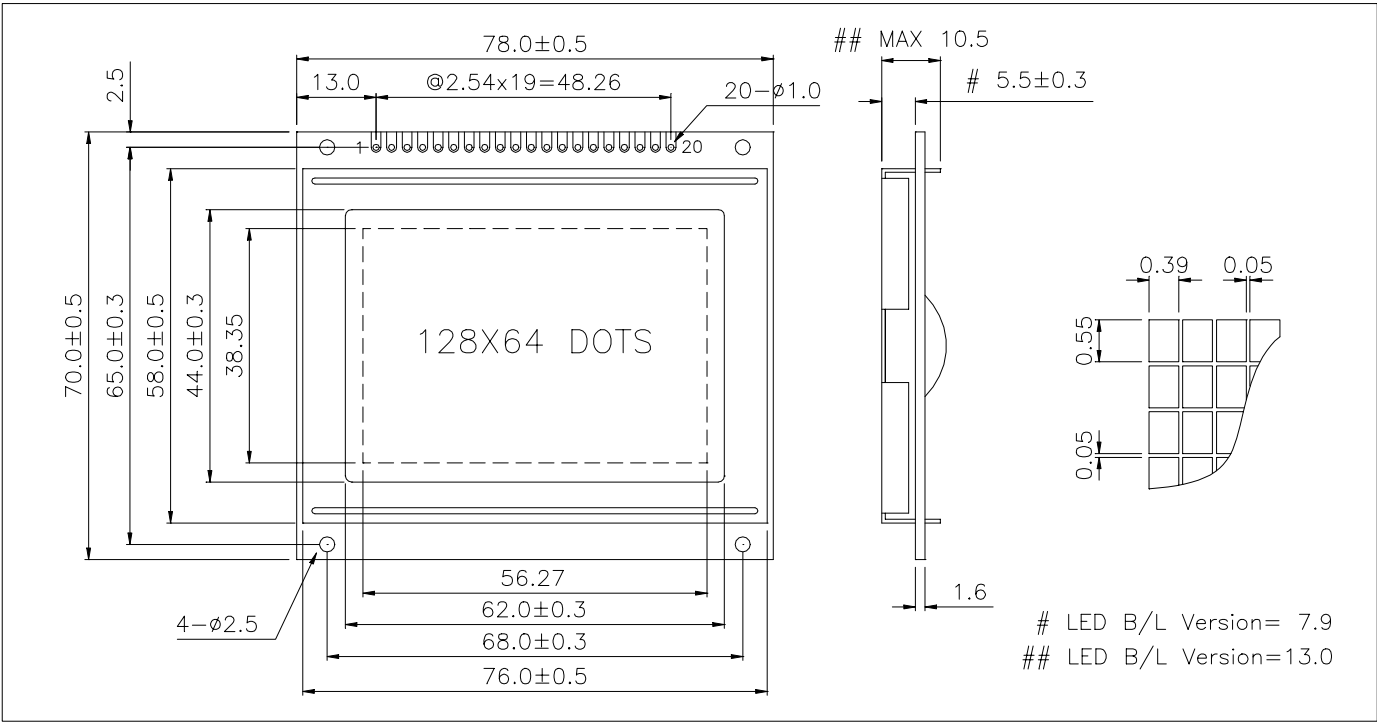


LGM126401

128 x 64 dots



ABSOLUTE MAXIMUM RATINGS

| Item                  | Symbol                            | Min. | Max.                  | Unit |
|-----------------------|-----------------------------------|------|-----------------------|------|
| Supply Voltage(Logic) | V <sub>DD</sub> - V <sub>SS</sub> | -0.3 | 7.0                   | V    |
| Supply Voltage(LCD)   | V <sub>DD</sub> - V <sub>O</sub>  | -0.3 | 19.0                  | V    |
| Input Voltage         | V <sub>I</sub>                    | -0.3 | V <sub>DD</sub> + 0.3 | V    |
| Operating Temp.       | T <sub>opr</sub>                  | -20  | 70                    | °C   |
| Storage Temp.         | T <sub>stg</sub>                  | -30  | 80                    | °C   |

MECHANICAL DATA

| Item                      | Nominal Dimensions      | Unit |
|---------------------------|-------------------------|------|
| Module Size ( W x H x T ) | 78.0 x 70.0 x 10.5/13.0 | mm   |
| Viewing Area ( W x H )    | 62.0 x 44.0             | mm   |
| Dot Pitch ( W x H )       | 0.44 x 0.60             | mm   |
| Dot Size ( W x H )        | 0.39 x 0.55             | mm   |
| Weight (Reflective/LED)   | Approx. 58 / 72         | g    |

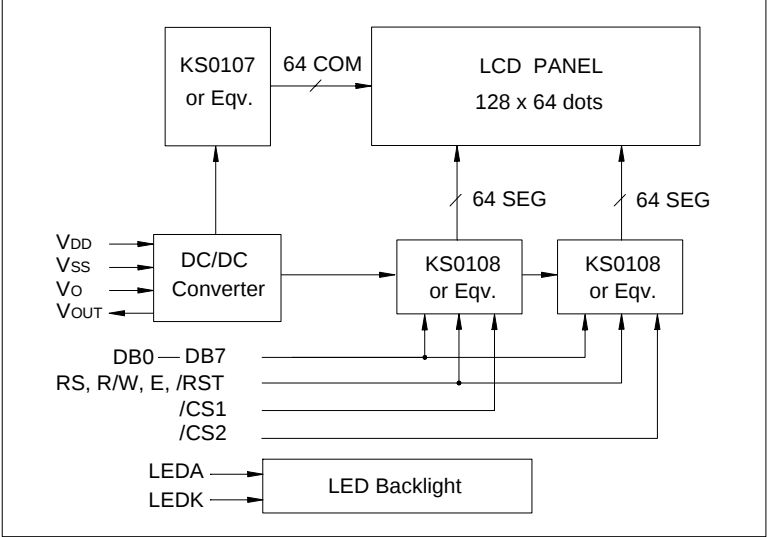
ELECTRICAL CHARACTERISTICS ( V<sub>DD</sub>=5V±0.25V )

| Item                | Symbol                           | Test Condition            | Min.  | Typ. | Max.            | Unit |
|---------------------|----------------------------------|---------------------------|-------|------|-----------------|------|
| Input High Voltage  | V <sub>IH</sub>                  | --                        | 2.0   | --   | V <sub>DD</sub> | V    |
| Input Low Voltage   | V <sub>IL</sub>                  | --                        | - 0.3 | --   | 0.8             | V    |
| Output High Voltage | V <sub>OH</sub>                  | I <sub>OH</sub> = - 0.2mA | 2.4   | --   | V <sub>DD</sub> | V    |
| Output Low Voltage  | V <sub>OL</sub>                  | I <sub>OL</sub> = 1.6mA   | 0     | --   | 0.4             | V    |
| Supply Current      | I <sub>DD</sub>                  | V <sub>DD</sub> = 5.0V    | --    | 5.0  | 8.0             | mA   |
| LCD Driving Voltage | V <sub>DD</sub> - V <sub>O</sub> | T <sub>a</sub> =25°C      | --    | 12.0 | --              | V    |

PIN CONNECTIONS

| Pin | Symbol           | Level | Function                      |
|-----|------------------|-------|-------------------------------|
| 1   | /CS1             | L     | Chip Selection for IC1        |
| 2   | /CS2             | L     | Chip Selection for IC2        |
| 3   | V <sub>SS</sub>  | --    | GND ( 0V )                    |
| 4   | V <sub>DD</sub>  | --    | Supply Voltage for Logic(+5V) |
| 5   | V <sub>O</sub>   | --    | Supply Voltage for LCD        |
| 6   | RS               | H/L   | H : Data L : Instruction Code |
| 7   | R/W              | H/L   | H : Read L : Write            |
| 8   | E                | H,H>L | Enable Signal                 |
| 9   | DB0              | H/L   | Data Bus Line                 |
| 10  | DB1              | H/L   |                               |
| 11  | DB2              | H/L   |                               |
| 12  | DB3              | H/L   |                               |
| 13  | DB4              | H/L   |                               |
| 14  | DB5              | H/L   |                               |
| 15  | DB6              | H/L   |                               |
| 16  | DB7              | H/L   |                               |
| 17  | /RST             | L     | Reset Signal, Active Low      |
| 18  | V <sub>OUT</sub> | --    | Negative Voltage Output(-10V) |
| 19  | LEDA             | --    | LED Backlight Power Supply    |
| 20  | LEDK             | --    |                               |

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (Ta=25°C)

| Item                 | Symbol         | Typ. | Max. | Unit |
|----------------------|----------------|------|------|------|
| Forward Voltage      | V <sub>f</sub> | 4.0  | 4.2  | V    |
| Forward Current      | I <sub>f</sub> | 250  | --   | mA   |
| Emission Wave Length | λ <sub>p</sub> | 568  | --   | nm   |