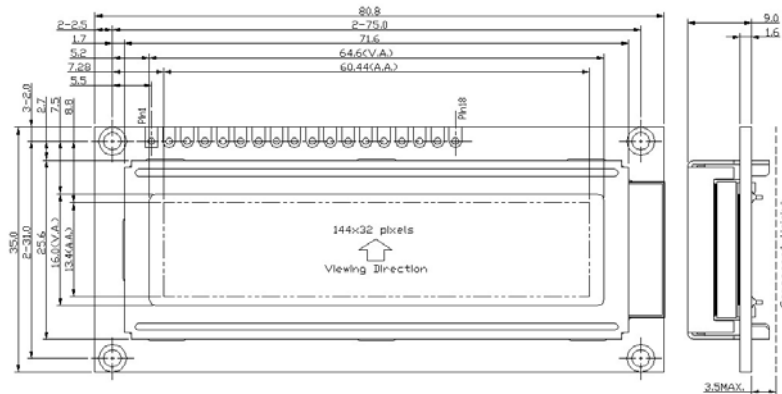


OUTLINE DRAWING



FEATURES

- 144x32 dots, built-in Chinese Fonts
- Mechanical size compatible with standard
- 16 x 2 character LCD module LMB162A Series
- Parallel or Serial interface optional
- 3.3v or 5v power supply optional
- STN-Gray or STN-Blue with white LED
- backlight optional

MECHANICAL DATA

| Item | Value |
|-------------------|------------------------|
| Outline (mm) | 80.8 x 35.0 x 12.5MAX. |
| Viewing Area (mm) | 64.6 x 16.0 |
| Active Area (mm) | 60.44 x 13.4 |
| Dot Pitch (mm) | 0.42 x 0.42 |
| Dot Size (mm) | 0.38 x 0.38 |

TERMINAL FUNCTIONS

| Pin | Name | Descriptions | |
|-----|----------|--|--|
| | | Parallel Mode (PSB=H) | Serial Mode (PSB=L) |
| 1 | VSS | 0V Power Supply, Ground | |
| 2 | VDD | Positive Power Supply | |
| 3 | NC | No Connection (keep open) | |
| 4 | RS (CS) | Register Select RS=H, data read/write RS=L, Instruction data write or Status busy flag read | Chip Select CS=H, chip enable CS=L, chip disable |
| 5 | R/W(SID) | Read Write Control | Serial Input Data |
| 6 | E(SCLK) | Enable Trigger | Serial Clock |
| 7 | DB0 | Data bus | Leave open or pull-up |
| : | : | Three state I/O terminal for display data or instruction | |
| 14 | DB7 | | |
| 15 | BLA | LED Backlight Positive Supply Power | |
| 16 | NC | No Connection (keep open) | |
| 17 | PSB | Interface Selection | |
| 18 | /RST | System Reset, low active | |

DISPLAY CHARACTERISTICS

| Item | Value |
|------------------|----------------------------------|
| LCD Display Mode | STN-Gray, Positive, Transmissive |
| Viewing Angle | 6:00 |
| Driving Method | 1/33 duty, 1/5 bias |
| Backlight | White LED backlight |

ELECTRICAL CHARACTERISTICS

| Item | Symbol | Min | Typ | Max |
|------------------------|-----------------|--------------------|-----|-----------------|
| Operating Voltage (V) | V _{DD} | 4.8 | 5.0 | 5.2 |
| Input High Voltage (V) | V _{IH} | 0.8V _{DD} | - | V _{DD} |
| Input Low Voltage (V) | V _{IL} | V _{SS} | - | 0.4 |
| Operating Current (mA) | I _{DD} | - | 1.7 | 5.0 |

BACKLIGHT CHARACTERISTICS

| Item | Symbol | Min | Typ | Max |
|----------------------|-------------------|-----|-----|-----|
| Forward Voltage (V) | V _{fBLA} | - | 5.0 | - |
| Forward Current (mA) | I _{fBLA} | - | 34 | 50 |

MAJOR PRODUCT LIST

| Models | Highlight | | |
|------------|-----------|-----------|---------|
| | LCD Mode | Backlight | Voltage |
| LM3037BDW★ | STN-Gray | White LED | 5.0V |
| LM3037BFW | STN-Blue | White LED | 5.0V |

For similar product or (semi) custom made LCD module, Please visit our web site or contact us.

★The above product information is based on this model.

TEMPERATURE CHARACTERISTICS

| Item | Symbol | Min | Max |
|----------------------------|-----------------|-----|-----|
| Operating Temperature (°C) | T _{OP} | -20 | +70 |
| Storage Temperature (°C) | T _{ST} | -30 | +80 |