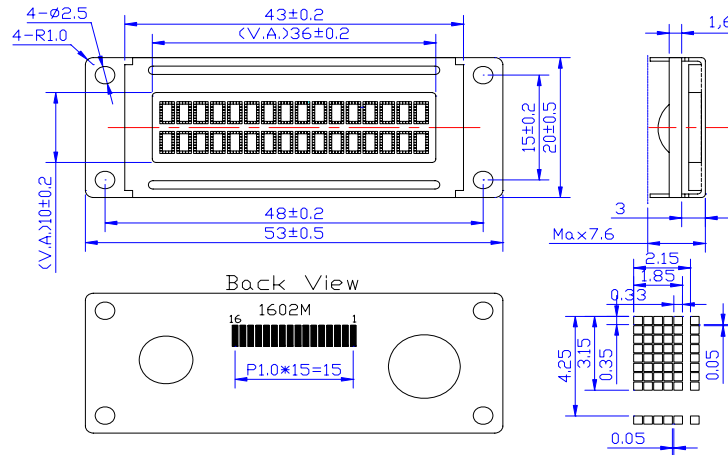
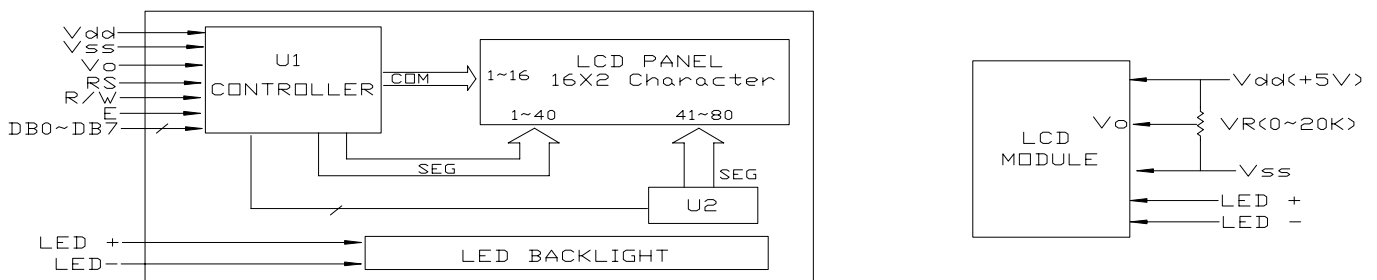


◆ **OUTLINE DIMENSION**



◆ **BLOCK DIAGRAM & POWER SUPPLY**



◆ **MECHANICAL SPEC. & FEATURES**

| Item                 | Dimension(mm) | Features        |  |
|----------------------|---------------|-----------------|--|
| Module Size(W×H×T)   | 53.0×20.0×7.6 | LC Fluid        | TN, STN (Yellow-green, Gray, Blue), FSTN |
| Viewing Area(W×H)    | 36×10         | Polarizer       | Reflective, Transflective, Transmissive  |
| Dot Size(W×H)        | 0.33×0.35     | View Angle      | 6:00 o'clock or 12:00 o'clock            |
| Dot Pitch(W×H)       | 0.38×0.40     | Display Type    | Positive or Negative                     |
| Character Size(W×H)  | 1.85×3.15     | Backlight       | LED (Optional)                           |
| Character Pitch(W×H) | 2.15×4.25     | Operating Temp. | 0℃~50℃ or -20℃~70℃                       |
|                      |               | Controller      | S6A0069 or Equivalent                    |

◆ **INTERFACE PIN CONNECTIONS**

| Pin No. | Symbol | Function                                   | Pin No. | Symbol  | Function       |
|---------|--------|--|---------|---------|----------------|
| 1       | Vss    | Ground for logic                           | 6       | E       | Enable signal  |
| 2       | Vdd    | Power supply for logic                     | 7~14    | DB0~DB7 | Data bus lines |
| 3       | Vo     | Power supply for LCD                       | 15      | A       | BKL +          |
| 4       | RS     | Register selection (H:Data, L:Instruction) | 16      | K       | BKL -          |
| 5       | R/W    | Read/Write selection (H: R, L: W)          |         |         |                |

◆ **ELECTRICAL CHARACTERISTICS**

| Item                      | Symbol | Test Condition   | Min. | Typ. | Max. | Unit |
|---------------------------|--------|------------------|------|------|------|------|
| Operating Voltage         | Vdd    | Ta=25℃           | ---  | 5.0  | ---  | V    |
| Operating Voltage for LCD | Vled   | Ta=25℃           | ---  | 4.5  | ---  | V    |
| Supply Current            | Idd    | Ta=25℃, Vdd=5.0V | ---  | 2.0  | 3.0  | mA   |
| Supply Voltage for LED    | Vf     | Ta=25℃, R=6.8Ω   | ---  | 4.2  | ---  | V    |
| Supply Current for LED    | If     | Ta=25℃, Vf=4.2V  | ---  | 60   | ---  | mA   |