



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF39BTZASDNN0#**

### General Specifications

| Item                           | Dimension                         | Unit |
|--------------------------------|-----------------------------------|------|
| Size                           | 3.9                               | inch |
| Dot Matrix                     | 480 x 128 x RGB (TFT)             | dots |
| Module dimension               | 105.5(W) x 37.0(H) x 3.05(D)      | mm   |
| Active area                    | 95.04 x 25.34                     | mm   |
| Dot pitch                      | 0.066(W) x 0.198(H)               | mm   |
| LCD type                       | TFT, Normally White, Transmissive |      |
| View Direction                 | 6 o'clock                         |      |
| Gray Scale Inversion Direction | 12 o'clock                        |      |
| Aspect Ratio                   | Bar Type                          |      |
| Backlight Type                 | LED, Normally White               |      |
| Touch Panel                    | Without Touch Panel               |      |
| Surface                        | Anti-Glare                        |      |

\*Color tone slight changed by temperature and driving voltage.

## Absolute Maximum Ratings

| Item                  | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-----|-----|------|
| Operating Temperature | TOP    | -20 | —   | +70 | °C   |
| Storage Temperature   | TST    | -30 | —   | +80 | °C   |

## Electrical Characteristics

### Operating conditions

| Item                   | Symbol | Condition | Min | Typ | Max | Unit |
|------------------------|--------|-----------|-----|-----|-----|------|
| Supply Voltage For LCM | VCC    | —         | 3.0 | 3.3 | 3.6 | V    |
| Supply Current For LCM | ICC    | —         | —   | 15  | 25  | mA   |

# Interface

## LCM PIN Definition

| No.   | Symbol | Description                       |
|-------|--------|-----------------------------------|
| 1     | VLED-  | Backlight LED Cathode             |
| 2     | VLED+  | Backlight LED Anode.              |
| 3     | GND    | System Ground                     |
| 4     | VCC    | Power supply for logic operation  |
| 5~12  | R0~R7  | Data bus                          |
| 13~20 | G0~G7  | Data bus                          |
| 21~28 | B0~B7  | Data bus                          |
| 29    | GND    | System Ground                     |
| 30    | DCLK   | Pixel clock signal                |
| 31    | DISP   | Display on/off control            |
| 32    | HSYNC  | Horizontal Sync signal            |
| 33    | VSYNC  | Vrtical Sync signal               |
| 34    | NC     | No connection (Option DE)         |
| 35    | NC     | No connection                     |
| 36    | GND    | System Ground                     |
| 37    | NC     | No connection (Option XR for RTP) |
| 38    | NC     | No connection (Option YD for RTP) |
| 39    | NC     | No connection (Option XL for RTP) |
| 40    | NC     | No connection (Option YU for RTP) |

# Contour Drawing

