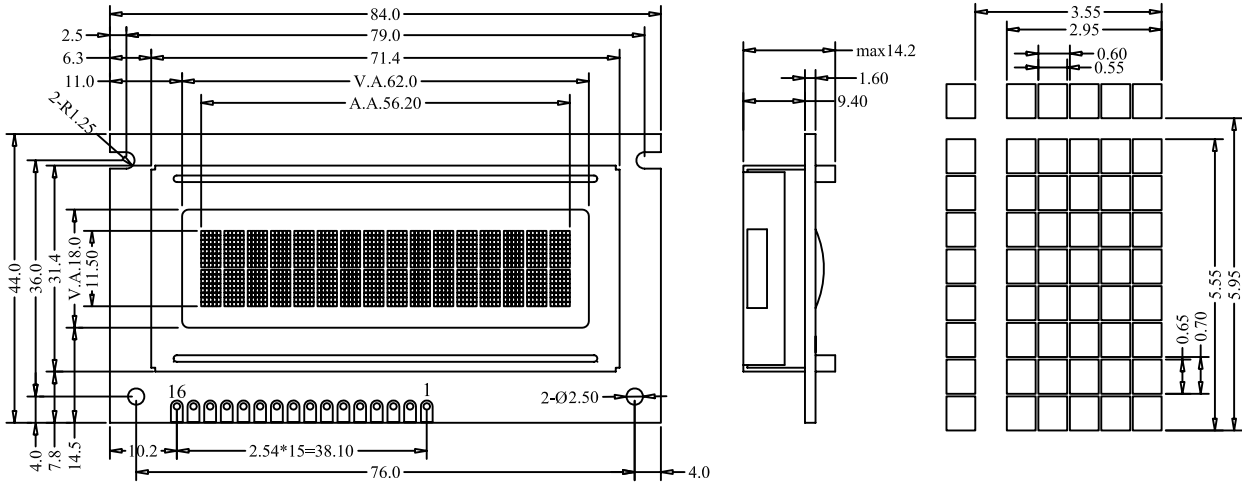


# HS162-2 (16 characters x 2)

## 1. DIMENSION OUTLINE



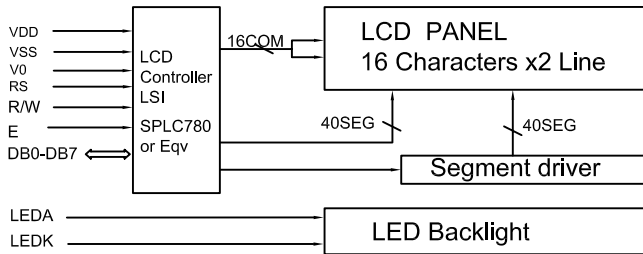
## 2. MECHANICAL SPECIFICATIONS

| ITEM                   | SPECIFICATIONS | ITEM | REMARK                        |
|------------------------|----------------|------|-------------------------------|
| Module Size(L×W×H)     | 84.0×44.0×14.0 | mm   | Reference Dimensional Outline |
| View Area(W×H)         | 62.0×18.0      | mm   |                               |
| Effective V/Area       | 56.20×11.50    | mm   |                               |
| Number of Characters   | 16CH×2Lines    | -    |                               |
| Character Size(W×H)    | 2.55×5.95      | mm   |                               |
| Dot Size(W×H)          | 0.55×0.65      | mm   |                               |
| Weight(Reflective/Led) | -              | g    |                               |

## 3. ABSOLUTE MAXIMUM RATINGS

| ITEM                  | SYMBOL           | CONDITION | STANDARD |                       |
|-----------------------|------------------|-----------|----------|-----------------------|
|                       |                  |           | MIN      | MAX                   |
| Logic Voltage         | V <sub>DD</sub>  | Ta=25°C   | -0.3V    | 7V                    |
| LCD Voltage           | V <sub>LCD</sub> |           | -0.3V    | 13V                   |
| Input Voltage         | V <sub>I</sub>   |           | -0.3V    | V <sub>DD</sub> +0.3V |
| Operation Temperature | T <sub>OP</sub>  | —         | -20°C    | 70°C                  |
| Storage Temperature   | T <sub>ST</sub>  | —         | -30°C    | 80°C                  |

## 4. BLOCK DIAGRAMMECHANICAL



## 5. LED BACKLIGHT SPECIFICATIONS

| ITEM                 | SYMBOL         | TYPE | MAX | UNIT |
|----------------------|----------------|------|-----|------|
| Ta=25°C              |                |      |     |      |
| Forward Voltage      | V <sub>f</sub> | 4.1  | 4.3 | V    |
| Forward Current      | I <sub>f</sub> | 240  | —   | mA   |
| Emission Wave Length | λ <sub>P</sub> | 568  | —   | nm   |

## 6. INTERFACE PIN CONNECTIONS

| ITEM | SYMBOL         | LEVEL  | FUNCTIONS                      |
|------|----------------|--------|--------------------------------|
| 1    | LEDA           | +5V    | Power supply For LED Backlight |
| 2    | LEDK           | 0V     |                                |
| 3    | VSS            | 0V     | Power Ground                   |
| 4    | VDD            | +5V    | Power Supply For Logic         |
| 5    | V <sub>0</sub> | —      | Contrast adjust                |
| 6    | RS             | H/L    | H:data L:command               |
| 7    | R/W            | H/L    | H:read L:write                 |
| 8    | E              | H. H→L | Enable signal                  |
| 9-16 | DB0-DB7        | H/L    | Data Bus                       |

## 7. ELECTRICAL CHARACTERISTICS

| ITEM                      | SYMBOL                          | MIN  | TYPE | MAX             | UNIT |
|---------------------------|---------------------------------|------|------|-----------------|------|
| Ta=25°C                   |                                 |      |      |                 |      |
| Logic Power               | V <sub>DD</sub>                 | 4.5  | 5    | 5.5             | V    |
| Input High Voltage        | V <sub>IH</sub>                 | 2.2  | —    | V <sub>DD</sub> | V    |
| Input Low Voltage         | V <sub>IL</sub>                 | -0.3 | —    | 0.8             | V    |
| Output High Voltage       | V <sub>OH</sub>                 | 2.4  | —    | V <sub>DD</sub> | V    |
| Output Low Voltage        | V <sub>OL</sub>                 | 0    | —    | 0.4             | V    |
| Logic Current             | I <sub>DD</sub>                 | —    | 1.2  | 3.0             | mA   |
| Operation Voltage For LCD | V <sub>DD</sub> -V <sub>0</sub> | —    | 5.0  | —               | V    |