientations**
- **EZ-OP clamshell and auto-loading paper replacement options**
- **Platen latch for better shock absorption**
- **Built-in auto-cutter (CAPD models)**



2" LTPD model and 2" CAPD model.



## Product Specifications

| Model                      | LTPD245                           | LTPD345                 | CAPD245               | CAPD345                                                     |
|----------------------------|-----------------------------------|-------------------------|-----------------------|-------------------------------------------------------------|
| Printing                   | Thermal line dot printing         |                         |                       |                                                             |
|                            | Method                            |                         |                       |                                                             |
|                            | Number of dots/line               | 384                     | 576                   | 384                                                         |
|                            | Resolution(dots/mm)               |                         | 8                     |                                                             |
|                            | Paper width (mm)                  | 58 <sup>+0.1</sup>      | 80 <sup>+0.1</sup>    | 58 <sup>+0.1</sup>                                          |
|                            | Printing width (mm)               | 48                      | 72                    | 48                                                          |
|                            | Speed (max mm/sec)                | 100                     | 80                    | 100                                                         |
| Sensors                    | Curved                            |                         |                       |                                                             |
|                            | By thermistor                     |                         |                       |                                                             |
|                            | By mechanical switch              |                         |                       |                                                             |
|                            | By photo interrupter              |                         |                       |                                                             |
| Power supply (V)           | Operating Voltage (Vdd)           | 2.7 to 3.6/4.75 to 5.25 |                       |                                                             |
|                            | Operating Voltage (Vp)            | -                       | -                     | 6.5 to 9.5                                                  |
|                            | Head                              | 3.66 (9.5V/64dots)      | 3.60 (9.5V/64dots)    | 3.66 (9.5V/64dots)                                          |
| Peak current (A)           | Motor                             | 0.6                     | 0.6                   | 0.6                                                         |
|                            | Cutter motor                      | -                       | -                     | 0.7                                                         |
| Service life               | Pulse activation (pulses)         | 100 million             |                       |                                                             |
|                            | Abrasion resistance (km)*         | 50 *                    |                       |                                                             |
| Operating temperature (°C) |                                   | -10 to 50               |                       |                                                             |
|                            |                                   | -10 to 50               |                       |                                                             |
| Dimensions (W x D x H mm)* | Horizontal                        | 69.0 x 30.0 x 15.0 **   | 91.0 x 30.0 x 15.0 ** | 83.1 x 35.4 x 26.9 **                                       |
|                            | Vertical                          | 69.0 x 15.0 x 30.0 **   | 91.0 x 15.0 x 30.0 ** | 105.1x35.4x27.2***                                          |
| Mass(g)                    |                                   | Approx. 40              | Approx. 58            | Approx. 125                                                 |
|                            |                                   |                         |                       | Approx. 148                                                 |
| Auto-cutter                | Method                            | -                       | -                     | Slide cutting                                               |
|                            | Paper thickness (um)              | -                       | -                     | 54 to 90*                                                   |
|                            | Cutting type                      | -                       | -                     | Full cut and partial cut (1.5±0.5mm tab left at the center) |
|                            | Operating time (sec/cycle)        | -                       | -                     | Approx 1.0                                                  |
|                            | Minimum paper cutting length (mm) | -                       | -                     | 10                                                          |
|                            | Cutting frequency (max cuts/min)  | -                       | -                     | 30                                                          |
|                            |                                   | -                       | -                     | 500,000 *                                                   |
| Life span                  | Paper cutting (cuts)              | -                       | -                     |                                                             |
|                            |                                   | -                       | -                     |                                                             |

\*Use recommended thermal paper. \*\*Excluding convex section.

\*\*\*Excluding mounting part. Specifications are subject to change without notice.

## IF Board Specifications

|                               | IFD501-01UK-E                      | IFD501-01SK-E                       |
|-------------------------------|------------------------------------|-------------------------------------|
| CPU                           | PTD50P01-E                         |                                     |
| Corresponding Model           | LTPD245, LTPD345 Series            |                                     |
| Operating Voltage (V)         | CAPD245, CAPD345 Series            |                                     |
| Character matrix (H x W dots) | Vp:4.75 to 9.5                     |                                     |
| Character Type                | 16 dots character: 16 x 8, 16 x 16 | 24 dots character: 24 x 12, 24 x 24 |
|                               | Optional font                      | Yes                                 |
|                               | Downloaded character               | Yes                                 |
|                               | User-defined character             | Yes                                 |
|                               | Extend graphics character set      | Yes                                 |
|                               | Katakana character set             | Yes                                 |
|                               | Codepage 1252                      | Yes                                 |
| Communication interface       | Yes                                | Yes                                 |
|                               | Yes                                | Yes                                 |
| Dimensions (W x D x H mm)     | USB(2.0)                           | Serial (RS-232C)                    |
|                               | 69.0 x 50.0 x 14.0                 |                                     |

## ASIC Specifications:

|                               | PTD50P01-E                         |
|-------------------------------|------------------------------------|
| Corresponding model           | LTPD245, LTPD345 series            |
| Package form                  | CAPD245, CAPD345 series            |
| Operating voltage (V)         | 120pin QFP                         |
| Operating frequency (MHz)     | Vp:4.75 to 9.5, Vcc:3.0 to 3.6     |
| Configuration                 | 12MHz±0.01%                        |
| Communication interface       | C-MOS LSI                          |
| Character type                | Parallel, Serial, USB              |
| Character matrix (H x W dots) | Extended graphics character set    |
|                               | Other characters available         |
|                               | With CGs or external memory        |
| Dimensions (W x D x H mm)     | 16 dot character: 16 x 8, 16 x 16  |
|                               | 24 dot character: 24 x 12, 24 x 24 |
|                               | 16.0 x 16.0 x 1.7                  |

## Optional Cables

| Accessory    | Product     |
|--------------|-------------|
| Power Cable  | DC-04100A-E |
| Switch Cable | OC-D1430A-E |
| Serial Cable | OC-D0730A-E |
| USB Cable    | IFC-U01-1-E |

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