

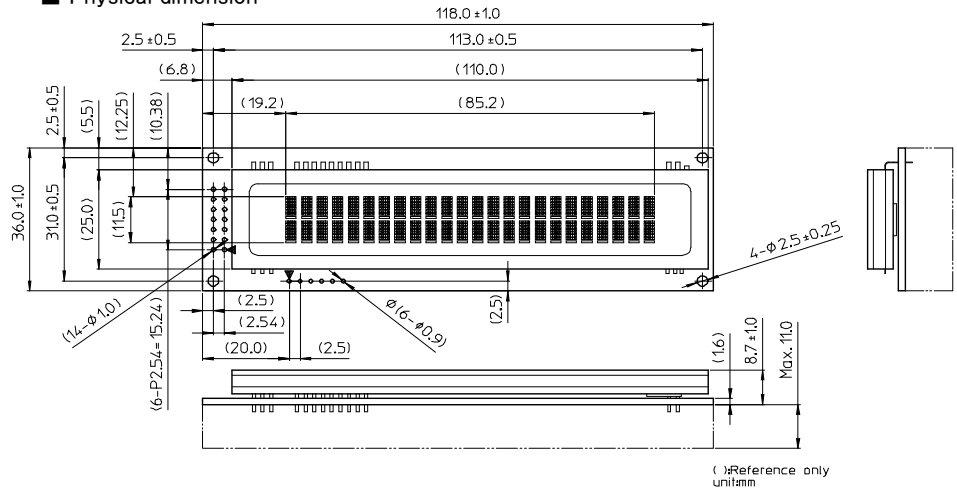
CU24025-UW1J

SIMPLIFIED DATASHEET

■ Features

24 character x 2 line display.
A good balance between
display size and amount of
text display.

■ Physical dimension



Specifications

■ Electrical Ratings

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

■ Electrical Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|------------------------|--------|------|---------|-------|------|-------------|
| Logic Output Voltage | 'H' | VOH | VCC-0.8 | — | VDC | IOH = -4 mA |
| | 'L' | VOL | — | 0.6 | | IOL = 4 mA |
| | 'H' | VOH | VCC-0.5 | — | VDC | IOH = -2 mA |
| | 'L' | VOL | — | 0.5 | | IOL = 2 mA |
| Power Supply Current 1 | ICC1 | — | 165 | 215 | mA | Display ON |
| Power Supply Current 2 | ICC2 | — | 13 | 25 | mA | Display OFF |
| Power Consumption | | — | 0.825 | 1.075 | W | Display ON |

■ Optical Characteristics

| Parameter | |
|-----------------------|----------------------------|
| Luminance | 350 cd/m ² Min. |
| Color of illumination | Green (Blue-Green) |

■ Environmental Conditions

| Parameter | |
|---------------------------|--|
| 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, 30 minutes, X-Y-Z |
| Shock (Non operation) | 539m/s ² (55G) 10ms |

■ Physical Specifications

| Parameter | | *ANK(Alphabet, Numeric, Kana) |
|-----------------|----------------------------|-------------------------------|
| Number of char. | 48 (24 x 2) | |
| Built-in Fonts | 5x7 | ANK, International |
| Display area | 85.2 x 11.5 mm (X x Y) | |
| Character size | 2.4 x 4.7 mm (X x Y) | |
| | Underline is not included. | |
| Character pitch | 3.6 mm | |
| Line pitch | 6.1 mm | |
| Weight | About 47 g | |

■ Interface

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

■ Pin Assignment (Parallel)

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

(Synchronous Serial)

| 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 |
| etc. |