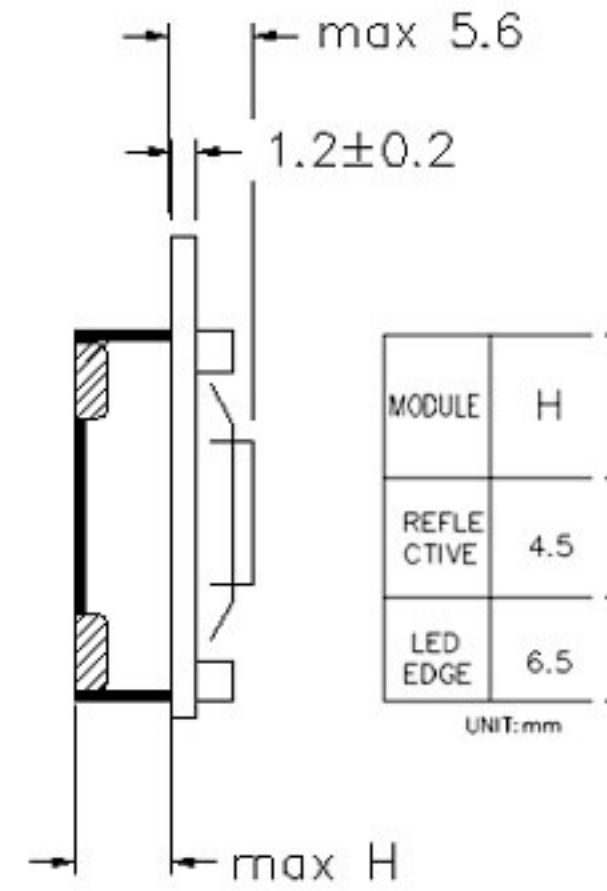
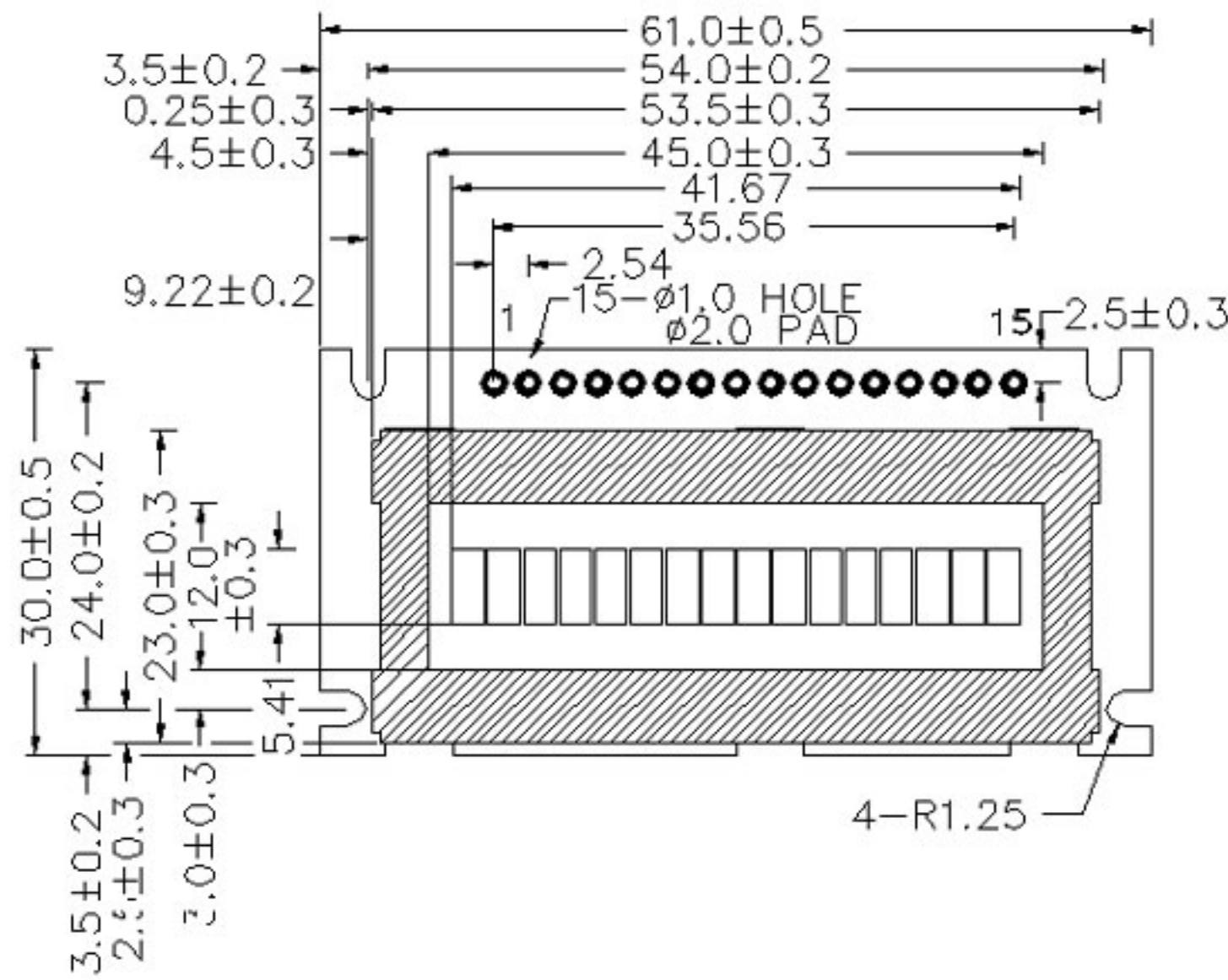
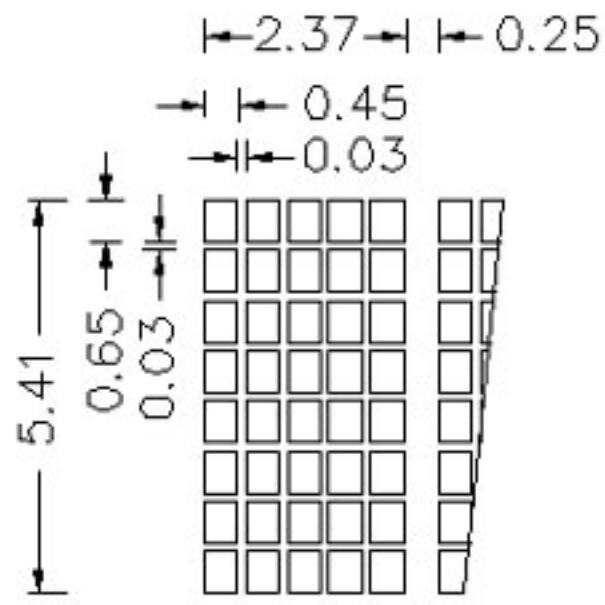


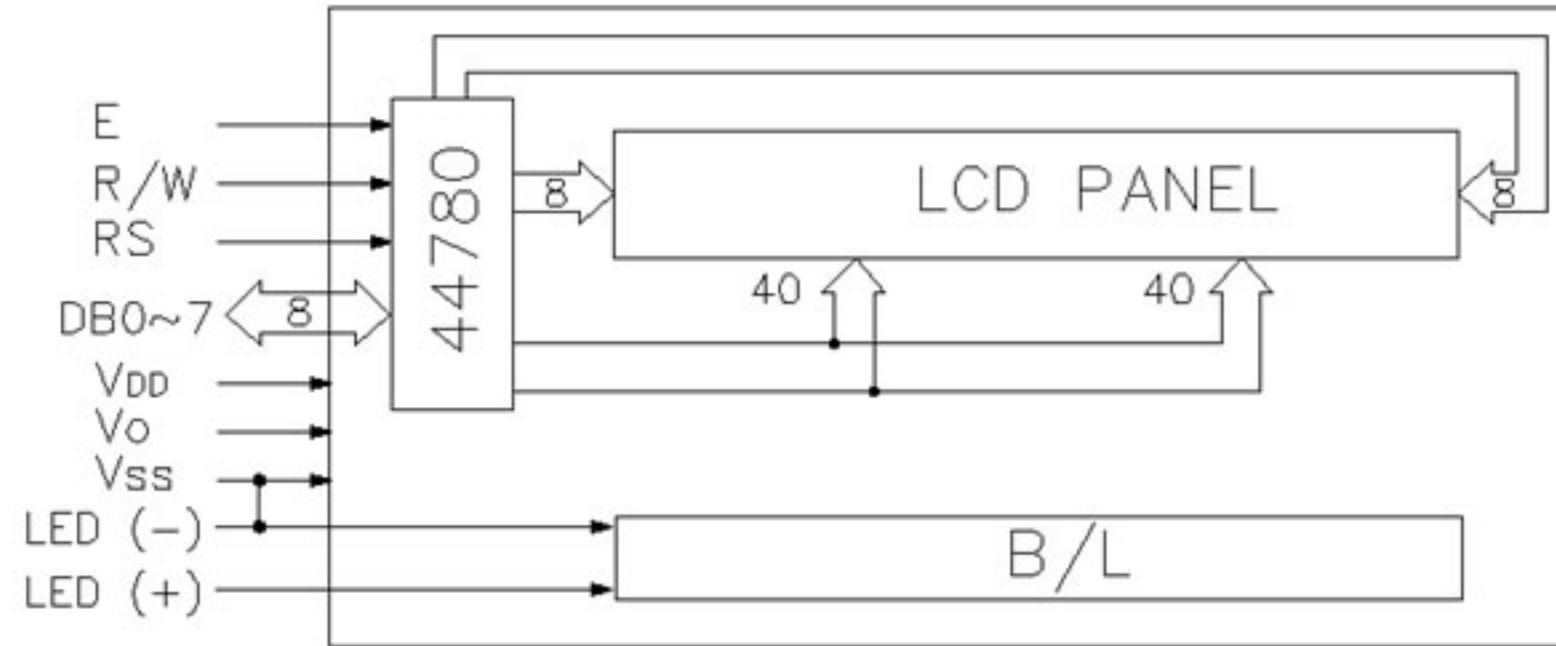


**DIMENSIONS:**



|            |     |
|------------|-----|
| MODULE     | H   |
| REFLECTIVE | 4.5 |
| LED EDGE   | 6.5 |

UNIT:mm



**GENERAL INFORMATION,, ELECTRICAL & PIN ASSIGNMENT:**

$T_a = 25^\circ\text{C}$   $V_{DD} = 5.0 \pm 0.25 \text{ v}$   
 Input "High" Voltage ( $V_{IH}$ ) 2.2 V min  
 Input "Low " Voltage ( $V_{IL}$ ) 0.6 V max

| INTERFACE PIN | 1                  | 2        | 3     | 4  | 5   | 6 | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15     |
|---------------|--------------------|----------|-------|----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| REFLECTIVE    | $V_{SS}$           | $V_{DD}$ | $V_O$ | RS | R/W | E | DB0 | DB1 | DB2 | DB3 | DB4 | DB5 | DB6 | DB7 | N/A    |
| (LED-EDGE)    | $V_{SS}$<br>LED(-) | ditto    |       |    |     |   |     |     |     |     |     |     |     |     | LED(+) |

**APPLICABLE FOR -LNA**

|   | TN<br>TEMPERATURE |      | STN<br>TEMPERATURE |      |
|---|-------------------|------|--------------------|------|
|   | NORMA             | WIDE | NORMA              | WIDE |
| Supply Current, ( $I_{DD}$ ) Typ.,mA                  | 1                 | N/A  | 1                  | 1    |
| Recommend LCD drive Voltage:                          |                   |      |                    |      |
| ( $V_{DD}-V_O$ ) at $T_a = -20^\circ\text{C}$ , Volts | N/A               | N/A  | N/A                | 6.1  |
| $T_a = 0^\circ\text{C}$                               | 5.2               | N/A  | 5.1                | 5.1  |
| $T_a = 25^\circ\text{C}$                              | 4.8               | N/A  | 4.8                | 4.8  |
| $T_a = 50^\circ\text{C}$                              | 4.5               | N/A  | 4.5                | 4.5  |
| $T_a = 70^\circ\text{C}$                              | N/A               | N/A  | N/A                | 4.1  |

**ABSOLUTE MAXIMUM RATINGS**

|                                      | NORMAL<br>TEMPERATURE |          | WIDE<br>TEMPERATURE |          |
|--------------------------------------|-----------------------|----------|---------------------|----------|
|                                      | MIN                   | MAX      | MIN                 | MAX      |
| Input Voltage ( $V_I$ )              | 0                     | $V_{DD}$ | 0                   | $V_{DD}$ |
| Supply for Logic ( $V_{DD}-V_{SS}$ ) | 0                     | 7        | 0                   | 7        |
| Supply for LCD ( $V_{DD}-V_O$ )      | 0                     | 10       | 0                   | 7        |
| Operating Temperature                | 0                     | +50      | -20                 | +70      |
| $T_{OP}, ^\circ\text{C}$             |                       |          |                     |          |
| Storage Temperature                  | -20                   | +70      | -30                 | +80      |
| $T_{ST}, ^\circ\text{C}$             |                       |          |                     |          |