

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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CU16025-UW6J

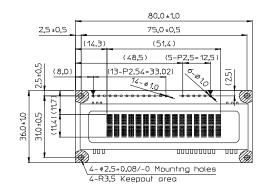
SIMPLIFIED DATASHEET

### ■ Features

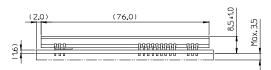
16 character x 2 line display. LCD compatible, serial interface. Good for use as LCD drop-in replacement, or in various other applications.

## Get full specification Click here to go to request form.

## **■** Physical dimension







( ):Reference only Unit:mm

#### Specifications

## **■** Electrical Ratings

| Parameter            | Symbol  | Min.   | Тур. | Max.   | Unit | Condition      |
|----------------------|---------|--------|------|--------|------|----------------|
| Logic Input Voltage  |         |        |      |        |      |                |
| DB0-DB7, RS,R/W(WR), | VIH1    | 2.0    | -    | VCC    | VDC  | VCC-VSS= 5.0 V |
| E(RD),SCK, STB       | VIL1    | VSS    | -    | 8.0    | VDC  | VOC-VSS= 5.0 V |
| Logic Input Voltage  | VIH2    | 0.7VCC | -    | VCC    | VDC  | VCC-VSS= 5.0 V |
| SI/SO                | VIL2    | VSS    | -    | 0.3VCC | VDC  | VOC-VSS= 5.0 V |
| Logic Input Voltage  | VIH3    | 0.8VCC | -    | VCC    | VDC  | VCC-VSS= 5.0 V |
| /RESET               | VIL3    | VSS    | -    | 0.2VCC | VDC  | VOC-VSS= 5.0 V |
| Power supply Voltage | VCC-VSS | 4.75   | 5.00 | 5.25   | VDC  | -              |

## **■** Electrical Characteristics

| Parameter                | Symbol | Min.    | Тур. | Max. | Unit | Condition    |
|--------------------------|--------|---------|------|------|------|--------------|
| Logic Output Voltage 'H' | VOH    | VCC-0.8 | -    | -    | VDC  | IOH = -4  mA |
| 'L'                      | VOL    | -       | -    | 0.6  | VDC  | IOL = 4 mA   |
| 'H'                      | VOH    | VCC-0.5 | -    | -    | VDC  | IOH = -2 mA  |
| 'L'                      | VOL    | -       | -    | 0.5  | VDO  | IOL = 2 mA   |
| Power Supply Current 1   | ICC1   | -       | 150  | 200  | mΑ   | Display ON   |
| Power Supply Current 2   | ICC2   | -       | 3    | 10   | mΑ   | Display OFF  |
| Power Consumption        |        | -       | 0.75 | 1.0  | W    | Display ON   |

## **■** Optical Characteristics

| i arameter            |                            |
|-----------------------|----------------------------|
| Luminance             | 350 cd/m <sup>2</sup> Min. |
| Color of illumination | Green (Blue-Green)         |

#### **■** Environmental Conditions

| i ai aiii etei            |                                  |
|---------------------------|----------------------------------|
| Operating Temperature     | -40 ~ +85 degrees celsius        |
| Storage Temperature       | -50 ~ +85 degrees celsius        |
| Operating Humidity        | 20 ~ 80% R.H. (non-condensing)   |
| Vibration (Non operation) | 10-55-10Hz, all amplitude 1mm, 3 |

30 minutes, X-Y-Z

Shock (Non operation) 980m/s<sup>2</sup> (100G) 6ms

#### ■ Physical Specifications

| — · · · / · · · · · · · · · · · · · · · |                            |  |
|---|----------------------------|--|
| Parameter                               |                            |  |
| Number of char.                         | 32 (16 x 2)                |  |
| Matrix format                           | 5 x 7 ANK, International   |  |
| Display area                            | 51.4 x 11.4 mm (X x Y)     |  |
| Character size                          | 2.275 x 4.759 mm (X x Y)   |  |
|   | Underline is not included. |  |
| Character pitch                         | 3.275 mm                   |  |
| Line pitch                              | 5.991 mm                   |  |
| Weight                                  | About 30 g                 |  |
|   |                            |  |

#### ■ Interface

8bit/4bit Parallel(TTL), Synchronous Serial (CMOS)

## ■ Pin Assignment (Parallel)

| Pin No | Signal  | Pin No | Signal |
|--------|---------|--------|--------|
| 1      | GND     | 8      | DB1    |
| 2      | VCC     | 9      | DB2    |
| 3      | NC      | 10     | DB3    |
| 4      | RS      | 11     | DB4    |
| 5      | R/W(WR) | 12     | DB5    |
| 6      | E(RD)   | 13     | DB6    |
| 7      | DB0     | 14     | DB7    |
|        |         |        |        |

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| (Synchronous Seri |       |  |  |  |
|-------------------|-------|--|--|--|
| Pin No Signal     |       |  |  |  |
| 1                 | VCC   |  |  |  |
| 2                 | SI/SO |  |  |  |
| 3                 | GND   |  |  |  |
| 4                 | STB   |  |  |  |
| 5                 | SCK   |  |  |  |
| 6                 | NC    |  |  |  |

## **■** Functions

#### Parameter

Command compatible with HD44780 LCD controller Display ON/OFF Brightness Control Cursor ON/OFF 8 User definable character font

