



PIN CONNECTIONS

| Pin | Symbol | Level | Function |
|--------------|-----------------|-------|----------------------------------|
| 1 | V _{DD} | +5V | Power supply for logic |
| 2 | V _{SS} | 0V | GND |
| 3 | V _O | - | Operating voltage for LCD |
| 4 | /REST | L | Reset signal, active "L" |
| 5 | E1 | H/L | Chip 1 Enable signal |
| 6 | E2 | H/L | Chip 2 Enable signal |
| 7 | R/W | H/L | "H" Read, "L" Write |
| 8 | A0 | H/L | "H" Data "L" Instruction code |
| 9 ~ 16 | DB0 DB7 | H/L | Date bus line |
| 17 | LEDA | +5V | Power supply for LED backlight |
| 18 | LEDK | 0V | |

NOTES:

1. Built-in SBN1661G controller
2. Yellow-green/Blue mode optional
3. 3.5V/3.3V power supply optional

MECHANICAL DATA

| Item | Nominal Dimensions | Unit |
|-------------------------|--------------------|------|
| Module Size (W x H x T) | 76.6X29.1X13.0 | mm |
| Viewing Area (W x H) | 60.0 X18.0 | mm |
| Dot Pitch (W x H) | 0.40X0.45 | mm |
| Dot Size (W x H) | 0.35X0.40 | mm |

ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Min. | Max. | Unit |
|------------------------|----------------------------------|-----------------|-----------------|------|
| Supply Voltage (Logic) | V _{DD} -V _{SS} | -0.3 | 7.0 | V |
| Supply Voltage (LCD) | V _{DD} -V _O | -0.3 | 8.0 | V |
| Input Voltage | V _I | V _{SS} | V _{DD} | V |
| Operating Temp | T _{OPR} | -20 | 70 | °C |
| Storage Temp | T _{STG} | -30 | 80 | °C |

ELECTRICAL CHARACTERISTICS (V_{DD}=5.0V, T_a=25°C)

| Item | Symbol | Min. | Typ. | Max. | Unit |
|---------------------|---------------------------------|----------------------|------|-----------------|------|
| Input High Voltage | V _{IH} | V _{DD} -1.2 | - | V _{DD} | V |
| Input Low Voltage | V _{IL} | 0 | - | 0.8 | V |
| Output High Voltage | V _{OH} | V _{DD} -0.3 | - | V _{DD} | V |
| Output Low Voltage | V _{OL} | 0 | - | 0.3 | V |
| Supply Current | I _{DD} | - | 1.0 | - | mA |
| LCD Driving Voltage | V _{DD} -V _O | - | 4.7 | - | V |

LED BACKLIGHT SPECIFICATION (T_a=25°C)

| Item | Forward Voltage | Forward Current |
|-------|-----------------|-----------------|
| WHITE | 3.1V | 30mA |