



### PIN CONNECTIONS

| Pin          | Symbol          | Level | Function                          |
|--------------|-----------------|-------|-----------------------------------|
| 1            | V <sub>SS</sub> | 0V    | Ground                            |
| 2            | V <sub>DD</sub> | 5.0V  | Power supply for Logic            |
| 3            | V <sub>O</sub>  | -     | Driving voltage for LCD           |
| 4            | /WR             | L     | 8080 : Write signal               |
| 5            | /RD             | L     | 8080 : Read signal                |
| 6            | /CS             | L     | Chip select ,Active L             |
| 7            | A0              | H/L   | “L” Data,<br>“H” Instruction code |
| 8            | /RES            | L     | Reset signal ,active “L”          |
| 9<br> <br>16 | DB0<br> <br>DB7 | L     | Data bus line                     |
| 17           | BUSY            | -     | Busy signal                       |
| 18           | INTI            | -     | Programmable interrupt            |
| 19           | LEDA            | +5V   | Power supply for B/L              |
| 20           | LEDK            | 0V    |                                   |

### NOTES:

- Built-in RA8806 controller  
(ASCII code , GB code)
- 5/3.3V power supply optional
- Touch panel optional

### MECHANICAL DATA

| Item                      | Nominal Dimensions | Unit |
|---------------------------|--------------------|------|
| Module Size ( W x H x T ) | 153.0X120.0X12.3   | mm   |
| Viewing Area (W x H )     | 122.0X92.0         | mm   |
| Dot Pitch (W x H )        | 0.36X0.36          | mm   |
| Dot Size (W x H )         | 0.34X0.34          | mm   |

### ABSOLUTE MAXIMUM RATINGS

| Item                   | Symbol                           | Min. | Max.            | Unit |
|------------------------|----------------------------------|------|-----------------|------|
| Supply Voltage (Logic) | V <sub>DD</sub> -V <sub>SS</sub> | 0    | 6.5             | V    |
| Supply Voltage (LCD)   | V <sub>DD</sub> -V <sub>O</sub>  | 0    | 28              | V    |
| Input Voltage          | V <sub>I</sub>                   | 0    | V <sub>DD</sub> | V    |
| Operating Temp.        | T <sub>OPR</sub>                 | -20  | +70             |      |
| Storage Temp.          | T <sub>STG</sub>                 | -30  | +80             |      |

### ELECTRICAL CHARACTERISTICS ( V<sub>DD</sub>=5.0V, Ta=25 )

| Item                | Symbol                          | Min.                | Typ. | Max.               | Unit |
|---------------------|---------------------------------|---------------------|------|--------------------|------|
| Input High Voltage  | V <sub>IH</sub>                 | 0.5 V <sub>DD</sub> | -    | V <sub>DD</sub>    | V    |
| Input Low Voltage   | V <sub>IL</sub>                 | 0                   | -    | 0.2V <sub>DD</sub> | V    |
| Supply Current      | I <sub>DD</sub>                 | -                   | 100  | -                  | mA   |
| LCD Driving Voltage | V <sub>DD</sub> -V <sub>O</sub> | -                   | 23.0 | -                  | V    |

### LED BACKLIGHT SPECIFICATIONS ( Ta=25 )

| Item  | Forward Voltage | Forward Current |
|-------|-----------------|-----------------|
| White | 3.1V            | 180mA           |

### CCFL BACKLIGHT SPECIFICATIONS ( Ta=25 )

| Item            | Symbol | Standard Value  |
|-----------------|--------|-----------------|
| Driving Current | IFLD   | 5.0mA (AC=250V) |