# *TG12864B-05*

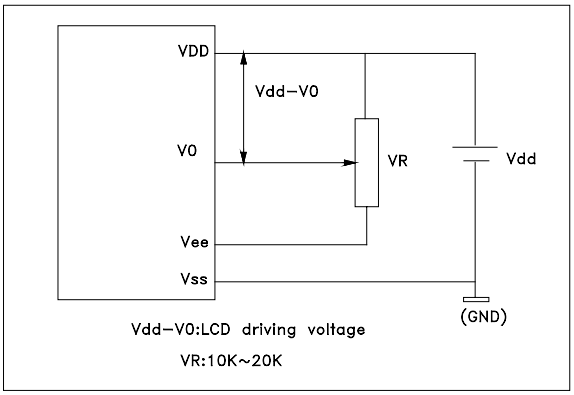
## ■ Series

| | |
|---|---|
| Display Format | 128 X 64 DOTS |
| Drive Method | 1/64 Duty ; 1/9 Bias |
| LCD Type | STN/Transflective/positive Y/G |
| LED Backlight | Yellow |
| Viewing direction | 6:00 |
| Operating Temperature | -20℃~70℃ |

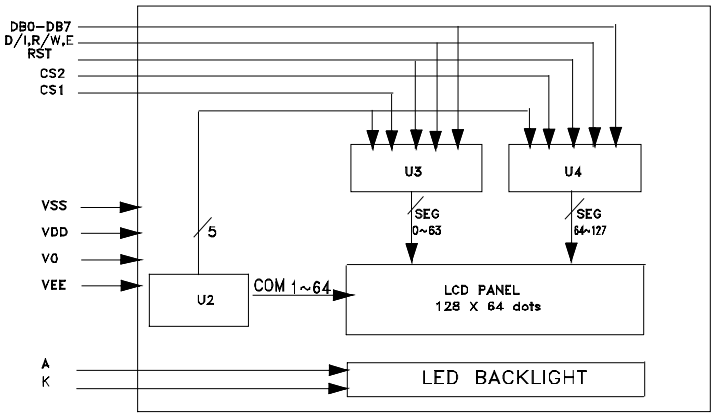
## ■ Electrical Characteristics

| ITEM | Symbol | Condition | Standard value | | | UNIT |
|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | |
| Supply Voltage For Logic | $V_{DD}$-$V_{SS}$ | -- | 4.5 | 5.0 | 5.5 | V |
| Supply Voltage For LCD | $V_{DD}$-$V_0$ | -- | -- | 9.0 | -- | V |
| Input High Voltage | $V_{IH}$ | -- | 0.7$V_{DD}$ | -- | $V_{DD}$ | V |
| Input Low Voltage | $V_{IL}$ | -- | 0 | -- | 0.3$V_{DD}$ | V |
| Supply Current for Logic | $I_{DD}$ | -- | -- | 6.0 | -- | mA |
| Supply Current for LCD | $I_{EE}$ | -- | -- | 4.5 | -- | mA |
| With B/L(Yellow-Green) | $I_{LED}$ | $V_{LED}$=5.0V | -- | 330 | 660 | mA |

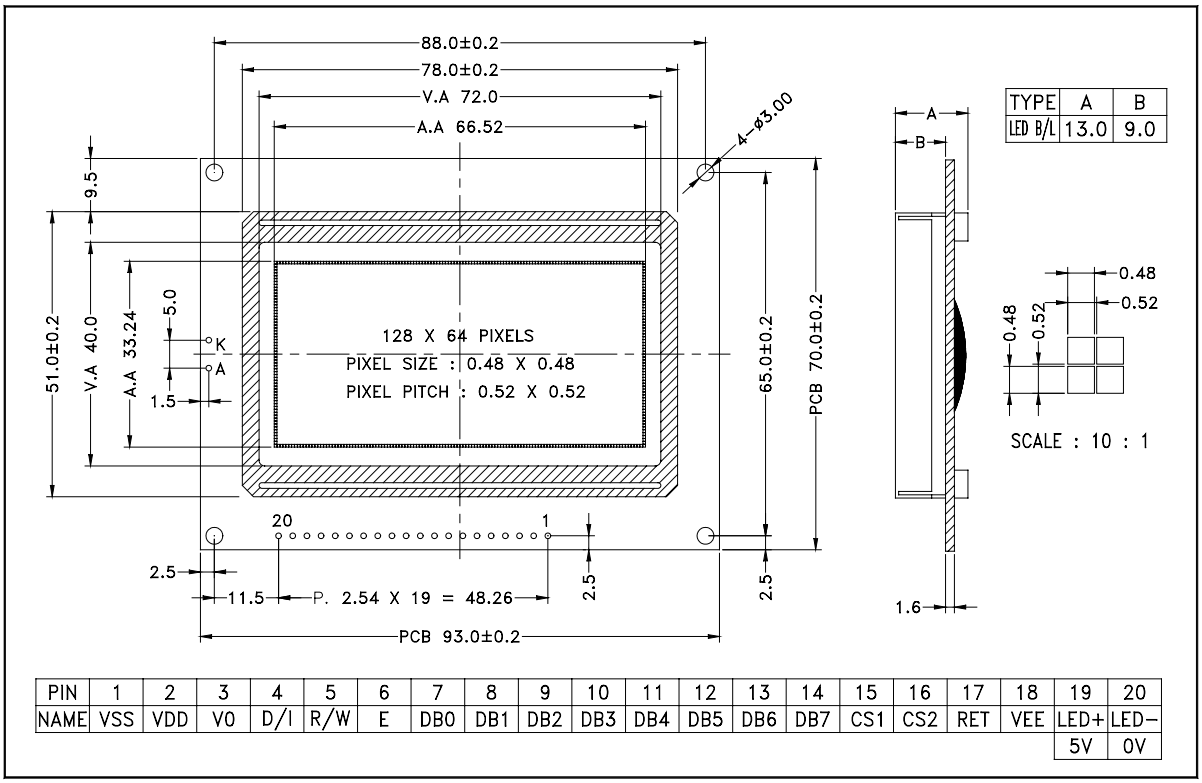
## ■ Power supply




## ■ Block Diagram




## ■ EXTERNAL DIMENSIONS AND DISPLAY PATTERN




| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAME | VSS | VDD | V0 | D/I | R/W | E | DB0 | DB1 | DB2 | DB3 | DB4 | DB5 | DB6 | DB7 | CS1 | CS2 | RET | VEE | LED+ 5V | LED- 0V |