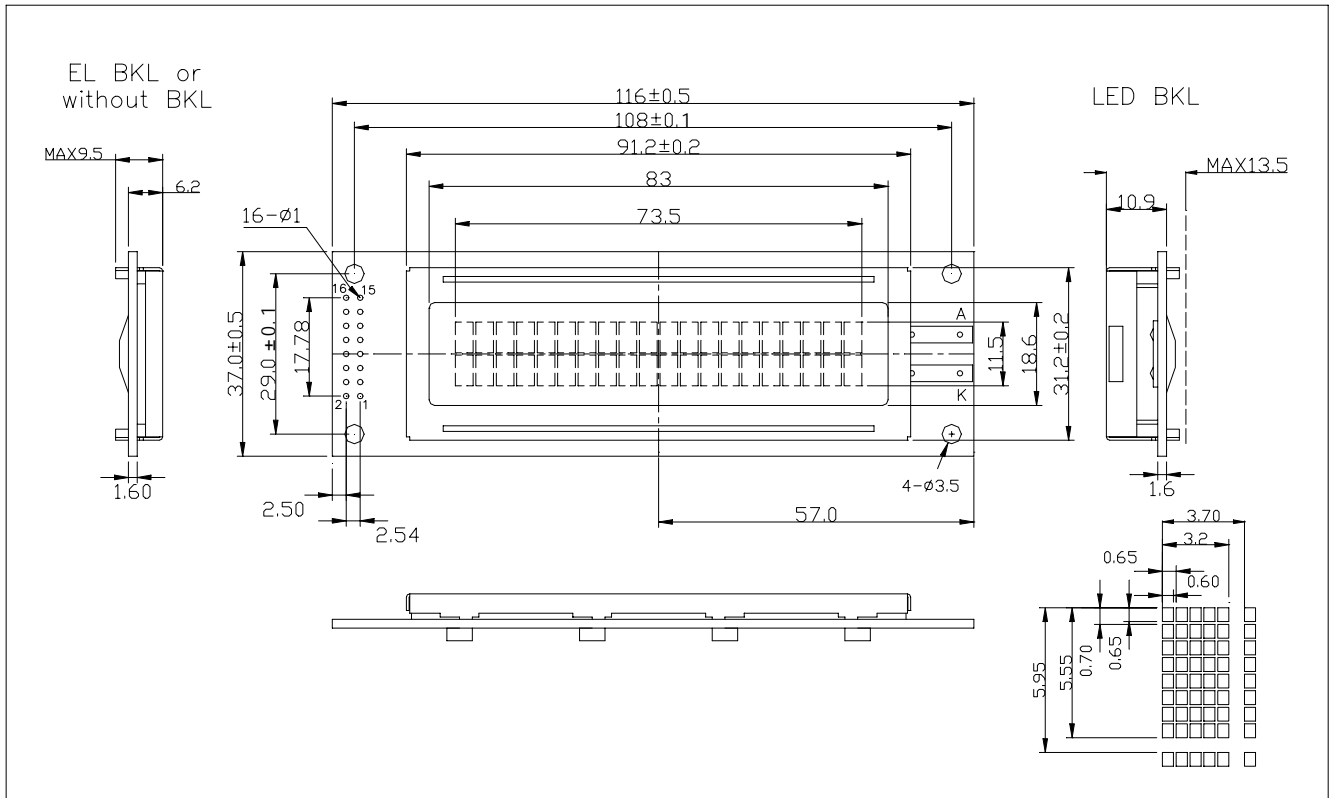


ATM2002D SERIES ----- STANDARD CHARACTER LCD MODULES

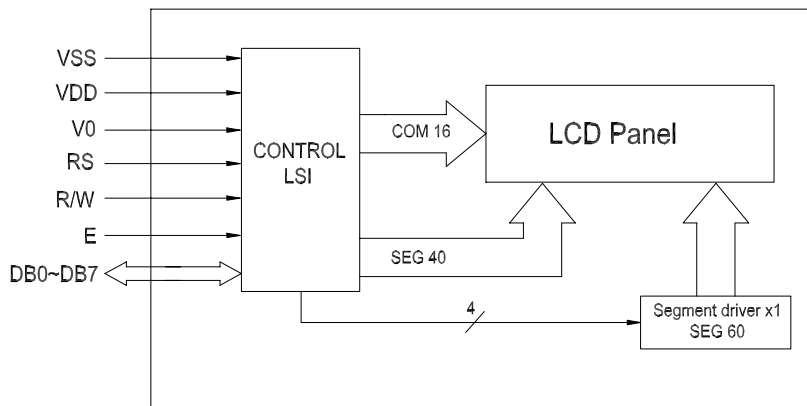
- * 5 x 8 with Cursor Dots
- * View Angle (6:00)
- * 1/16 Duty, 1/5 Bias, 20CHAR x 2LINE
- * LED Backlight (Yellow green)

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

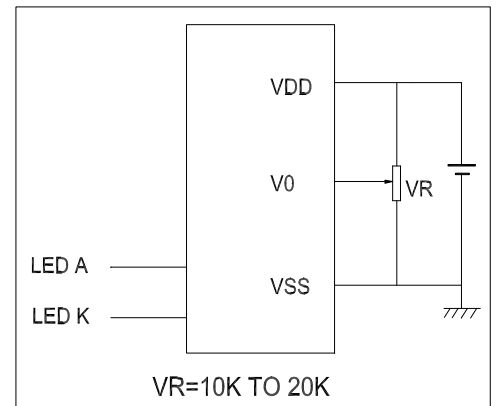
External Dimensions



Block Diagram



Power Supply



Mechanical Specifications

Electrical Specifications

| Item | Description(mm) | Item | Symbol | Min | Typ | Max | Unit |
|-----------------|----------------------|--------------------------|--------|-----|-----|-----|------|
| Size | 116(L)x37(W)x13.5(H) | Supply Voltage for Logic | VDD | 4.5 | 5.0 | 5.5 | V |
| V.A | 83(L)x13.6(W) | Supply Voltage for LCD | VLCD | 4.0 | 4.5 | 5.0 | V |
| Character Pitch | 3.7 x 5.95 | Supply Current for Logic | IDD | | 1.0 | 2.0 | mA |
| Dot Size | 0.60*0.65 | 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 | 15 | A | -- | Back Light anode:+4.2V |
| 3 | V0 | -- | Operating Voltage for LCD | 16 | K | -- | Back Light cathode:0V |
| 4 | R/S | H/L | H: Data L: Instruction Code | | | | |
| 5 | R/W | H/L | H: Data Read L: Data Write | | | | |
| 6 | E | H,H-L | Enable Signal | | | | |