



Feature

1. 240x64 dots includes cursor
2. Built-in controller (RA6963 or equivalent)
3. +5V power supply(Also available for +3V)
4. 1/64duty cycle
5. LED can be driven by pin2, pin3, or A and K

Mechanical Data

| Item | Value | Unit |
|--------------|----------------|------|
| Outline | 180.0 x 65.0 | mm |
| Viewing Area | 133.0 x 39.0 | mm |
| Active Area | 127.16 x 33.88 | mm |
| Dot Size | 0.49 x 0.49 | mm |
| Dot Pitch | 0.53 x 0.53 | mm |

Terminal Function

| Pin No. | Symbol | Function |
|---------|---------------------|--|
| 1 | FG | Frame ground |
| 2 | V _{SS} | GND |
| 3 | V _{DD} | Supply voltage for logic |
| 4 | V ₀ | Contrast Adjustment |
| 5 | /WR | Data write s |
| 6 | /RD | Data read |
| 7 | /CE | H-L Enable signal |
| 8 | C/D | Command/data read/write |
| 9 | V _{ee} | Negative Voltage output |
| 10 | /RST | Reset signal |
| 11-18 | DB0-DB7 | H/L Data bus line |
| 19 | FS | FS="H", 6*8character font FS="L", 8*8character font |
| 20 | NC/ V _{ee} | No connection/ Negative Voltage output |

Electrical Characteristics

| Item | Symbol | Min | Typ | Max |
|------------------------|---------------------------------|-----------------|------|-----------------|
| Operating Voltage(V) | V _{DD} | 4.7 | 5.0 | 5.3 |
| Supply Voltage For LCD | V _{DD} -V ₀ | — | 12.5 | — |
| Input High Voltage(V) | V _{IH} | 0.7 | — | V _{DD} |
| Input Low Voltage(V) | V _{IL} | V _{SS} | — | 0.6 |
| Operating Current(mA) | I _{DD} | — | 45 | 50 |

Backlight Characteristics

| Item | Symbol | Min | Typ | Max | Unit |
|-----------------|------------------------|-----|-----|-----|------|
| Forward Voltage | V _f (edge) | 3.4 | 3.5 | 3.6 | V |
| Forward Current | I _f (edge) | 48 | 64 | 80 | mA |
| Forward Voltage | V _f (array) | - | 4.2 | 4.4 | V |
| Forward Current | I _f (array) | - | 660 | 900 | mA |

Absolute Maximum

| Item | Symbo | Min | Max |
|---------------------------|-----------------|------|-----|
| Operating Voltage(V) | V _{dd} | -0.3 | 5.5 |
| Operating Temperature(°C) | Top | -20 | +70 |
| Storage Temperature(°C) | T _{st} | -30 | +80 |