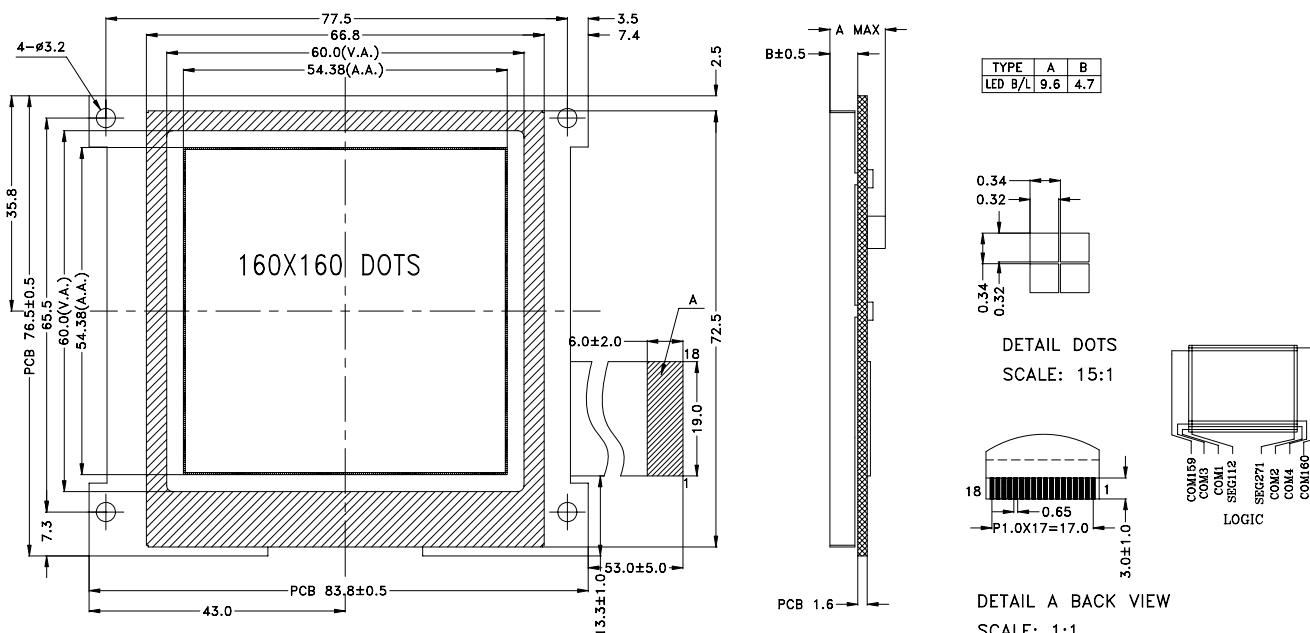


Outline Dimension



Graphic Type

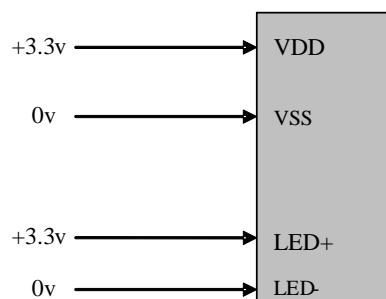
Feature :

- 1、160x160 dot-matrix
- 2、STN/Transmissive/Negative/Blue
- 3、Backlight: White /side light
- 4、Operating Temp.: -30°C~+80°C
- 5、1/160 duty cycle, 1/10 Bias
- 6、Built-in Controller (UC1698 or equivalent)
- 7、Viewing angle: 6 o'clock

Absolute Maximum Rating :

| Item | Symbol | Standard value | | | Unit |
|------------------------|----------------------------------|-----------------|-----------------|----------------------|------|
| | | M _{IN} | T _{YP} | M _{AX} | |
| Power supply for logic | V _{DD} -V _{SS} | -0.5 | -- | 4.0 | V |
| Input voltage | V _I | -0.5 | -- | V _{DD} +0.5 | V |

Adjusting Display Contrast :



Note: Adjust V0 to VDD as an initial setting. When the module is operational, readjust V0 for optimal display appearance.

Electrical Characteristic : (V_{SS}=0V, T_a = 25°C)

| Parameter | Symbol | Condition | M _{IN} | T _{YP} | M _{AX} | Unit |
|------------------------------|------------------|-----------|-----------------|-----------------|-----------------|------|
| Supply voltage for logic | V _{DD} | -- | 3.1 | 3.3 | 3.5 | V |
| Supply current for logic | I _{DD} | -- | 3 | -- | -- | mA |
| Operating voltage for LCD | V _{LCD} | -30°C | -- | -- | -- | V |
| | | +25°C | -- | 16.5 | -- | V |
| | | +80°C | -- | -- | -- | V |
| Supply voltage for Backlight | V _{BL} | -- | -- | 3.3 | -- | V |
| Supply current for Backlight | I _{BL} | -- | -- | 75 | -- | mA |

Interface Pin Connections :

| Pin No. | Symbol | Level | Description |
|---------|-----------------|-------|---|
| 1 | V _{SS} | 0V | The ground of power. |
| 2 | A0 | H/L | Selects Control data or Display data for read/write operation. "L": Control data "H": Display data |
| 3 | WR | H/L | Write control input pin(Write signal) |
| 4 | RD | H/L | Read enable signal(Read signal) |
| 5 | XCS | H/L | Chip Select. Chip is selected when XCS = "L". |
| 6 | RST | H/L | When RST="L", all control registers are re-initialized by their default states. Since UC1698u has built-in Power-ON reset and software reset commands, RST pin is not required for proper chip operation. |
| 7 | V _{DD} | +3.3V | Supply voltage for logic operating. |
| 8~15 | DB0~DB7 | H/L | 8-bit bi-directional data bus. |
| 16 | LED- | 0V | The backlight ground. |
| 17 | NC | -- | Non-connection. |
| 18 | LED+ | +3.3V | Power supply for Backlight |