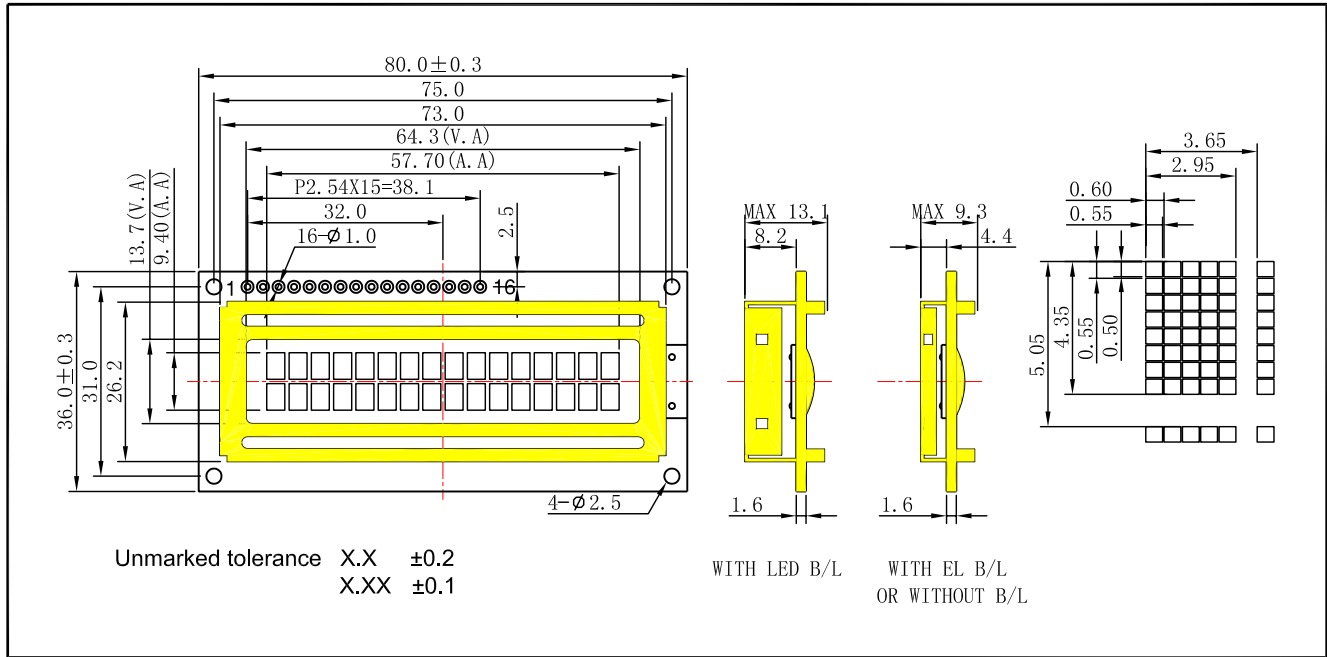
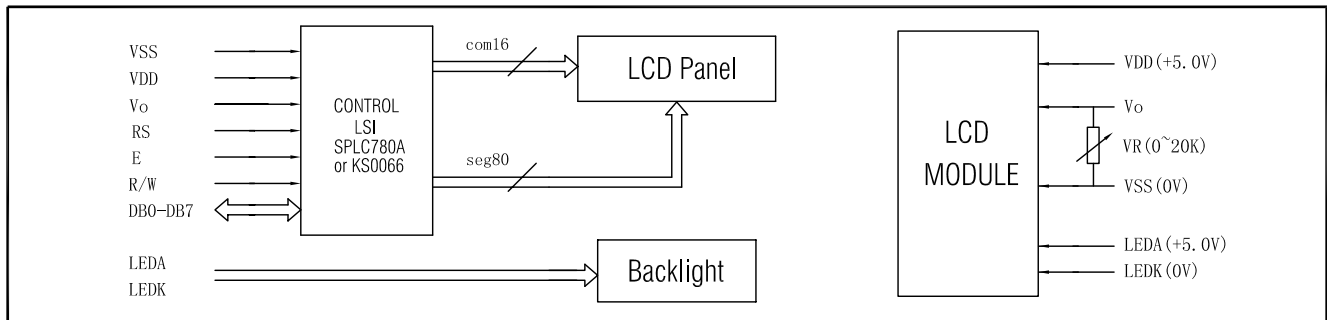


OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

| Item                 | Normal Dimensions(mm) | FEATURE               |   |
|----------------------|-----------------------|-----------------------|---|
| Module Size (W*H*T)  | 80.0×36.0×9.3/13.1    | LCD Type              | STN、TN、HTN、FSTN                             |
| View Area (W*H)      | 64.3×13.7             | LCD Colour            | STN:Yellow-Green、Gray Other:Gray            |
| Character Pitch(W*H) | 3.65×5.05             | View Angle            | 6 O'clock、12 O'clock                        |
| Character Size(W*H)  | 2.95×4.35             | Display Type          | Positive Type、Negative Type                 |
| Character Font       | 5×8                   | Rear polarizer        | Transmissive、Reflective、Transflective       |
| Dot Pitch (W*H)      | 0.60×0.55             | Operating Temperature | 0°C ~ 50°C、-20°C ~ 70°C                     |
| Dot Size (W*H)       | 0.55×0.50             | Backlight             | LED:Yellow EL:Green、Blue-Green、Blue Without |

ELECTRICAL CHARACTERISTICS

| Item                              | Symbol | Test Condition     | Min. | Typ. | Max. | Unit |
|-----------------------------------|--------|--------------------|------|------|------|------|
| Operating Voltage                 | Vdd    | Ta=25° C           | ---  | 5.0  | ---  | V    |
| Operating Voltage for LCD         | Vlcd   | Ta=25° C           | ---  | 4.2  | ---  | V    |
| Supply Current                    | Idd    | Ta=25° C, Vdd=5.0V | ---  | 2.0  | 3.0  | mA   |
| Supply Current for Backlight(LED) | If     | Ta=25° C, Vf=4.2V  | ---  | 110  | ---  | mA   |

INTERFACE PIN CONNECTIONS

| Pin No | Symbol  | Level | Description  |
|--------|---------|-------|--|
| 1      | VSS     | --    | Ground for Logic   |
| 2      | VDD     | --    | Power supply for Logic                                       |
| 3      | Vo      | --    | Power supply for LCD drive                                   |
| 4      | RS      | H/L   | Register selection (H:Data register, L:Instruction register) |
| 5      | R/W     | H/L   | Read/write selection (H:Read,L:Write)                        |
| 6      | E       | H/H—L | Enable signal for LCM  |
| 7-14   | DB0-DB7 | H/L   | Data Bus lines   |
| 15     | LEDA    | --    | Power supply for Backlight(+)                                |
| 16     | LEDK    | --    | Power supply for Backlight(-)                                |

REMARK

Pin15 and Pin16 electrode(A、K) can be exchanged  
 Negative type LCD colour: Blue  
 CGROM font option: English、Japanese、Russian、etc  
 Old NO.:HY-1602A Series