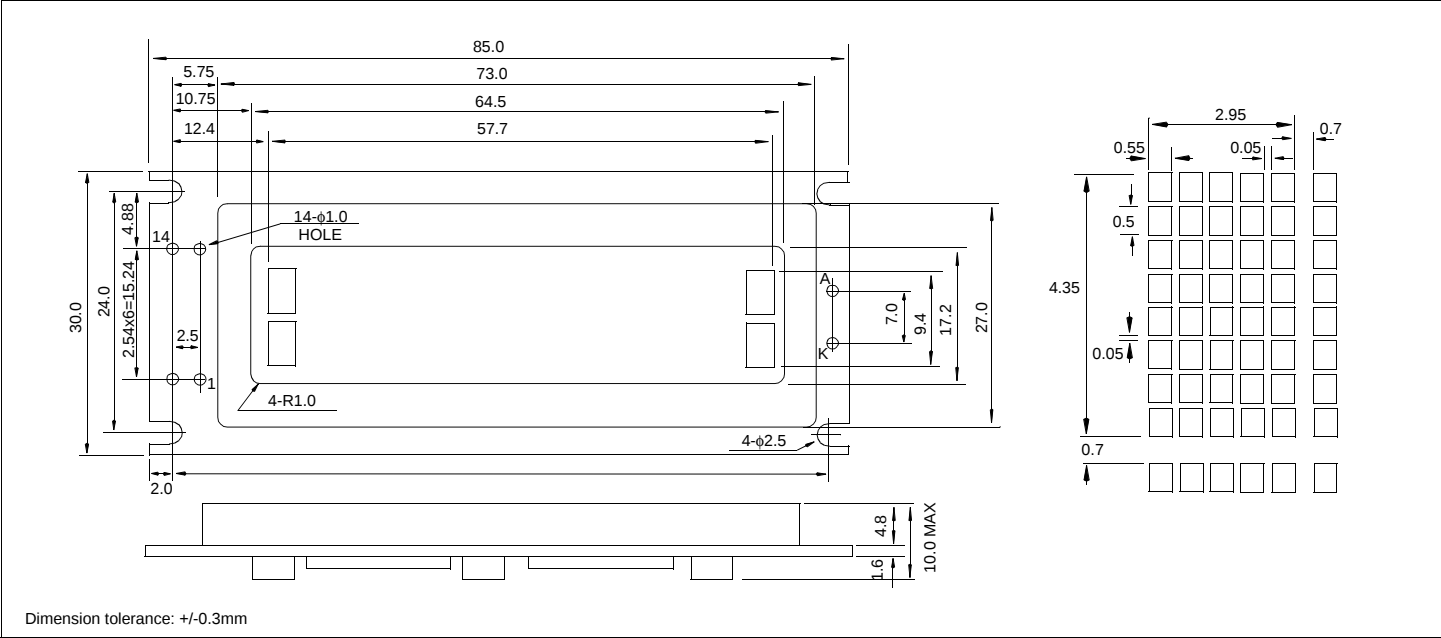


HDM16216H-D

Dimensional Drawing

16 Character x 2 Lines, Narrow Width PCB



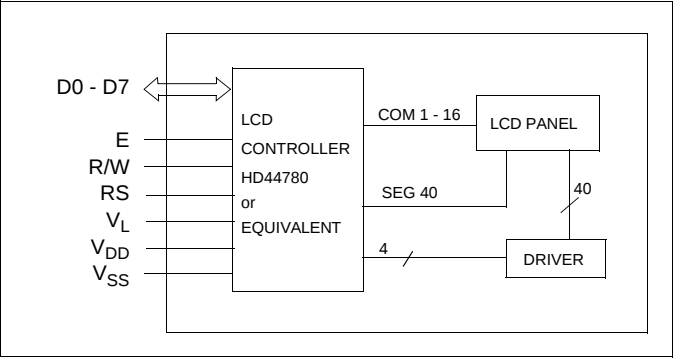
Features

Character Format .....5x7 Dots with Cursor  
Backlight.....EL Optional  
Options....TN/Gray STN/Yellow STN, 12 o'Clock/6 o'Clock View  
Normal/Extended Temperature  
Normal/Negative Displays

Physical Data

Module Size.....85.0W x 30.0H x 10.0T mm  
Viewing Area Size.....64.5W x 17.2H mm  
Weight.....30g

Block Diagram



Absolute Maximum Ratings

| PARAMETER              | SYMBOL                           | MIN             | MAX             | UNIT |
|------------------------|----------------------------------|-----------------|-----------------|------|
| SUPPLY VOLTAGE         | V <sub>DD</sub> -V <sub>SS</sub> | 0               | 7.0             | V    |
| SUPPLY VOLTAGE FOR LCD | V <sub>DD</sub> -V <sub>L</sub>  | 0               | 13.5            | V    |
| INPUT VOLTAGE          | V <sub>IN</sub>                  | V <sub>SS</sub> | V <sub>DD</sub> | V    |
| OPERATING TEMPERATURE  | T <sub>OP</sub>                  | 0               | 50              | °C   |
| STORAGE TEMPERATURE    | T <sub>STG</sub>                 | -20             | 70              | °C   |

Electrical Characteristics (VDD=5.0±0.25V 25°C)

| PARAMETER            | SYM                             | CONDITION               | MIN | TYP | MAX | UNIT |
|----------------------|---------------------------------|-------------------------|-----|-----|-----|------|
| INPUT HIGH VOLTAGE   | V <sub>IH</sub>                 | -                       | 2.2 | -   | -   | V    |
| INPUT LOW VOLTAGE    | V <sub>IL</sub>                 | -                       | -   | -   | .6  | V    |
| OUTPUT HIGH VOLTAGE  | V <sub>OH</sub>                 | I <sub>OH</sub> = 0.2mA | 2.4 | -   | -   | V    |
| OUTPUT LOW VOLTAGE   | V <sub>OL</sub>                 | I <sub>OL</sub> = 1.2mA | -   | -   | 0.4 | V    |
| POWER SUPPLY CURRENT | I <sub>DD</sub>                 | V <sub>DD</sub> = 5.0V  | -   | 1.0 | 2.2 | mA   |
| POWER SUPPLY FOR LCD | V <sub>DD</sub> -V <sub>L</sub> | TA = 25°C               | 4.3 | -   | 4.7 | V    |
| DRIVE METHOD         | 1/16 Duty                       |                         |     |     |     |      |

Pin Connections

| PIN NO. | SYMBOL          | LEVEL | FUNCTION                                   |              |
|---------|-----------------|-------|--------------------------------------------|--------------|
| 1       | V <sub>DD</sub> | -     | 5V                                         | Power supply |
| 2       | V <sub>SS</sub> | -     | 0V                                         |              |
| 3       | V <sub>L</sub>  | -     | -                                          |              |
| 4       | RS              | H/L   | H: Data input<br>L: Instruction data input |              |
| 5       | R/W             | H/L   | H: Data read<br>L: Data write              |              |
| 6       | E               | H,H→L | Enable signal                              |              |
| 7       | D0              | H/L   | Data bus                                   |              |
| 8       | D1              | H/L   |                                            |              |
| 9       | D2              | H/L   |                                            |              |
| 10      | D3              | H/L   |                                            |              |
| 11      | D4              | H/L   |                                            |              |
| 12      | D5              | H/L   |                                            |              |
| 13      | D6              | H/L   |                                            |              |
| 14      | D7              | H/L   |                                            |              |