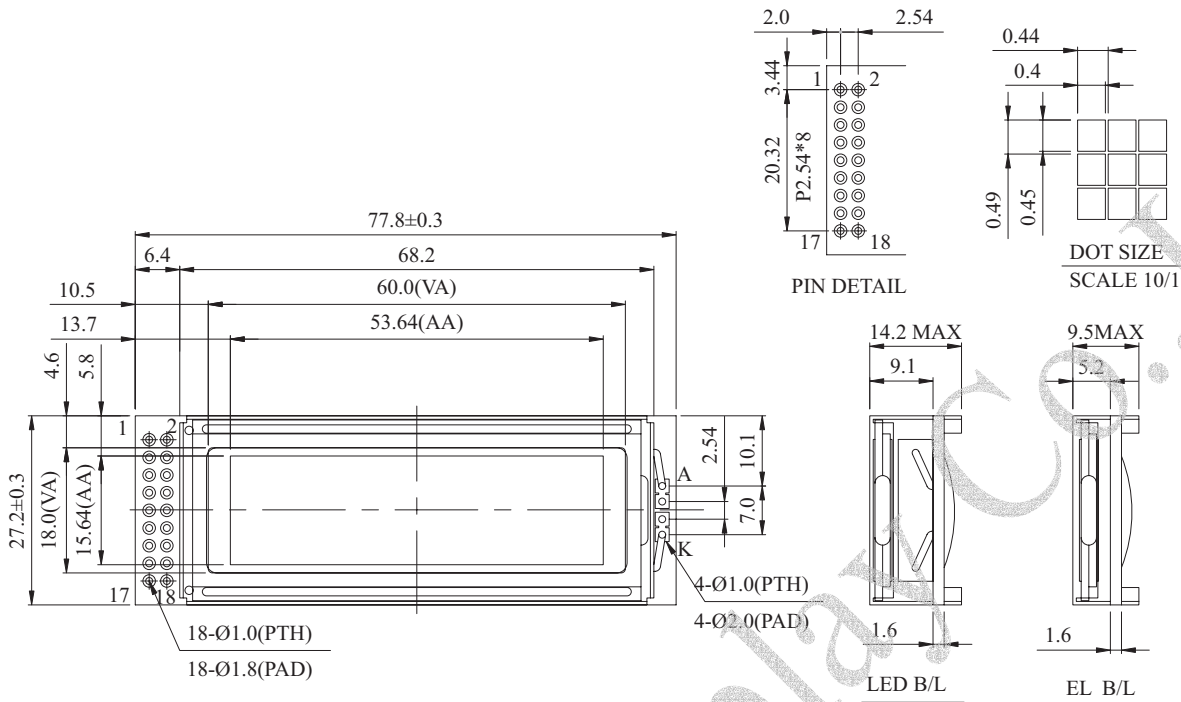




WG122320 Graphic 122x32 dots

Dimension drawing



Feature

1. Built-in controller Epson SED 1520 ,or equivalent
2. 1/32 duty cycle
3. N.V. optional for +3.0V power supply
4. LED backlight only White version

Mechanical Data

| Item | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 77.8x27.2 | mm |
| Viewing Area | 60.0x18.0 | mm |
| Mounting hole | 0.4x0.45 | mm |
| Character Size | 0.44x0.49 | mm |

Graphic type

| Pin NO. | Symbol | Function |
|---------|-------------|-----------------------------------|
| 1 | Vss | Ground |
| 2 | Vdd | Supply voltage for logic |
| 3 | Vo | Operating voltage for LCD |
| 4 | A0 | H: Data , L :Instruction |
| 5 | CS1 | Chip select signal for IC1 |
| 6 | CS2 | Chip select signal for IC2 |
| 7 | NC/CL | No connection/External clock 2KHz |
| 8 | NC/E | No connection/Enable signal |
| 9 | R \bar{W} | H: read data L:write data |
| 10 | DB0 | Data bus line |
| 11 | DB1 | Data bus line |
| 12 | DB2 | Data bus line |
| 13 | DB3 | Data bus line |
| 14 | DB4 | Data bus line |
| 15 | DB5 | Data bus line |
| 16 | DB6 | Data bus line |
| 17 | DB7 | Data bus line |
| 18 | /RST | H -> L: The LCM be reset |

Absolute Maximum Rating

| Item | Symbol | Standard Value | | | Unit |
|---------------|---------|----------------|------|------|------|
| | | min. | typ. | max. | |
| Power Supply | VDD-VSS | 4.75 | 5.0 | 5.25 | V |
| Input Voltage | VI | 0 | --- | VDD | V |

Note: VSS=0 Volt , VDD=5.0 Volt .

Electronical Characteristics

| Item | Symbol | Condition | Standard Value | | | Unit |
|--|--------|----------------------|----------------|------|------|------|
| | | | min. | typ. | max. | |
| Input Voltage | VDD | --- | 4.5 | 5.0 | 5.5 | V |
| Supply Current | IDD | --- | --- | 1.0 | --- | mA |
| Recommended LC Driving Voltage for Normal Temp. Version module | VDD-VO | -20°C | --- | --- | 5.8 | V |
| | | 25°C | --- | 4.9 | --- | |
| | | 70°C | 4.6 | --- | --- | |
| CCFL Starting Voltage | VFLS | 25°C | --- | --- | --- | Vrms |
| CCFL Driving Voltage | VFLD | 25°C | --- | --- | --- | Vrms |
| CCFL Driving Current | IFLD | VFO=450Vrms 30KHz | --- | --- | --- | mAms |
| LED Forward Voltage | VF | 25°C | 3.4 | 3.5 | 3.6 | V |
| LED Forward Current | IF | 2°C | 32 | 40 | 60 | mA |
| EL Power Supply Current | IEF | Vel=110VAC,400Hz | --- | --- | 5.0 | mA |