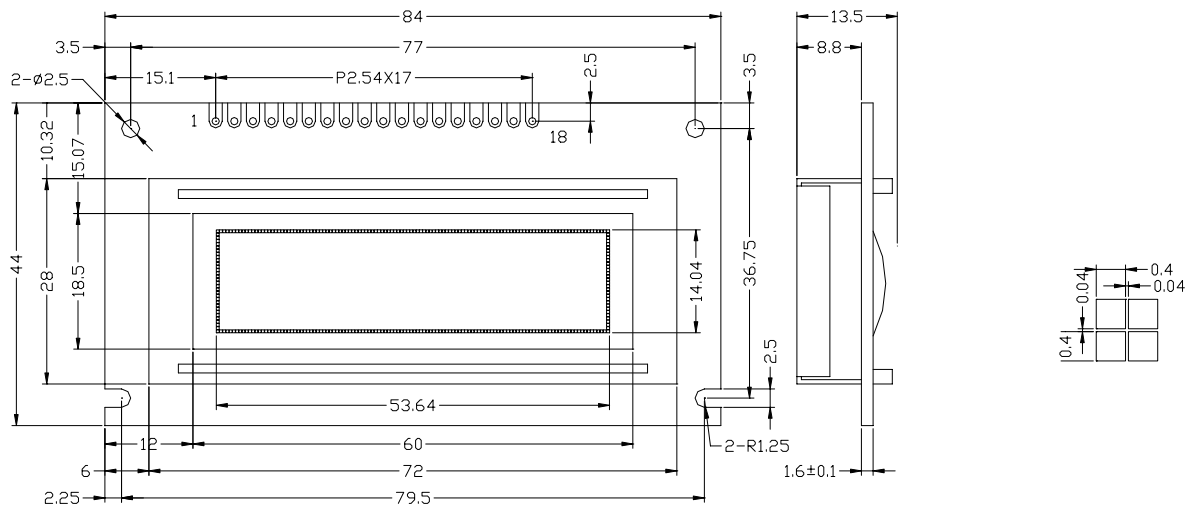


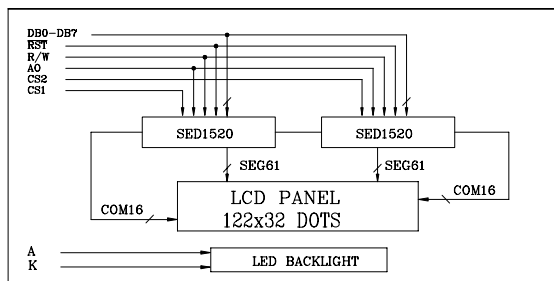


• EXTERNAL DIMENSIONS:

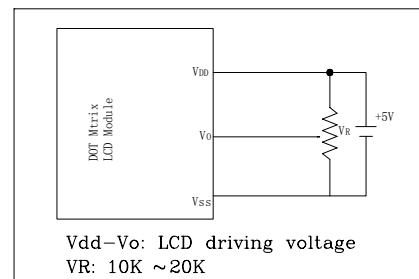
[ ] For LED Backlight



• BLOCK DIAGRAM:



• POWER SUPPLY:



MECHANICAL SPECIFICATIONS

| ITEM                | SPECIFICATION           | UNIT |
|---------------------|-------------------------|------|
| Module Size (WxHxT) | 84.0x44.0x9.2[13.5]     | mm   |
| Viewing Area (WxH)  | 60.0x18.5               | mm   |
| Dot Number (WxH)    | 122x32                  | dots |
| Dot Size (WxH)      | 0.4x0.4                 | mm   |
| Dot Pitch (WxH)     | 0.44x0.44               | mm   |
| LCD MODE            | STN(Y/G,Gray,Blue),FSTN |      |

ABSOLUTE MAXIMUM RATINGS

| PARAMETER             | SYMBOL  | MIN. | MAX.    | UNIT |
|-----------------------|---------|------|---------|------|
| Power Supply (logic)  | Vdd-Vss | -0.3 | 7.0     | V    |
| Power Supply (LCD)    | Vdd-Vo  | 0.3  | 15.0    | V    |
| Input Voltage         | Vi      | -0.3 | Vdd+0.3 | V    |
| Operating Temperature | Topr    | 0    | 50      | °C   |
| Storage Temperature   | Tstg    | -20  | 70      | °C   |

PIN ASSIGNMENT

| PIN  | SYMBOL  | FUNCTION                         |
|------|---------|----------------------------------|
| 1    | Vss     | Power Supply (0V)                |
| 2    | Vdd     | Power Supply (+5V)               |
| 3    | Vo      | Contrast Adjust                  |
| 4    | RS      | Data/Instruction Register Select |
| 5    | E1      | Enable Signal 1                  |
| 6    | E2      | Enable Signal 2                  |
| 7    | R/W     | Read/Write                       |
| 8~15 | DB0~DB7 | Data bus Line                    |
| 16   | /RST    | Reset                            |
| 17   | A       | Power Supply for LED BL (+)      |
| 18   | K       | Power Supply for LED BL (-)      |

ELECTRICAL CHARACTERISTICS (Ta=25°C)

| ITEM                   | SYMBOL | CONDITION    | MIN. | TYP. | MAX. | UNIT |
|------------------------|--------|--------------|------|------|------|------|
| Power Supply (logic)   | Vdd    | -            | 4.5  | 5.0  | 5.5  | V    |
| Supply Current (logic) | Idd    | VDD=5.0V     | 2.0  | -    | -    | mA   |
| Driving Voltage (LCD)  | Vdd-Vo |              | 4.0  | 4.7  | 5.0  | V    |
| Driving Current (LCD)  | Ilcd   |              | 0    | 2    | -    | mA   |
| Input Voltage "H"      | Vih    |              | 2.2  | -    | Vdd  | V    |
| Input Voltage "L"      | Vil    | -0.3         | -    | 0.6  | V    |      |
| Output Voltage "H"     | Voh    | Ioh=-0.205mA | 2.4  | -    | -    | V    |
| Output Voltage "L"     | Vol    | Iol=1.2mA    | -    | -    | 0.4  | V    |

LED BACKLIGHT SPECIFICATIONS(SIZE TYPE)

| PARAMETER       | TYP.  | ITEM                | TYP.  |
|-----------------|-------|---------------------|-------|
| Forward Voltage | 4.2V  | Power Dissipation   | 504mW |
| Forward Current | 120mA | Emission Wavelength | nm    |