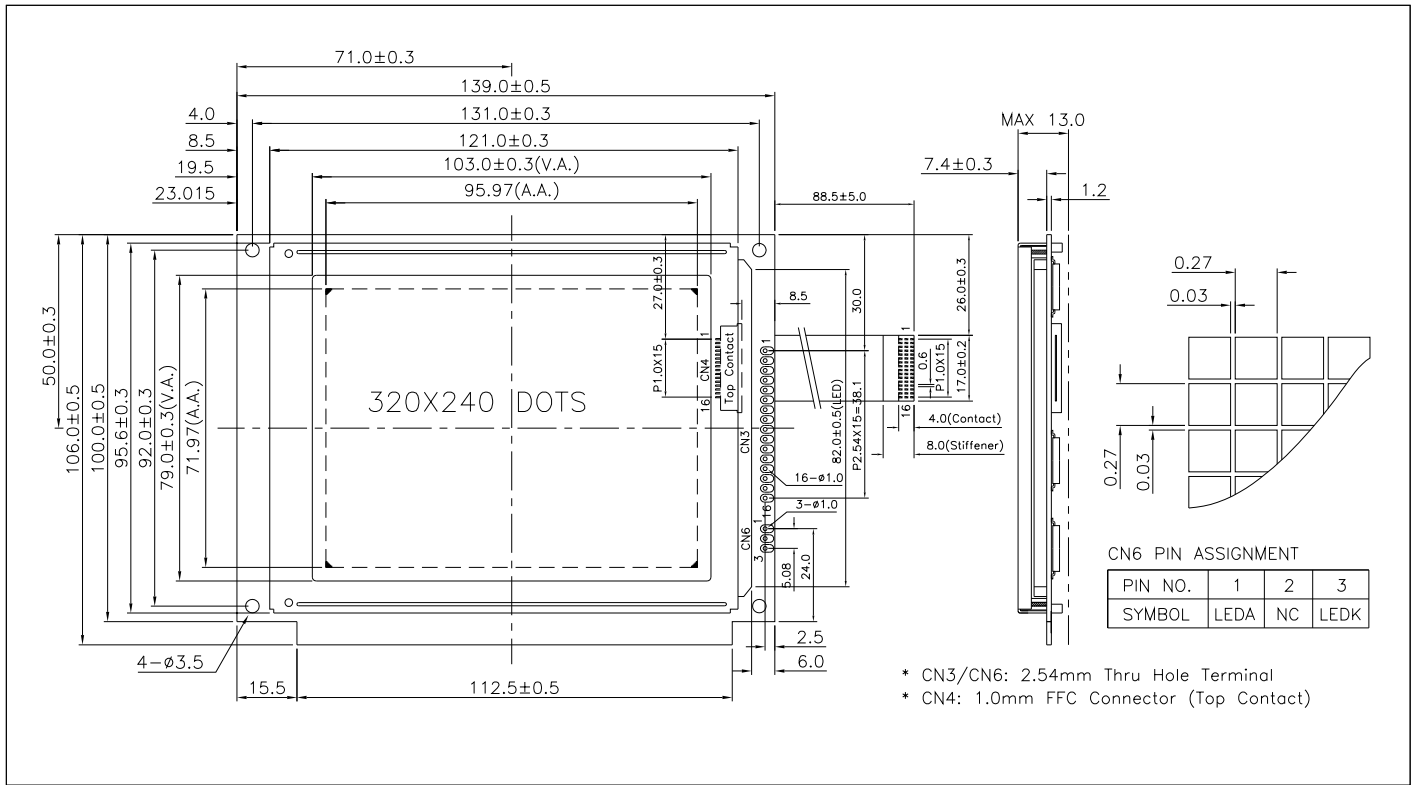


LG3202404-DW

4.7", 320 x 240 dots + white led, with dc-dc converter, 3.3V to 5.5V



ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|-----------------------|-------------------|------|----------------|------|
| Supply Voltage(Logic) | $V_{DD} - V_{SS}$ | -0.3 | 6.0 | V |
| Supply Voltage(LCD) | $V_{DD} - V_o$ | -0.3 | 30.0 | V |
| Input Voltage | V_i | -0.3 | $V_{DD} + 0.3$ | V |
| Operating Temp. | T_{opr} | -20 | 70 | °C |
| Storage Temp. | T_{stg} | -30 | 80 | °C |

MECHANICAL DATA

| Item | Nominal Dimensions | Unit |
|---------------------------|----------------------|------|
| Module Size (W x H x T) | 139.0 x 106.0 x 13.0 | mm |
| Viewing Area (W x H) | 103.0 x 79.0 | mm |
| Dot Pitch (W x H) | 0.30 x 0.30 | mm |
| Dot Size (W x H) | 0.27 x 0.27 | mm |
| Weight | Approx. 175 | g |

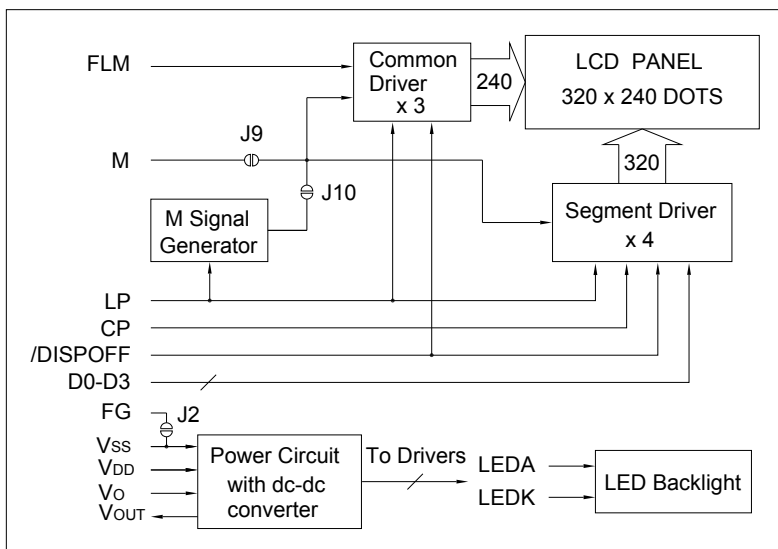
ELECTRICAL CHARACTERISTICS ($V_{DD}=3.3V$ to 5.5V)

| Item | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------|----------------|------------------|-------------|------|-------------|------|
| Input High Voltage | V_{IH} | -- | $0.8V_{DD}$ | -- | V_{DD} | V |
| Input Low Voltage | V_{IL} | -- | 0 | -- | $0.2V_{DD}$ | V |
| Supply Current | I_{DD} | $V_{DD} = 5.0V$ | -- | 30.0 | 60.0 | mA |
| | | $V_{DD} = 3.3V$ | -- | 40.0 | 80.0 | mA |
| LCD Driving Voltage | $V_{DD} - V_o$ | $T_a=25^\circ C$ | -- | 22.7 | -- | V |

PIN CONNECTIONS (CN3/CN4/CN5)

| Pin | Symbol | Level | Function |
|-----|-----------|-------------|--|
| 1 | FLM | H | Scan start-up pulse |
| 2 | LP | H>L | Display data latch pulse |
| 3 | CP | H>L | Display data shift pulse |
| 4 | M(NC) | -- | External M signal (J9 close and J10 open) or No connection (J9 open and J10 close) |
| 5 | V_o | -- | Operating voltage for LCD |
| 6 | V_{DD} | 3.3 to 5.5V | Power supply for logic |
| 7 | V_{SS} | 0V | GND |
| 8 | V_{OUT} | -22V | Output voltage for LCD driving |
| 9 | D0 | H/L | Display data |
| 10 | D1 | H/L | |
| 11 | D2 | H/L | |
| 12 | D3 | H/L | |
| 13 | /DISPOFF | H/L | H: display on L: display off |
| 14 | NC | -- | No connection |
| 15 | LEDA | 5V | Power supply for LED backlight |
| 16 | LEDK | 0V | |

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS ($T_a=25^\circ C$)

| Item | Symbol | Typ. | Max. | Unit |
|-----------------|--------|-------|------|------|
| Forward Voltage | V_f | 3.1 | 3.3 | V |
| Forward Current | I_f | 105 | -- | mA |
| LED Color | | White | | |