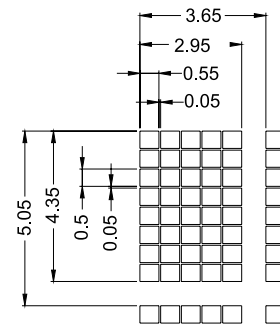
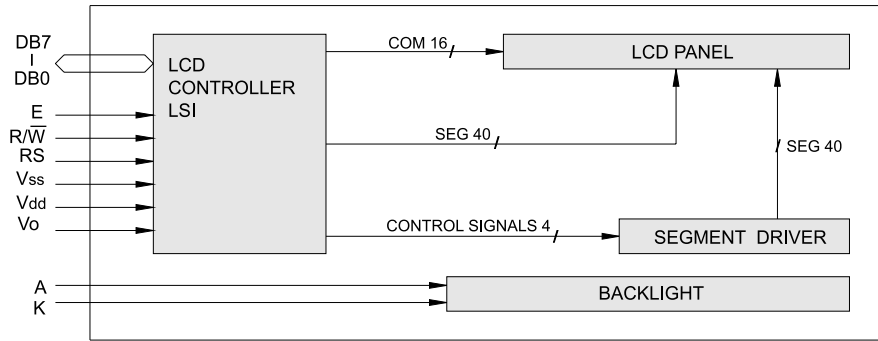
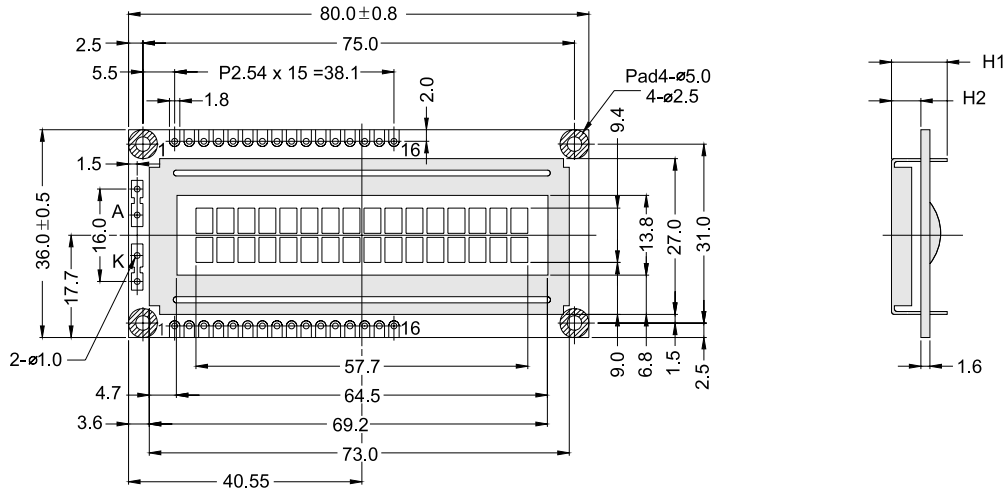


## OUTLINE DIMENSION & BLOCK DIAGRAM



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

### MECHANICAL SPECIFICATION

| Overall Size | 80.0 x 36.0 | Module    | H2 / H1    |
|--------------|-------------|-----------|------------|
| View Area    | 64.5 x 13.8 | W / O B/L | 5.0 / 9.6  |
| Dot Size     | 0.55 x 0.50 | EL B/L    | 5.0 / 9.6  |
| Dot Pitch    | 0.60 x 0.55 | LED B/L   | 9.0 / 13.6 |

### 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     | -    | 7.1     | -    | 7.5   | -   | 7.9 | V |
|                                  |           | 0°C       | 4.5  | -       | 4.8  | -     | 5.1 | -   | V |
|                                  |           | 25°C      | 4.1  | 6.1     | 4.4  | 6.4   | 4.7 | 6.7 | V |
|                                  |           | 50°C      | 3.8  | -       | 4.1  | -     | 4.4 | -   | V |
|                                  |           | 70°C      | -    | 5.7     | -    | 6     | -   | 6.3 | V |
| LCM current consumption (No B/L) | Idd       | Vdd=5V    | -    | 2       | 3    | mA    |     |     |   |
| Backlight current consumption    | LED/edge  | VB/L=4.2V | -    | -       | -    | mA    |     |     |   |
|                                  | LED/array | VB/L=4.2V | -    | 120     | -    | mA    |     |     |   |