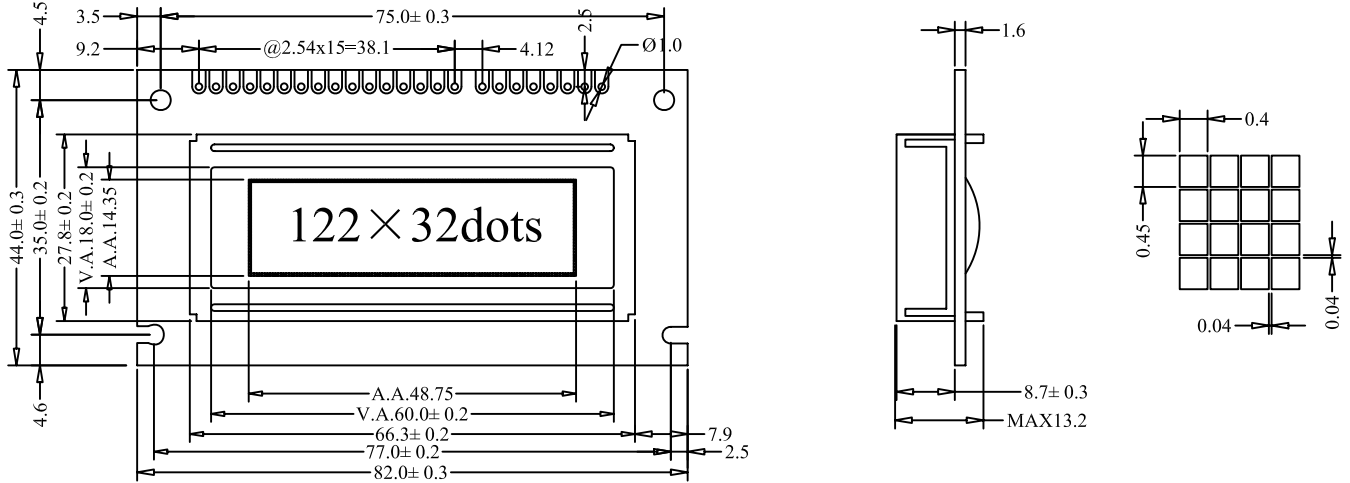


1.DIMENSION OUTLINE



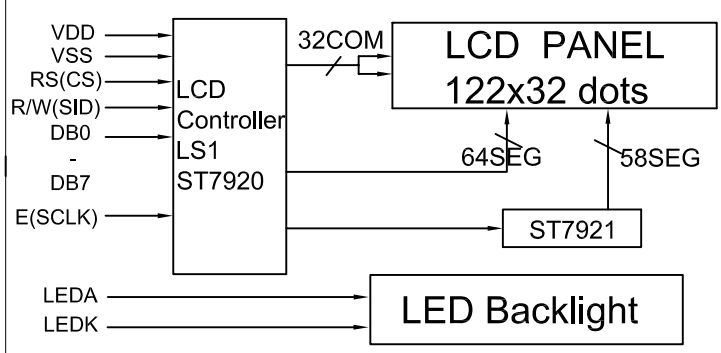
2.MECHANICAL SPECIFICATIONS

| ITEM                    | SPECIFICATIONS | ITEM | REMARK                        |
|-------------------------|----------------|------|-------------------------------|
| Module Size(L×W×H)      | 84.0×44.0×13.0 | mm   | Reference Dimensional Outline |
| View Area(W×H)          | 60.0×18.0      | mm   |                               |
| Effective V/Area        | 48.75×14.35    | mm   |                               |
| Number of Characters    | 122×32         | -    |                               |
| Dot Pitch(W×H)          | 0.40×0.45      | mm   |                               |
| Dot Size(W×H)           | 0.35×0.40      | 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    | 5.5V                  |
| LCD Voltage           | V <sub>LCD</sub> |           | -0.3V    | 7V                    |
| 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 DIAGRAM MECHANICAL



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> | 90   | —   | mA   |
| Emission Wave Length | λ <sub>p</sub> | 572  | —   | nm   |

6.INTERFACE PIN CONNECTIONS

| ITEM1 | ITEM2 | SYMBOL   | LEVEL | FUNCTIONS                                      |
|-------|-------|----------|-------|------------------------------------------------|
| 1     | 1     | VSS      | 0V    | Power Ground                                   |
| 2     | 2     | VDD      | +5V   | Power Supply For Logic                         |
| 3     | 3     | V0       | —     | Contrast adjust                                |
| 4     | 6     | RS(CS)   | H/L   | H:data L:command (Chip enable for serial mode) |
| 5     | 5     | R/W(SID) | H/L   | H:read L:write (serial data for serial mode)   |
| 6     | 4     | E(SCLK)  | H.H→L | Enable signal (Serial clock)                   |
| 7-14  |       | DB0-DB7  | H/L   | Data bus line                                  |
| 15    | 7     | LEDA     | +5V   | Power supply For LED Backlight                 |
| 16    | 8     | LEDK     | 0V    |                                                |

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> | 0.7V <sub>DD</sub> | —    | V <sub>DD</sub> | V    |
| Input Low Voltage         | V <sub>IL</sub> | -0.3               | —    | 0.6             | V    |
| Output High Voltage       | V <sub>OH</sub> | 0.8V <sub>DD</sub> | —    | V <sub>DD</sub> | V    |
| Output Low Voltage        | V <sub>OL</sub> | 0                  | —    | 0.4             | V    |
| Logic Current             | I <sub>DD</sub> | —                  | 3    | 5               | mA   |
| Operation Voltage For LCD | V0.GND          | —                  | 5    | —               | V    |