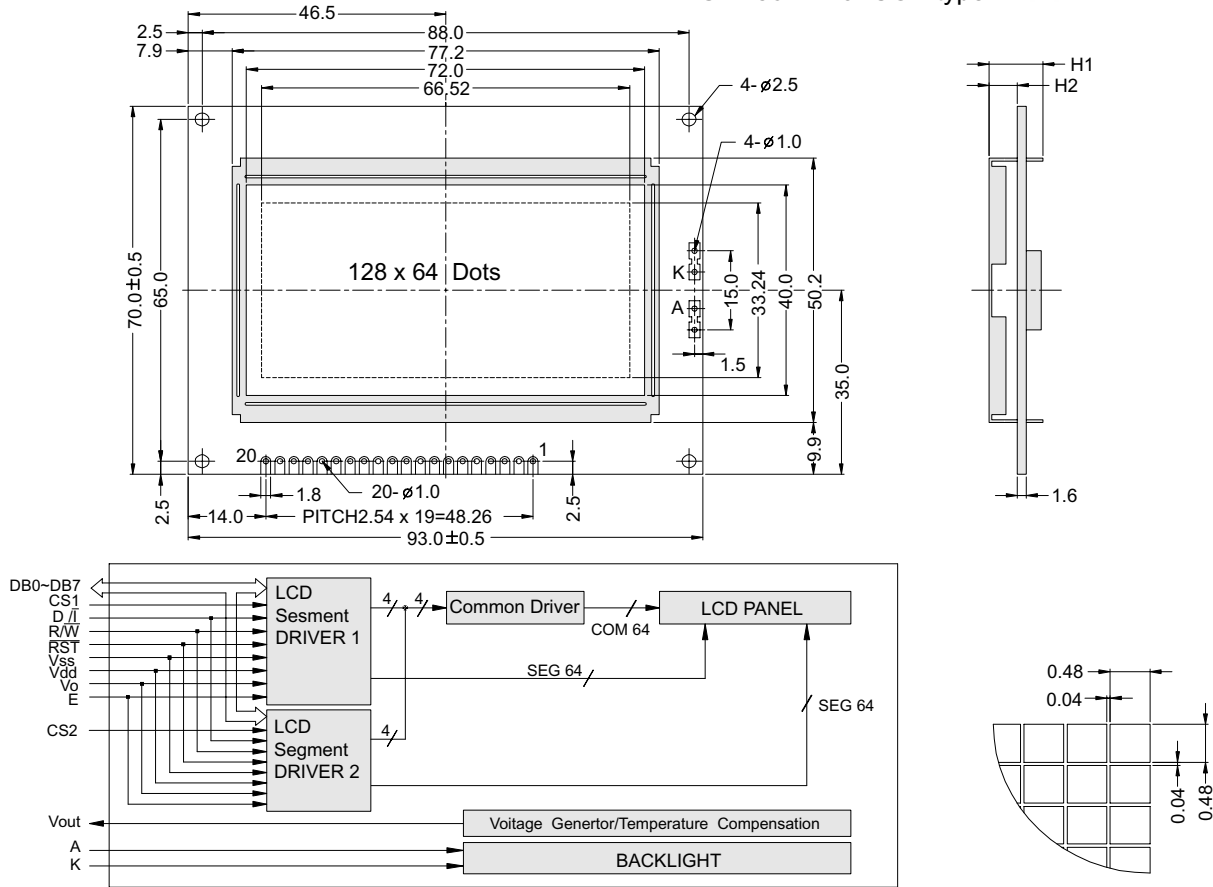




OUTLINE DIMENSION & BLOCK DIAGRAM

*PG 12864-A for SMT type
*PG 12864-K for COB type



The tolerance unless classified $\pm 0.3\text{mm}$

| MECHANICAL SPECIFICATION | | | |
|--------------------------|-------------|---------|------------|
| Overall Size | 93.0 x 70.0 | Module | H2 / H1 |
| View Area | 72.0 x 40.0 | W/O B/L | 5.1 / 9.7 |
| Dot Size | 0.48 x 0.48 | EL B/L | 5.1 / 9.7 |
| Dot Pitch | 0.52 x 0.52 | LED B/L | 8.9 / 13.5 |

| PIN ASSIGNMENT | | |
|----------------|---------|------------------------------|
| Pin no. | Symbol | Function |
| 1 | Vss | Power supply(GND) |
| 2 | Vdd | Power supply(+) |
| 3 | Vo | Contrast Adjust |
| 4 | D/I | Command / data input |
| 5 | R/W | Data read / write |
| 6 | E | Enable signal |
| 7-14 | DB0-DB7 | Data bus line |
| 15 | CS1 | Chip selection driver 1 |
| 16 | CS2 | Chip selection driver 2 |
| 17 | RST | Reset |
| 18 | Vout | Negative voutage output |
| 19 | A | Power supply for LED B/L (+) |
| 20 | K | Power supply for LED B/L (-) |

| ABSOLUTE MAXIMUM RATING | | | | | | | | | |
|----------------------------------|-----------|-----------|------|---------|-------|-------|------|------|---|
| Item | Symbol | Condition | Min. | Max. | Units | | | | |
| Supply for logic voltage | Vdd-Vss | 25°C | -0.3 | 7.0 | V | | | | |
| LCD driving supply voltage | Vdd-Vee | 25°C | -0.3 | 19.0 | V | | | | |
| Input voltage | Vin | 25°C | -0.3 | Vdd+0.3 | V | | | | |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | |
| Item | Symbol | Condition | Min. | Typical | Max. | Units | | | |
| Power supply voltage | Vdd-Vss | 25°C | 4.5 | — | 5.5 | V | | | |
| LCD operation voltage | Vop | Top | N | W | N | W | N | W | V |
| | | -20°C | — | 14.3 | — | 14.7 | — | 15.1 | V |
| | | 0°C | 9.7 | — | 10.2 | — | 10.7 | — | V |
| | | 25°C | 8.9 | 13.2 | 9.4 | 13.6 | 9.9 | 14 | V |
| | | 50°C | 8.6 | — | 9.1 | 9.6 | — | — | V |
| 70°C | — | 12 | — | 12.4 | — | 12.8 | V | | |
| LCM current consumption (No B/L) | Idd | Vdd=5V | — | 2.5 | 5 | mA | | | |
| Backlight current consumption | LED/edge | VB/L=4.2V | — | — | — | mA | | | |
| | LED/array | VB/L=4.2V | — | 390 | — | mA | | | |

REMARK

LCD option: STN, TN, FSTN

Backlight Option: LED,EL Backlight feature, other Specs not available on catalog is under request.

