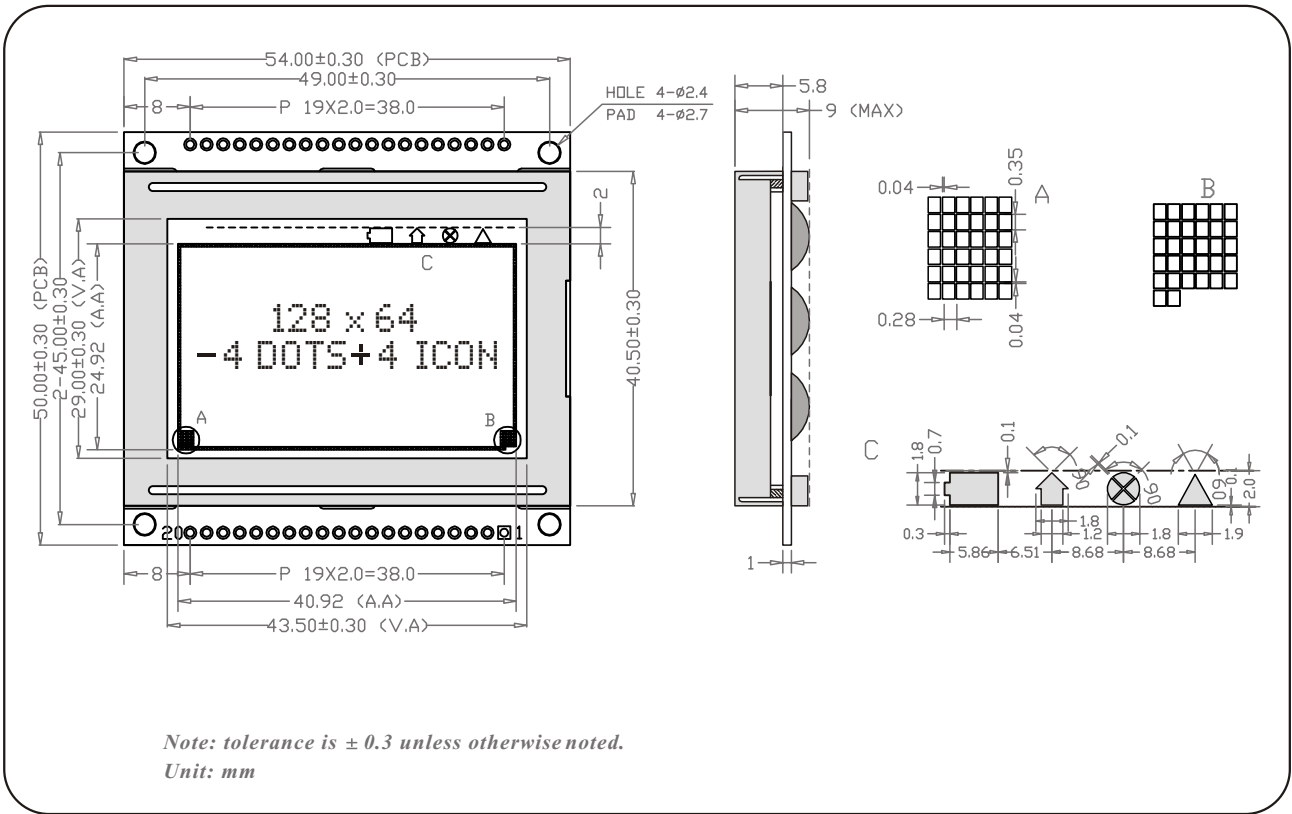


**CHARACTERISTICS:**

- DISPLAY CONTENT: 128 × 64 DOTS
- LCD TYPE: STN Y/G、STN BLUE、STN GREY
- LED BACKLIGHT: Y/G、WHITE
- CONTROLLER: KS0108 OR EQUAL
- OPERATING TEMPERATURE: NORMAL(0-50°C); WIDE(-20-70°C)
- POWER SUPPLY: 5.0V
- VIEWING ANGLE: 6H; 12H

**DIMENSIONS/DISPLAY CONTENT**



**PIN CONFIGURATION**

|     |     |     |     |     |     |     |     |      |      |
|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   |
| Vss | VDD | Vo  | Ao  | R/W | E   | DB0 | DB1 | DB2  | DB3  |
| 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19   | 20   |
| DB4 | DB5 | DB6 | DB7 | CS1 | CS2 | RST | VEE | LEDA | LEDK |

**LIMIT PARAMETER (Ta=25°C)**

| Parameter      | Symbol  | Standard Values |     | Unit |
|----------------|---------|-----------------|-----|------|
|                |         | Min.            | Max |      |
| Supply Voltage | VDD-Vss | 0               | 7.0 | V    |
| LCD Voltage    | VDD-Vo  | 0               | 17  |      |
| Input Voltage  | V1      | 0               | VDD |      |

**ELECTRONIC PARAMETER**

| Parameter               | Symbol |         | Standard Values |      |        | Unit |
|-------------------------|--------|---------|-----------------|------|--------|------|
|                         |        |         | Min.            | Typ. | Max    |      |
| Voltage                 | Logic  | VDD-VSS | 4.75            | 5.0  | 5.25   | V    |
|                         | LCD    | VDD-Vo  | 7.0             | 8.5  | 17     | V    |
| Current                 | Logic  | IDD     | -               | 2.5  | -      | mA   |
|                         | LCD    | IEE     | -               | 2.0  | -      | mA   |
| LCD Drive Voltage(25°C) |        |         | -               | 8.5  | -      | V    |
| Input Voltage           | H      | VIH     | 0.7VDD          | -    | VDD    | V    |
|                         | L      | VIL     | 0               | -    | 0.3VDD | V    |

**APPLICATION CIRCUIT**

