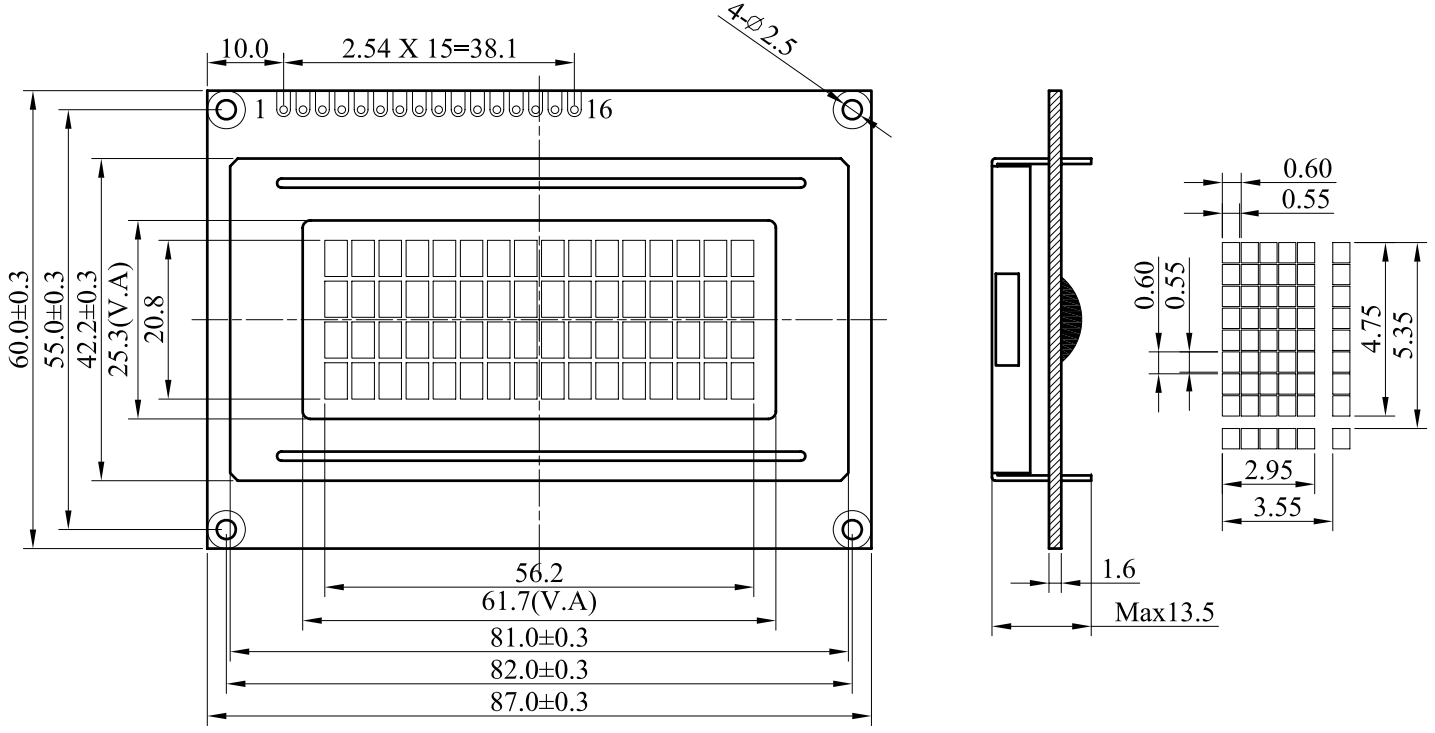
# DM1604A

*16Characters X 4 Line 1/16duty 1/5bias
Yellow-Green or Blue mode STN Transflective




## ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|---|---|---|---|---|
| Supply Voltage(Logic) | Vdd - Vss | -0.3 | 5.5 | V |
| Supply Voltage(LCD) | Vdd - V0 | -0.3 | 5.5 | V |
| Input Voltage | Vi | -0.3 | Vdd + 0.3 | V |
| Operating Temp. | Topr | 0 | 50 | ℃ |
| Storage Temp. | Tstg | -10 | 60 | ℃ |

## MECHANICAL DATA

| Item | Max. | Unit |
|---|---|---|
| Module Size (W X H X T) | 87.0 X 60.0 X 13.5 | mm |
| Viewing Area(W X H) | 64.5 X 13.8 | mm |
| Character Size(W X H) | 2.95 X 4.75 | mm |
| Dot Size(W X H) | 0.55 X 0.55 | mm |
| View Angle | 6 or 12 O'Clock | |

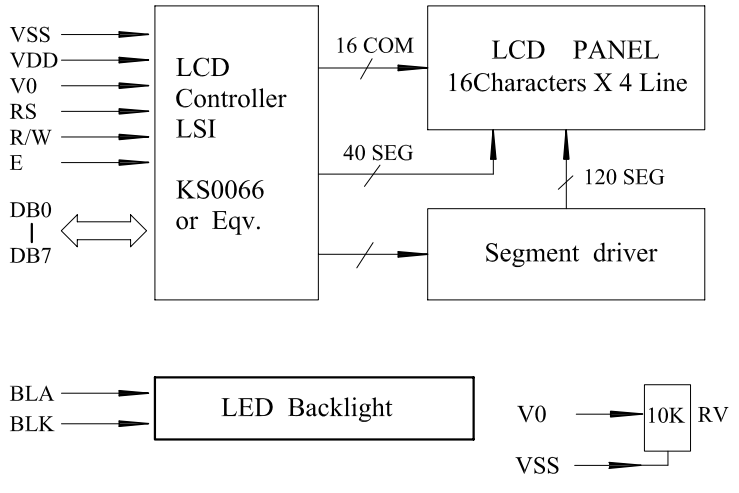
## ELECTRICAL CHARACTERISTICS (Vdd=5V±0.25V)

| Item | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Input High Voltage | Vih | -- | 2.0 | -- | Vdd | V |
| Input Low Voltage | Vil | -- | -0.3 | -- | 0.8 | V |
| Output High Voltage | Voh | Ioh=-0.2mA | 2.4 | -- | Vdd | V |
| Output Low Voltage | Vol | Iol=-1.6mA | 0 | -- | 0.4 | V |
| Supply Current | Idd | Vdd=5.0V | -- | 2.0 | 3.0 | mA |
| LCD Driving Voltage | Vdd - V0 | Ta=25 ℃ | -- | 4.7 | -- | V |

## PIN CONNECTIONS

| Pin | Symbol | Level | Function |
|---|---|---|---|
| 1 | VSS | 0V | Power GND |
| 2 | VDD | +5V | Power supply for logic |
| 3 | V0 | -- | Operation voltage for LCD |
| 4 | RS | H/L | H:Data<br>L:Instruction code |
| 5 | R/W | H/L | H:Read<br>L:Write |
| 6 | E | H/L | Enable signal |
| 7 | DB0 | H/L | Data bus line |
| 8 | DB1 | H/L | |
| 9 | DB2 | H/L | |
| 10 | DB3 | H/L | |
| 11 | DB4 | H/L | |
| 12 | DB5 | H/L | |
| 13 | DB6 | H/L | |
| 14 | DB7 | H/L | |
| 15 | BLA | +5V | Power supply for LED backlight |
| 16 | BLK | 0V | |

## BLOCK DIAGRAM




## LCD Type

| LCD Color | Blacklight |
|---|---|
| Yellow Green | LED/Yellow Green/4.2V (≤250mA) |
| Blue | LED/White /3.1V (≤150mA) |
| | |