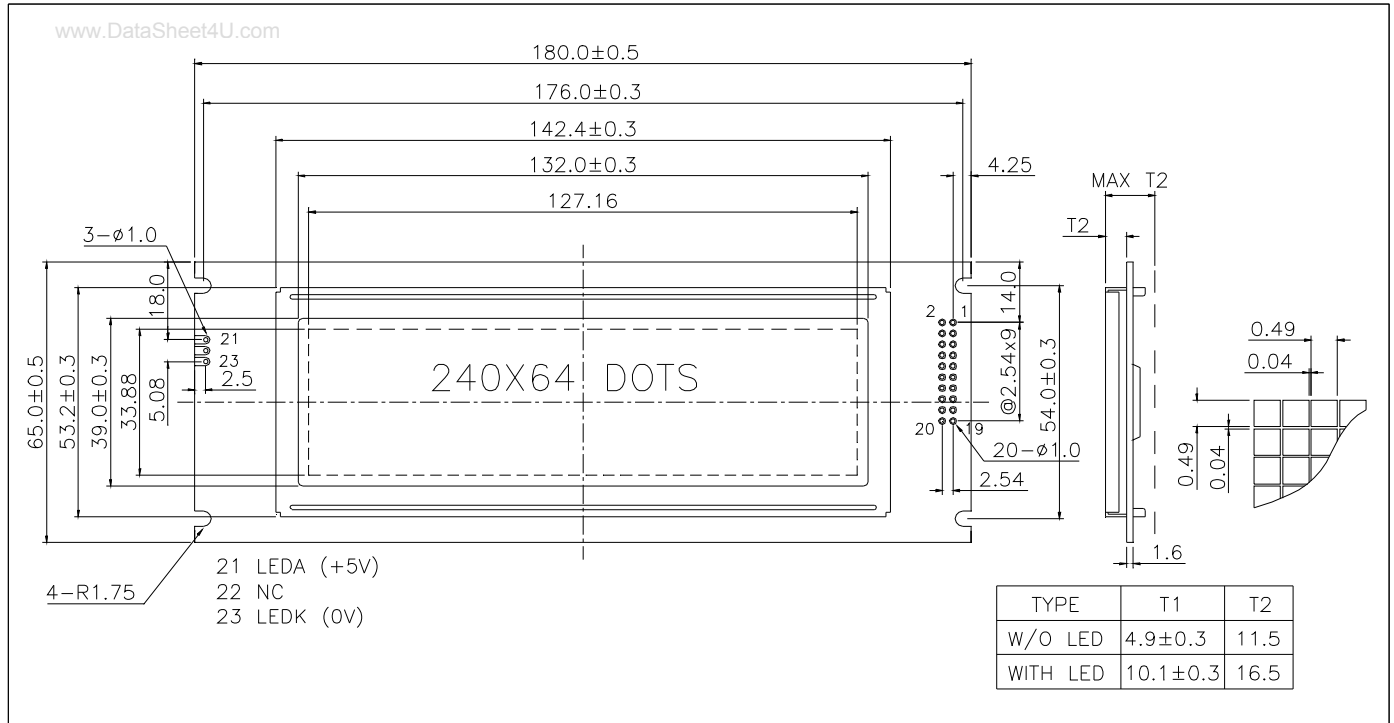


# LG240641-LY 240 x 64 dots + yellow green led backlight



## 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 | 25.0                  | 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 ) | 180.0 x 65.0 x 11.5/16.5 | mm   |
| Viewing Area ( W x H )    | 132.0 x 39.0             | mm   |
| Dot Pitch ( W x H )       | 0.53 x 0.53              | mm   |
| Dot Size ( W x H )        | 0.49 x 0.49              | mm   |
| Weight (Reflective/LED)   | Approx. 110 / 150        | g    |

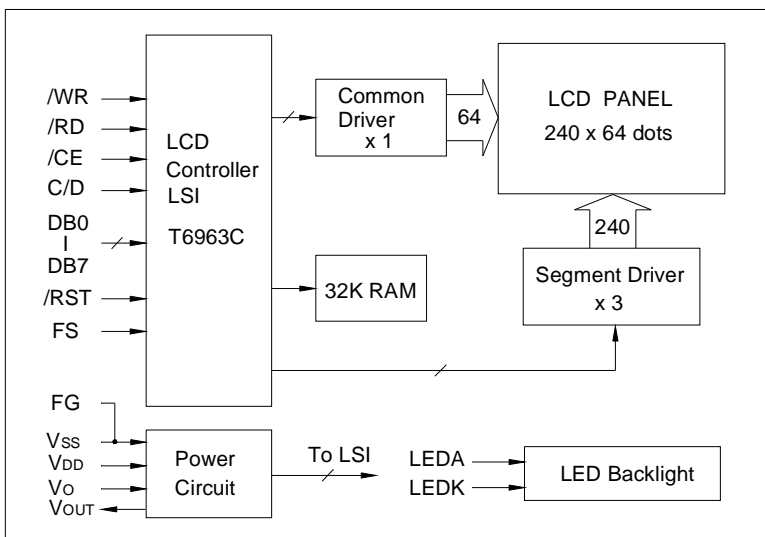
## ELECTRICAL CHARACTERISTICS ( V<sub>DD</sub>=5V±0.25V )

| Item                | Symbol                           | Test Condition         | Min.                 | Typ. | Max.            | Unit |
|---------------------|----------------------------------|------------------------|----------------------|------|-----------------|------|
| Input High Voltage  | V <sub>IH</sub>                  | --                     | V <sub>DD</sub> -2.2 | --   | V <sub>DD</sub> | V    |
| Input Low Voltage   | V <sub>IL</sub>                  | --                     | - 0.3                | --   | 0.8             | V    |
| Output High Voltage | V <sub>OH</sub>                  | --                     | V <sub>DD</sub> -0.3 | --   | V <sub>DD</sub> | V    |
| Output Low Voltage  | V <sub>OL</sub>                  | --                     | 0                    | --   | 0.3             | V    |
| Supply Current      | I <sub>DD</sub>                  | V <sub>DD</sub> = 5.0V | --                   | 16.0 | 20.0            | mA   |
| LCD Driving Voltage | V <sub>DD</sub> - V <sub>O</sub> | T <sub>a</sub> =25°C   | --                   | 12.7 | --              | V    |

## PIN CONNECTIONS

| Pin | Symbol           | Level | Function                       |
|-----|------------------|-------|--------------------------------|
| 1   | FG               | --    | Frame ground                   |
| 2   | V <sub>SS</sub>  | 0V    | GND                            |
| 3   | V <sub>DD</sub>  | +5V   | Power supply for logic         |
| 4   | V <sub>O</sub>   | --    | Operating voltage for LCD      |
| 5   | /WR              | L     | Write signal, active "L"       |
| 6   | /RD              | L     | Read signal, active "L"        |
| 7   | /CE              | L     | Chip enable signal, active "L" |
| 8   | C/D              | H/L   | L : Data H : Instruction code  |
| 9   | NC               | --    | No connection                  |
| 10  | /RST             | L     | Reset signal, active "L"       |
| 11  | DB0              | H/L   | Data bus line                  |
| 12  | DB1              | H/L   |                                |
| 13  | DB2              | H/L   |                                |
| 14  | DB3              | H/L   |                                |
| 15  | DB4              | H/L   |                                |
| 16  | DB5              | H/L   |                                |
| 17  | DB6              | H/L   |                                |
| 18  | DB7              | H/L   |                                |
| 19  | FS               | H/L   | Font selection L: 8x8, H: 6x8  |
| 20  | V <sub>OUT</sub> | -10V  | Output voltage for LCD driving |

## BLOCK DIAGRAM



## LED BACKLIGHT SPECIFICATIONS (T<sub>a</sub>=25°C)

| Item                 | Symbol         | Typ. | Max. | Unit |
|----------------------|----------------|------|------|------|
| Forward Voltage      | V <sub>f</sub> | 4.1  | 4.3  | V    |
| Forward Current      | I <sub>f</sub> | 550  | --   | mA   |
| Emission Wave Length | λ <sub>p</sub> | 568  | --   | nm   |