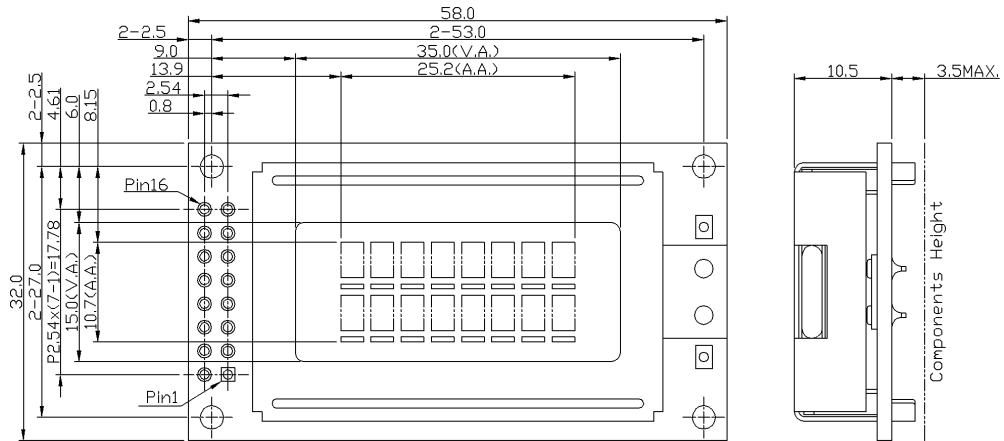


OUTLINE DRAWING



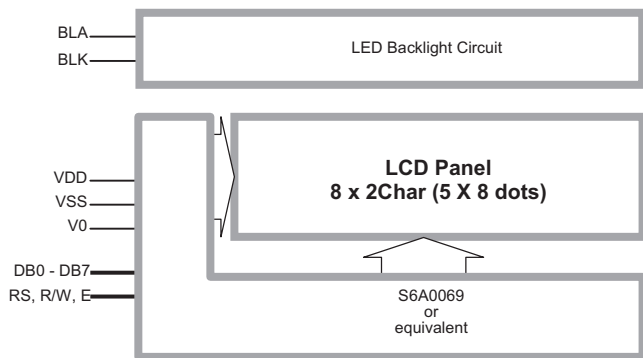
TERMINAL FUNCTIONS

| Pin | Name | Descriptions |
|-----|------|--|
| 1 | VSS | 0V Power Supply, Ground |
| 2 | VDD | Positive Power Supply |
| 3 | V0 | LCD Contrast Reference Supply |
| 4 | RS | Register Select RS=HIGH: Transferring Display Data RS=LOW: Transferring Instruction Data |
| 5 | R/W | Read/Write Control Bus R/W=HIGH: Read Mode Selected R/W=LOW: Write Mode Selected |
| 6 | E | Data Enable |
| 7 | DB0 | Bi-directional Tri-state Data Bus |
| : | : | |
| 14 | DB7 | |
| 15 | BLA | LED Backlight Positive Power Supply |
| 16 | BLK | LED Backlight Negative Power Supply |

DISPLAY CHARACTERISTICS

| Item | Value |
|------------------------|-----------------------------------|
| LCD Display Mode | STN-GRAY, Positive, Transflective |
| Viewing Angle | 6:00 |
| Driving Method | 1/16 duty, 1/5 bias |
| Backlight [#] | Blue LED Backlight |

BLOCK DIAGRAM



MECHANICAL DATA

| Item | Value |
|----------------------|------------------------|
| Outline (mm) | 58.0 x 32.0 x 14.0MAX. |
| Viewing Area (mm) | 35.0 x 15.0 |
| Active Area (mm) | 25.2 x 10.7 |
| Character Pitch (mm) | 0.6 x 0.7 |
| Character Size (mm) | 0.56 x 0.66 |

ABSOLUTE MAXIMUM

| Item | Symbol | Min | Max |
|----------------------------|-----------------|-----|-----|
| Operating Voltage (V) | V _{DD} | 0 | 6.0 |
| Operating Temperature (°C) | T _{OP} | 0 | +50 |
| Storage Temperature (°C) | T _{ST} | -10 | +60 |

ELECTRICAL CHARACTERISTICS*

| Item | Symbol | Min | Typ | Max |
|------------------------|-----------------|---------------------|-----|-----------------|
| Operating Voltage (V) | V _{DD} | 4.7 | 5.0 | 5.3 |
| Input High Voltage (V) | V _{IH} | 0.8 V _{DD} | - | V _{DD} |
| Input Low Voltage (V) | V _{IL} | V _{SS} | - | 0.5 |
| Operating Current (mA) | I _{DD} | - | 1.3 | 3.0 |

BACKLIGHT CHARACTERISTICS

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

LMB0820A series

| | Highlight | |
|-------------|-----------|------------|
| | | #Backlight |
| LMB0820ABC | STN-YG | YG LED |
| LMB0820ADC* | STN-Gray | Blue LED |
| LMB0820AFC | STN-Blue | White LED |

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.