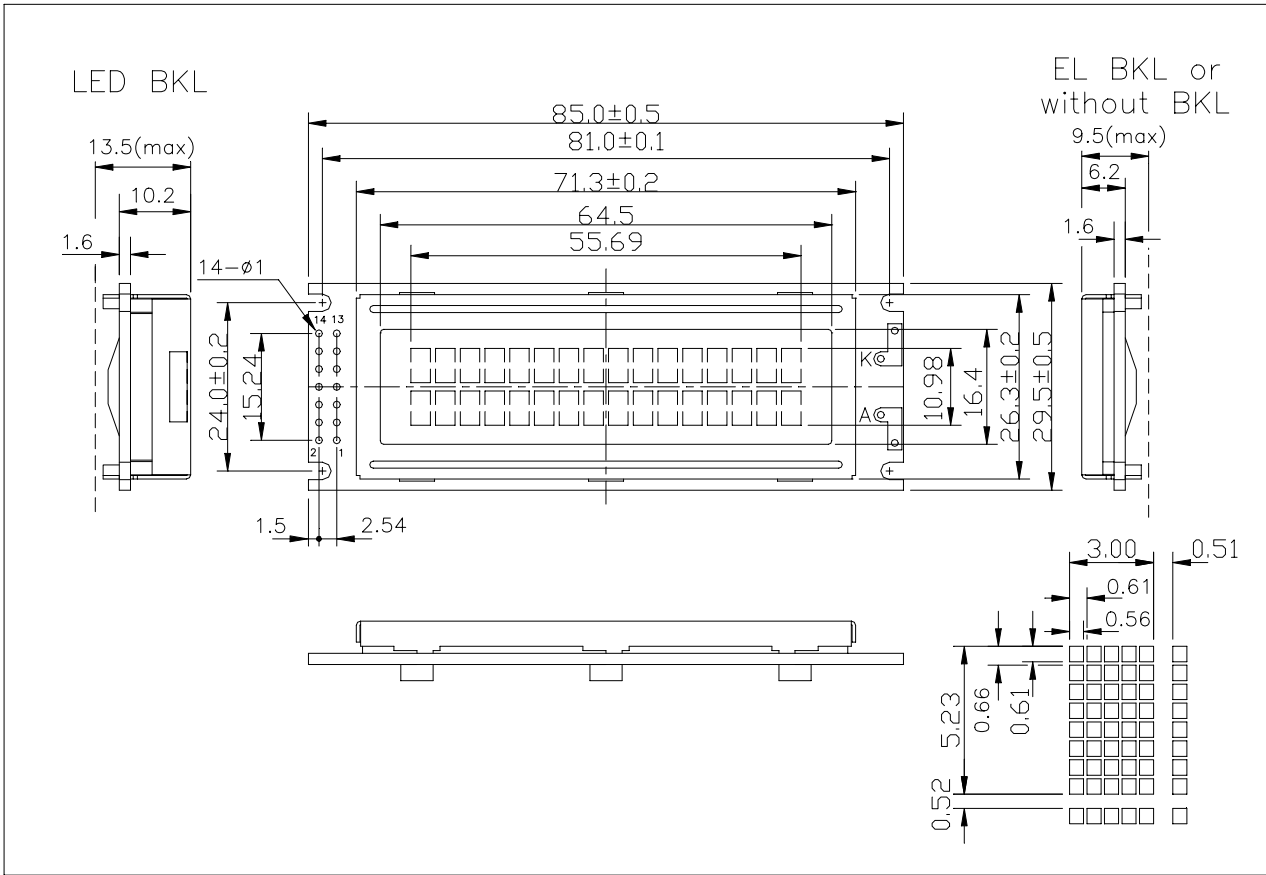


# ATM1602N SERIES ----- STANDARD CHARACTER LCD MODULES

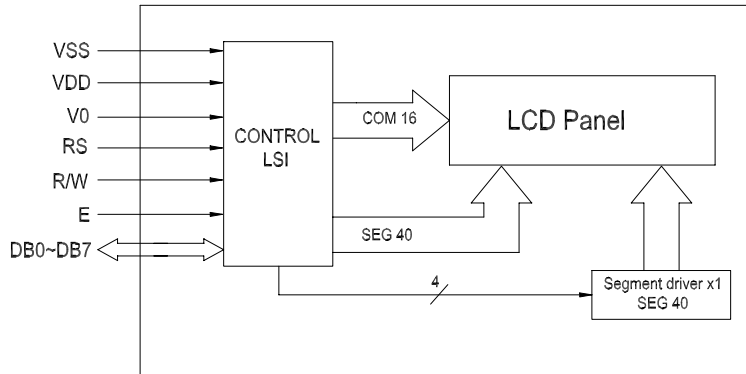
- \* 5 x 8 with Cursor Dots
- \* View Angle (6:00)
- \* 1/16 Duty, 1/5 Bias, 16CHAR x 2LINE
- \* LED Backlight (Yellow green)

- \* Transflective
- \* STN (Yellow green)
- \* Controller/Driver (S6A0069 )
- \* Operating Temp (-20 ~70 )

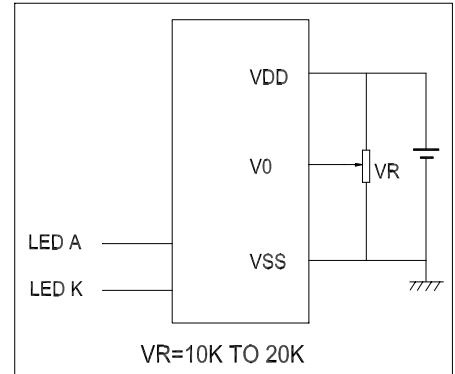
## External Dimensions



## Block Diagram



## Power Supply



## Mechanical Specifications

## Electrical Specifications

| Item            | Description(mm)       | Item                     | Symbol | Min | Typ | Max | Unit |
|-----------------|-----------------------|--------------------------|--------|-----|-----|-----|------|
| Size            | 85(L)x29.5(W)x13.5(H) | Supply Voltage for Logic | VDD    | 4.5 | 5.0 | 5.5 | V    |
| V.A             | 64.5(L)x16.4(W)       | Supply Voltage for LCD   | VLCD   | 4.0 | 4.5 | 5.0 | V    |
| Character Pitch | 3.51 x 5.75           | Supply Current for Logic | IDD    |     | 1.0 | 2.0 | mA   |
| Dot Size        | 0.56*0.61             | Supply Current for LED   | IF     |     |     | 80  | mA   |

## Interface Signals---- J1

| Pin | Symbol | Level | Description                    | Pin  | Symbol  | Level | Description   |
|-----|--------|-------|--------------------------------|------|---------|-------|---------------|
| 1   | VSS    | 0V    | Ground                         | 7~14 | DB0~DB7 | H/L   | Data Bus Line |
| 2   | VDD    | +5V   | Supply Voltage for Logic       |      |         |       |               |
| 3   | V0     | --    | Operating Voltage for LCD      |      |         |       |               |
| 4   | R/S    | H/L   | H: Data<br>L: Instruction Code |      |         |       |               |
| 5   | R/W    | H/L   | H: Data Read L: Data Write     |      |         |       |               |
| 6   | E      | H,H-L | Enable Signal                  |      |         |       |               |