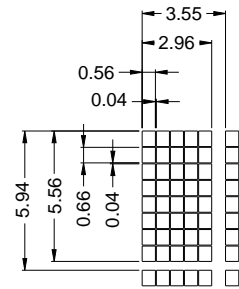
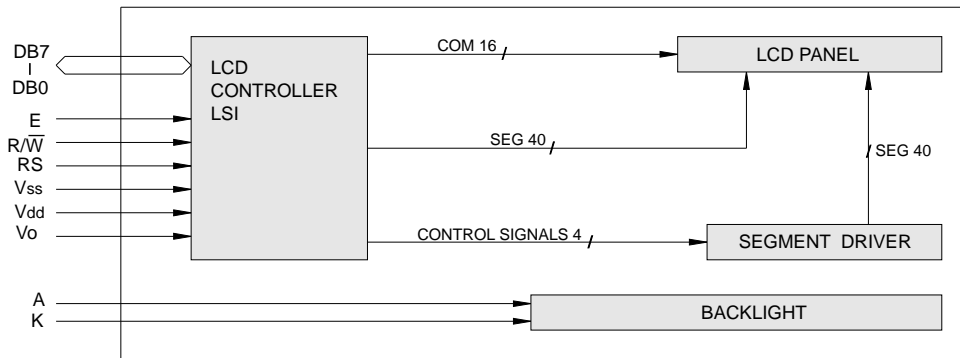
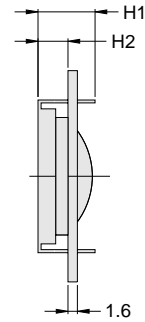
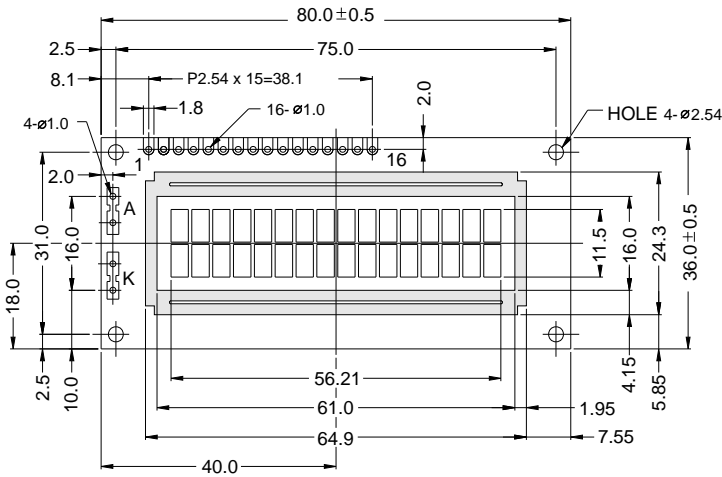




OUTLINE DIMENSION & BLOCK DIAGRAM



The tolerance unless classified $\pm 0.3\text{mm}$

MECHANICAL SPECIFICATION

| | | | |
|--------------|-------------|---------|------------|
| Overall Size | 80.0 x 36.0 | Module | H2 / H1 |
| View Area | 61.0 x 16.0 | W/O B/L | 5.1 / 9.7 |
| Dot Size | 0.56 x 0.66 | EL B/L | 5.1 / 9.7 |
| Dot Pitch | 0.60 x 0.70 | LED B/L | 9.1 / 13.7 |

PIN ASSIGNMENT

| Pin no. | Symbol | Function |
|---------|--------|------------------------------|
| 1 | Vss | Power supply(GND) |
| 2 | Vdd | Power supply(+) |
| 3 | Vo | Contrast Adjust |
| 4 | RS | Register select signal |
| 5 | R/W | Data read / write |
| 6 | E | Enable signal |
| 7 | DB0 | Data bus line |
| 8 | DB1 | Data bus line |
| 9 | DB2 | Data bus line |
| 10 | DB3 | Data bus line |
| 11 | DB4 | Data bus line |
| 12 | DB5 | Data bus line |
| 13 | DB6 | Data bus line |
| 14 | DB7 | Data bus line |
| 15 | A | Power supply for LED B/L (+) |
| 16 | K | Power supply for LED B/L (-) |

ABSOLUTE MAXIMUM RATING

| Item | Symbol | Condition | Min. | Max. | Units |
|----------------------------|---------|-----------|------|---------|-------|
| Supply for logic voltage | Vdd-Vss | 25°C | -0.3 | 7 | V |
| LCD driving supply voltage | Vdd-Vee | 25°C | -0.3 | 13 | V |
| Input voltage | Vin | 25°C | -0.3 | Vdd+0.3 | V |

ELECTRICAL CHARACTERISTICS

| Item | Symbol | Condition | Min. | Typical | Max. | Units | | | |
|----------------------------------|-----------|-----------|------|---------|------|-------|-----|-----|---|
| Power supply voltage | Vdd-Vss | 25°C | 2.7 | - | 5.5 | V | | | |
| LCD operation voltage | Vop | Top | N | W | N | W | V | | |
| | | -20°C | - | 4.7 | - | 5 | - | V | |
| | | 0°C | 4.6 | - | 4.9 | - | 5.2 | - | V |
| | | 25°C | 4.2 | 4.7 | 4.5 | 5 | 4.8 | 5.3 | V |
| | | 50°C | 3.9 | - | 4.2 | - | 4.5 | - | V |
| | | 70°C | - | 4.5 | - | 4.8 | - | 5.1 | V |
| LCM current consumption (No B/L) | Idd | Vdd=5V | - | 2 | 3 | mA | | | |
| Backlight current consumption | LED/edge | VB/L=4.2V | - | 20 | - | mA | | | |
| | LED/array | VB/L=4.2V | - | 90 | - | mA | | | |

REMARK

LCD option: STN, TN, FSTN
 Backlight Option: LED, EL Backlight feature, other Specs not available on catalog is under request.

