



**Feature**

1. 320x240 dots includes cursor
2. Built-in controller RA8803
3. +5V power supply(Also available for +3V)
4. 1/240duty cycle

**Mechanical Data**

| Item         | Value          | Unit |
|--------------|----------------|------|
| Outline      | 160.0 x 109.0  | mm   |
| Viewing Area | 122.0 x 92.0   | mm   |
| Active Area  | 115.18 x 86.38 | mm   |
| Dot Size     | 0.34 x 0.34    | mm   |
| Dot Pitch    | 0.36 x 0.36    | mm   |

**Terminal Function**

| Pin No. | Symbol                           | Function(CON2)                                     |
|---------|----------------------------------|--|
| 1       | V <sub>SS</sub>                  | GND  |
| 2       | V <sub>DD</sub>                  | Supply voltage for logic                           |
| 3       | V <sub>0</sub>                   | Contrast Adjustment                                |
| 4       | A <sub>0</sub>                   | Data type select                                   |
| 5       | /WR                              | 8080family:write signal,<br>6800family:R/W signal  |
| 6       | /RD                              | 8080family:read signal,<br>6800family:enable clock |
| 7-14    | DB <sub>0</sub> -DB <sub>7</sub> | Data bus line                                      |
| 15      | /CS                              | Chip select  |
| 16      | /RST                             | Reset signal                                       |
| 17      | V <sub>ee</sub>                  | Negative Voltage output                            |
| 18      | BUSY                             | Busy signal output                                 |
| 19      | INT                              | Interrupt signal output                            |
| 20      | A                                | Backlight led+                                     |

**Electrical Characteristics**

| Item                   | Symbol                          | Min             | Typ  | Max             |
|------------------------|---------------------------------|-----------------|------|-----------------|
| Operating Voltage(V)   | V <sub>DD</sub>                 | 4.7             | 5.0  | 5.3             |
| Supply Voltage For LCD | V <sub>DD</sub> -V <sub>0</sub> | —               | 23.0 | —               |
| Input High Voltage(V)  | V <sub>IH</sub>                 | 0.7             | —    | V <sub>DD</sub> |
| Input Low Voltage(V)   | V <sub>IL</sub>                 | V <sub>SS</sub> | —    | 0.6             |
| Operating Current(mA)  | I <sub>DD</sub>                 | —               | 7.5  | —               |

**Backlight Characteristics**

| Item            | Symbol                | Min | Typ | Max | Unit |
|-----------------|-----------------------|-----|-----|-----|------|
| Forward Voltage | V <sub>f</sub> (edge) | 3.4 | 3.5 | 3.6 | V    |
| Forward Current | I <sub>f</sub> (edge) | 120 | 160 | 200 | mA   |

**Absolute Maximum**

| Item                      | Symbo           | Min  | Max |
|---------------------------|-----------------|------|-----|
| Operating Voltage(V)      | V <sub>dd</sub> | -0.3 | 5.5 |
| Operating Temperature(°C) | Top             | -20  | +70 |
| Storage Temperature(°C)   | T <sub>st</sub> | -30  | +80 |