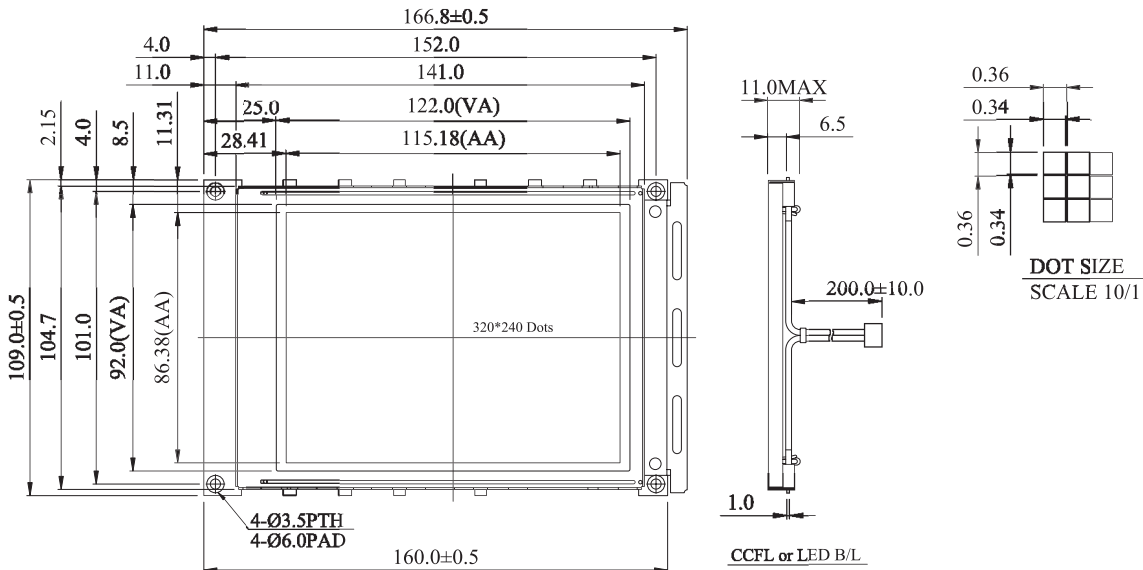




# WG320240BX/BP2/BP3 Graphic 320x240 dots

## Dimension drawing



### Feature

1. Built-in controller Epson-S1D13700
2. Built-in Negative Voltage generator
3. 1/240 duty cycle
4. Touch screen option
5. Temperature compensation option
6. BP2: DIP connection
7. BP3: touch panel driver

| Pin NO. | Symbol | Function  |
|---------|--------|---|
| 1       | Vss    | Ground  |
| 2       | Vdd    | Power supply for logic  |
| 3       | Vo     | Driving voltage for LCD   |
| 4       | Ao     | RD=L, WR=H, AO=L: Date Read AO=H: Status read<br>RD=H, WR=L, AO=L: Date Write AO=H: Command write |
| 5       | WR     | 8080 family: Write signal, 6800 family: R/W signal  |
| 6       | RD     | 8080 family: Read signal, 6800 family: Enable clock   |
| 7       | DB0    | Data bus line   |
| 8       | DB1    | Data bus line   |
| 9       | DB2    | Data bus line   |
| 10      | DB3    | Data bus line   |
| 11      | DB4    | Data bus line   |
| 12      | DB5    | Data bus line   |
| 13      | DB6    | Data bus line   |
| 14      | DB7    | Data bus line   |
| 15      | CS     | Chip select, Active L   |
| 16      | RES    | Controller reset signal, Active L   |
| 17      | Vee    | Negative Voltage Output   |
| 18      | NC     | No connection   |
| 19      | NC     | No connection   |
| 20      | NC     | No connection   |

### Mechanical Data

| Item             | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 166.8x109.0    | mm   |
| Viewing Area     | 122.0x92.0     | mm   |
| Mounting hole    | 152.0x101.0    | mm   |
| Dot Pitch        | 0.36x0.36      | mm   |

### Absolute Maximum Rating

| Item          | Symbol  | Standard Value |      |      | Unit |
|---------------|---------|----------------|------|------|------|
|               |         | min.           | typ. | max. |      |
| Power Supply  | VDD-VSS | 4.5            | 5.0  | 5.5  | 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    | ---               | 4.75           | 5.0  | 5.25 | V    |
| Supply Current   | IDD    | VDD=5V            | 65.0           | 75.0 | 85.0 | mA   |
| Recommended LC Driving Voltage for Normal Temp. Version module | VDD-VO | -20°C             | ---            | ---  | 26.1 | V    |
|  |        | 25°C              | ---            | 23.8 | ---  |      |
|  |        | 70°C              | 22.2           | ---  | ---  |      |
| CCFL Starting  | VFLS   | 25°C              | ---            | 600  | ---  | Vrms |
| CCFL Driving Voltage   | VFLD   | 25°C              | ---            | 270  | ---  | Vrms |
| CCFL Driving Current   | IFLD   | VFQ=450Vms 30KHz  | 4.8            | 5.3  | 5.5  | mAms |
| LED Forward Voltage  | VF     | 25°C              | 3.4            | 3.5  | 3.6  | V    |
| LED Forward Current  | IF     | 25°C              | 140            | 160  | 180  | mA   |
| EL Power Supply Current  | IEF    | Vel=110VAC; 400Hz | ---            | ---  | 5.0  | mA   |

Graphic type