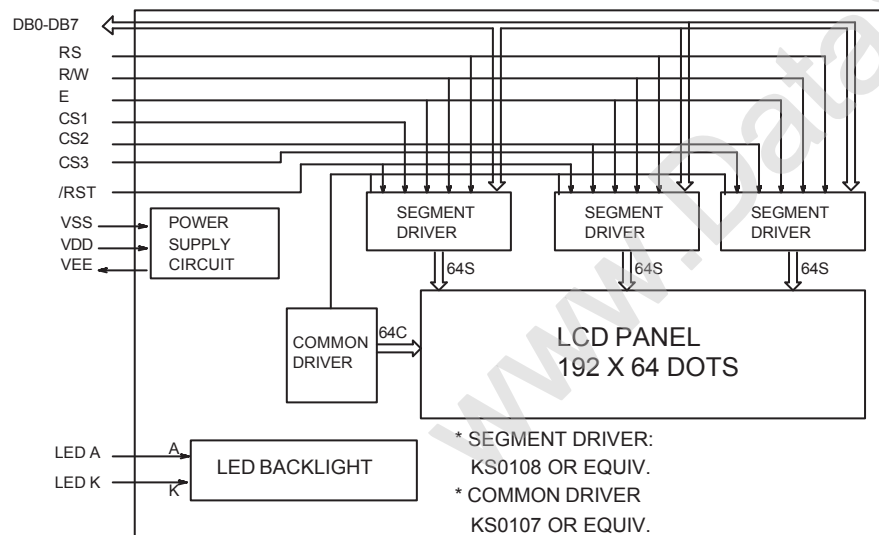
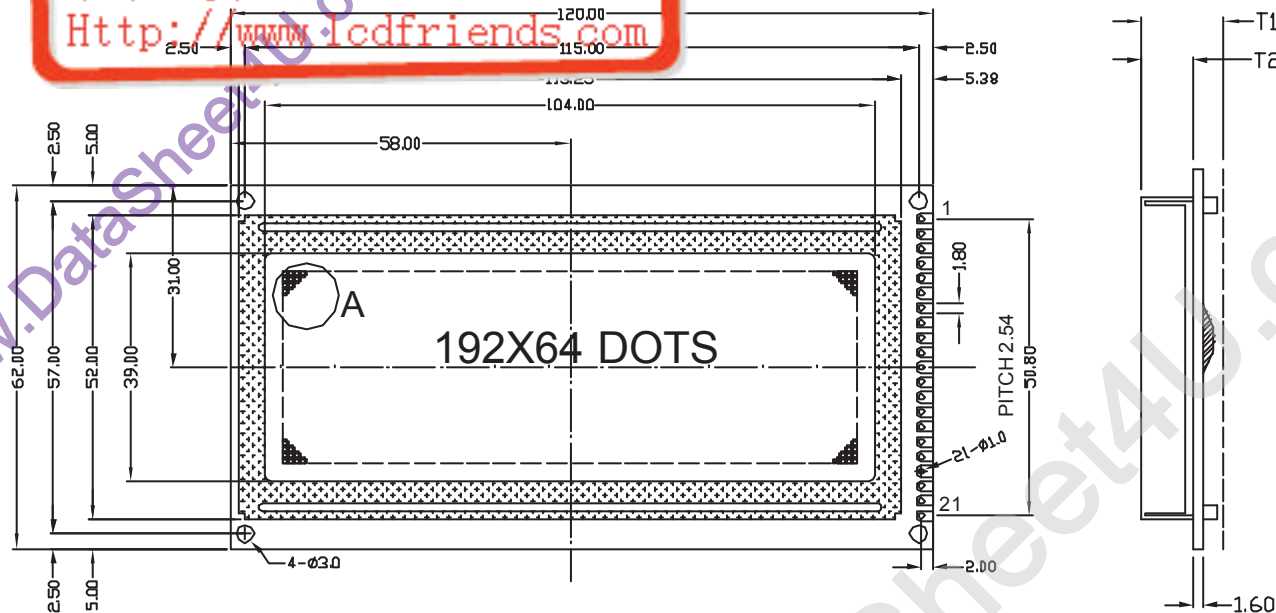
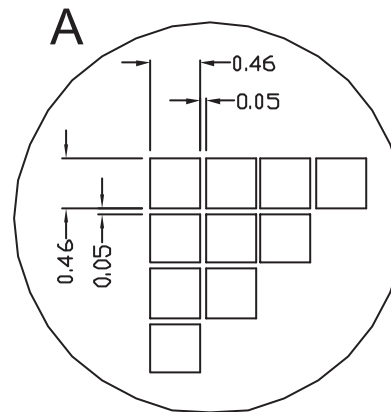


液晶之友 电话: 020-33819057  
Http://www.lcdfriends.com



\* FOR LED BACKLIGHT  
T1=14.0MAX T2=9.0±0.3  
\* FOR EL OR NO BACKLIGHT  
T1=11.0MAX T2=6.0±0.3



#### REVISIONS

| NO. | DATE     | BY   | DESCRIPTION |
|-----|----------|------|-------------|
| 1   | 01/06/18 | A.CH | NEW RELEASE |

#### PINS ASSIGNMENT

| NO.  | SYMBOL  | DESCRIPTION                         |
|------|---------|-------------------------------------|
| 1    | VSS     | GROUND                              |
| 2    | VDD     | POWER SUPPLY FOR LOGIC AND LCD      |
| 3    | V0      | OPERATING VOLTAGE FOR LCD           |
| 4    | VEE     | NEGATIVE VOLTAGE OUTPUT/INPUT(-10V) |
| 5    | RS      | DATA/INSTRUCTION SELECT             |
| 6    | R/W     | READ/WRITE SELECT                   |
| 7    | E       | ENABLE SIGNAL                       |
| 8-15 | DB0-DB7 | DATA BUS                            |
| 16   | /CS1    | CHIP SELECT OF IC1 (LOW EFFECTIVE)  |
| 17   | /CS2    | CHIP SELECT OF IC2 (LOW EFFECTIVE)  |
| 18   | /CS3    | CHIP SELECT OF IC3 (LOW EFFECTIVE)  |
| 19   | /RST    | RESET SIGNAL(LOW EFFECTIVE)         |
| 20   | A       | POWER SUPPLY FOR LED B.L.(+)        |
| 21   | K       | POWER SUPPLY FOR LED B.L.(-)        |

#### ABSOLUTE MAXIMUM RATING

| ITEM                   | SYMBOL  | MIN | MAX  | UNIT |
|------------------------|---------|-----|------|------|
| POWER SUPPLY(LOGIC)    | VDD-VSS | 0   | 6.5  | V    |
| POWER SUPPLY(LCD DRV.) | VDD-V0  | 0   | 18.0 | V    |
| INPUT VOLTAGE          | Vi      | Vi  | VDD  | V    |

#### ELECTRICAL CHARACTERISTICS

| ITEM                  | SYMBOL  | MIN    | TYP | MAX    | UNIT |
|-----------------------|---------|--------|-----|--------|------|
| VOLTAGE FOR LOGIC     | VDD-VSS | 4.75   | 5.0 | 5.25   | V    |
| SUPPLY CURRENT        | IDD     | -      | 5.1 | 9.8    | mA   |
| LCD OPERATING VOLTAGE | 0C      | -      | 9.2 | -      | V    |
|                       | 25C     | -      | 9.0 | -      | V    |
|                       | 40C     | -      | 8.8 | -      | V    |
| INPUT VOLTAGE         | H ViH   | 0.7VDD | -   | VDD    | V    |
|                       | L ViL   | 0      | -   | 0.3VDD | V    |

#### MECHANICAL SPECIFICATIONS

| ITEM         | SPECIFICATION                 | UNIT |
|--------------|-------------------------------|------|
| OVERALL SIZE | 120.0W x 62.0H x 14.0T(10.0T) | MM   |
| VIEWING AREA | 104.0W x 39.0H                | MM   |
| DOT NUMBER   | 192 x 64                      | DOTS |
| DOT SIZE     | 0.46W x 0.46H                 | MM   |
| DOT PITCH    | 0.51W x 0.51H                 | MM   |

#### OPTIONS

- LCD TYPE: Y/G STN; GRAY STN; B/W FSTN
- BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
- COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
- TEMPERATURE RANGE: NORMAL(0-50C); EXTENDED(-20-70C)
- POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V); DUAL POWER SUPPLY(5.0V & -10.0V)
- VIEWING ANGLE: 6H; 12H