

## Feature

1. SMT with metal frame
2. Built-in controller UCi6963c or equivalent
3. +5V single power supply, with built-in negative voltage
4. 1/64 duty cycle
5. Option: Temperature compensation
6. Option: LED array/edge B/L
7. Option: External negative voltage

## Mechanical Data

| Item             | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 78.0 x 70.0    | mm   |
| Viewing Area     | 62.0 x 44.0    | mm   |
| Dot Size         | 0.40 x 0.56    | mm   |
| Dot Pitch        | 0.44 x 0.60    | mm   |

## Pin Assignment

| Pin   | Symbol | Function                               |
|-------|--------|----------------------------------------|
| 1     | FG/Vee | Frame ground / Negative voltage output |
| 2     | Vss    | Power supply(GND)                      |
| 3     | Vdd    | Power supply(+5V)                      |
| 4     | Vo     | Contrast Adjustment                    |
| 5     | /WR    | Data write                             |
| 6     | /RD    | Data read                              |
| 7     | /CE    | Chip enable                            |
| 8     | C/D    | Command/data                           |
| 9     | /RST   | Controller reset                       |
| 10~17 | DB0~7  | Data bus line                          |
| 18    | FS     | Font select(H: 6x8, L:8x8)             |
| 19    | K      | Power supply for B/L (GND)             |
| 20    | A      | Power supply for B/L (+)               |

## Electronic Characteristics

| Item                | Symbol | Condition | Typical Value | Unit |
|---------------------|--------|-----------|---------------|------|
| Input Voltage       | Vdd    | Vdd = +5V | 5.0           | V    |
| Supply Current      | Idd    | Vdd = +5V | 15            | mA   |
| LCD Driving Voltage | Vdd-Vo | 25°C      | 8.8           | V    |
| LED Forward Voltage | Vf     | 25°C      | 4.2           | V    |
| LED Forward Current | If     | 25°C      | 480           | mA   |

## Dimension

