

ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|-----------------------|---------|------|-----------------------|------|
| Supply Voltage(Logic) | VDD-VSS | -0.3 | 7.0 | V |
| Supply Voltage(LCD) | Vdd- Vo | -0.3 | 13.0 | V |
| Input Voltage | Vı | -0.3 | V _{DD} + 0.3 | V |
| Operating Temp. | Topr | -20 | 70 | °C |
| Storage Temp. | Tstg | -30 | 80 | °C |

MECHANICAL DATA

| Item | Nominal Dimensions | Unit |
|-------------------------|--------------------|------|
| Module Size(WxHxT) | 80.0 x 36.0 x 9.5 | mm |
| Viewing Area(W x H) | 64.6 x 16.0 | mm |
| Character Size(W x H) | 2.95 x 5.55 | mm |
| Dot Size(WxH) | 0.55 x 0.65 | mm |
| Weight | | g |

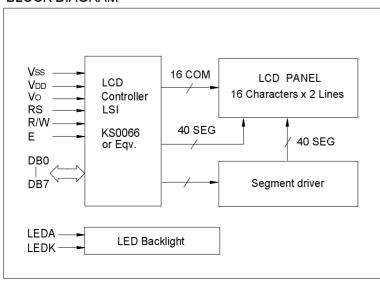
ELECTRICAL CHARACTERISTICS (VDD=5V±0.25V)

| Item | Symbol | Test Condition | Min. | Тур. | Max. | Unit |
|---------------------|-------------|-------------------|-------|------|------|------|
| Input High Voltage | VIH | | 2.2 | | VDD | ٧ |
| Input Low Voltage | VIL | | - 0.3 | | 0.6 | ٧ |
| Output High Voltage | V OH | Iон = - 0.2mA | 2.4 | | VDD | V |
| Output Low Voltage | Vol | IoL = 1.2mA | 0 | | 0.4 | V |
| Supply Current | IDD | VDD = 5.0V | | 1.5 | 3.0 | mΑ |
| LCD Driving Voltage | VDD-VO | Ta=25°C | | 4.6 | | V |

PIN CONNECTIONS

| Pin | Symbol | Level | Function | |
|-----|--------|----------------|----------------------------------|--|
| 1 | Vss | | GND (0V) | |
| 2 | VDD | | Supply Voltage for Logic(+5V) | |
| 3 | Vo | - | LCD Driving Voltage | |
| 4 | RS | H/L | H : Data L : Instruction Code | |
| 5 | R/W | H/L | H : Read L : Write | |
| 6 | E | H,H → L | Enable Signal | |
| 7 | DB0 | H/L | | |
| 8 | DB1 | H/L | | |
| 9 | DB2 | H/L | | |
| 10 | DB3 | H/L | Data Bus Line | |
| 11 | DB4 | H/L | Data bus Line | |
| 12 | DB5 | H/L | | |
| 13 | DB6 | H/L | | |
| 14 | DB7 | H/L | | |
| 15 | LEDA | - | LED Power Supply | |
| 16 | LEDK | | LED I Ower Supply | |

BLOCK DIAGRAM



LED BACKLIGHT SPECIFICATIONS (Ta=25°C)

| Item | Symbol | Тур. | Max. | Unit |
|----------------------|----------------|------|------|------|
| Forward Voltage | Vf | 4.1 | 4.3 | V |
| Forward Current | l _f | 156 | | mA |
| Emission Wave Length | λр | 568 | | nm |

