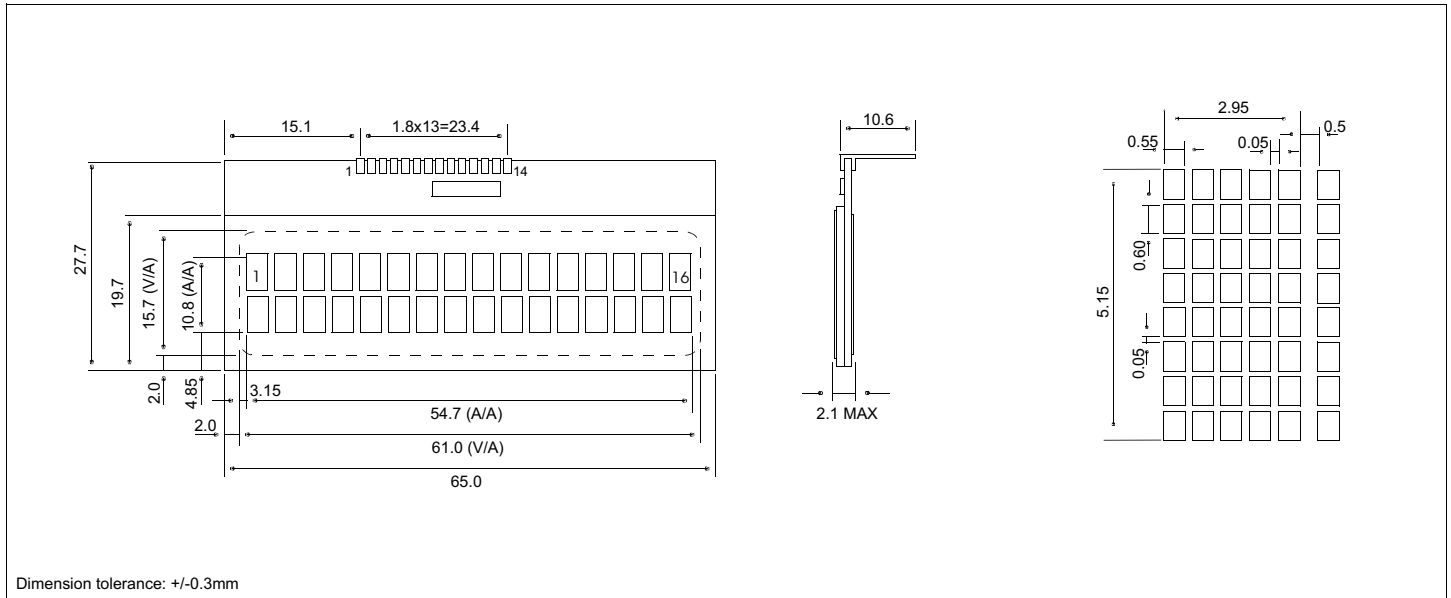


HDG1602P-2

Chip On Glass technology

Dimensional Drawing

16 Character x 2 Line



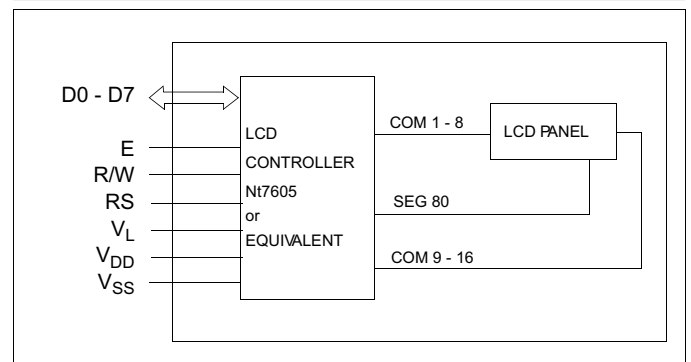
Features

Character Format5x7 Dots with Cursor
 ConnectionPin
 Options.....TN or STN reflective or transreflective polarizer
 ControllerNt7605

Physical Data

Module Size.....65.0W x 27.7H x 2.1T mm
 Viewing Area Size.....61.0W x 15.7H mm
 Character Size.....2.95W x 5.15H mm
 Weight.....10.0 g

Block Diagram



Absolute Maximum Ratings

| PARAMETER | SYMBOL | MIN | MAX | UNIT |
|------------------------|-----------------|----------|--------------|------|
| SUPPLY VOLTAGE | $V_{DD}-V_{SS}$ | -0.3 | 6.0 | V |
| SUPPLY VOLTAGE FOR LCD | $V_{DD}-V_L$ | -0.3 | $V_{DD}+0.3$ | V |
| INPUT VOLTAGE | V_{IN} | V_{SS} | V_{DD} | V |
| OPERATING TEMPERATURE | T_{OP} | 0 | 50 | °C |
| STORAGE TEMPERATURE | T_{STG} | -20 | 70 | °C |

Pin Connections

| PIN NO. | SYMBOL | LEVEL | FUNCTION |
|---------|----------|---------|--|
| 1 | V_{SS} | 0V | Ground |
| 2 | V_L | - | Operating Voltage for LCD Driving |
| 3 | V_{DD} | 5V | Power Supply for Logic |
| 4 | RS | H/L | H: Data input L: Instruction data input |
| 5 | R/W | H/L | H: Data read 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 | |

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

| PARAMETER | SYM | CONDITION | MIN | TYP | MAX | UNIT |
|----------------------|--------------|----------------|-------------|-----|-------------|------|
| INPUT HIGH VOLTAGE | V_{IH} | - | $0.7V_{DD}$ | - | V_{DD} | V |
| INPUT LOW VOLTAGE | V_{IL} | - | V_{SS} | - | $0.2V_{DD}$ | V |
| OUTPUT HIGH VOLTAGE | V_{OH} | $I_{OH}=0.2mA$ | $.75V_{DD}$ | - | V_{DD} | V |
| OUTPUT LOW VOLTAGE | V_{OL} | $I_{OL}=1.2mA$ | V_{SS} | - | $0.2V_{DD}$ | V |
| POWER SUPPLY CURRENT | I_{DD} | $V_{DD}=5.0V$ | - | 1.0 | 2.0 | mA |
| POWER SUPPLY FOR LCD | $V_{DD}-V_L$ | $TA=25°C$ | - | 4.7 | - | V |
| DRIVE METHOD | 1/16 Duty | | | | | |