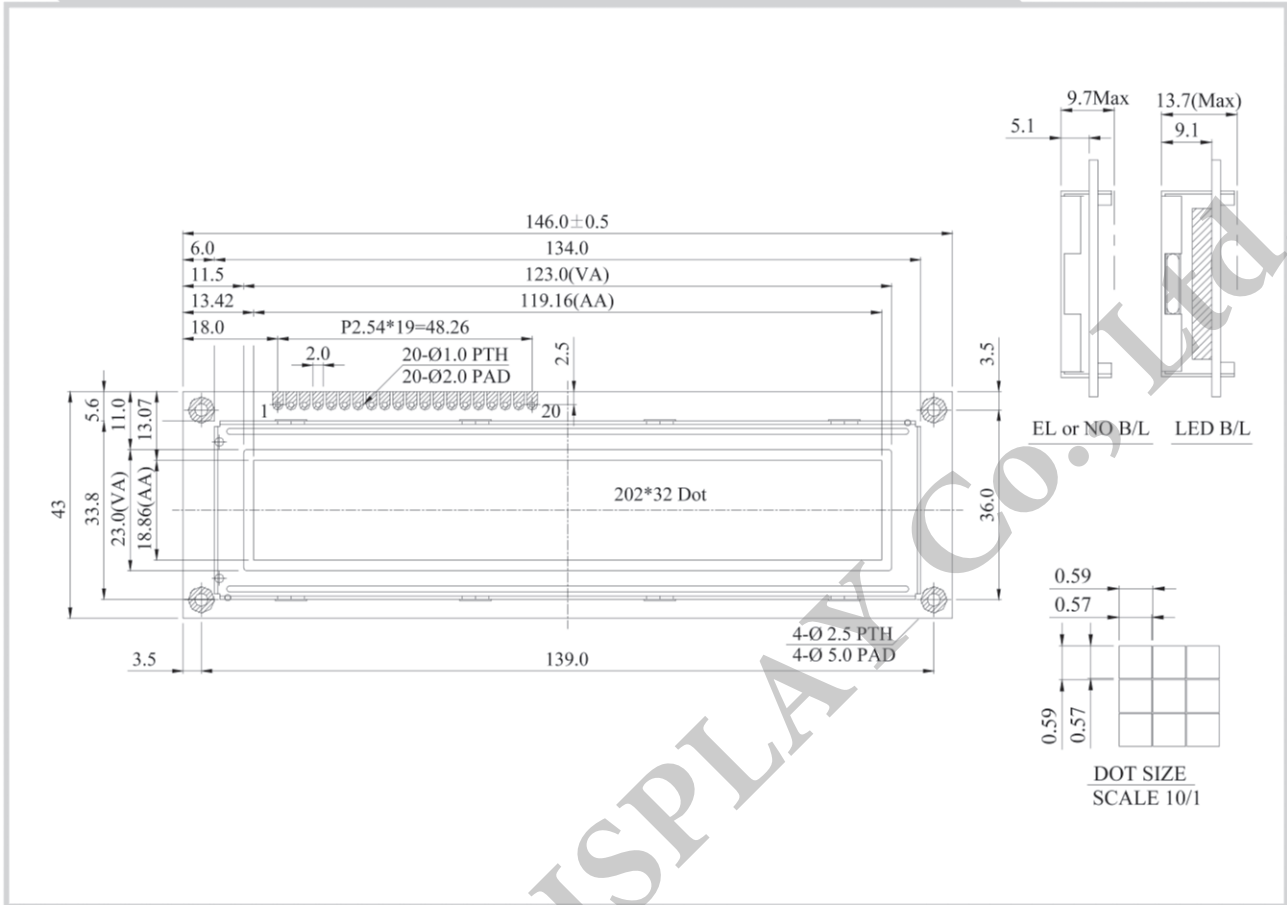


## WG20232A Graphic 202x32 dots



### Feature

1. Built-in oscillation
2. Built-in controller Avant (SBN1661G or equivalent)
3. 1/32 duty cycle
4. 2.85~5V power supply

| Pin No. | Symbol          | Description                         |
|---------|-----------------|-------------------------------------|
| 1       | V <sub>SS</sub> | Ground                              |
| 2       | V <sub>DD</sub> | Power supply for logic              |
| 3       | V <sub>O</sub>  | Contrast Adjustment                 |
| 4       | A0              | Data/ Instruction select signal     |
| 5       | R/W             | Read/Write select signal            |
| 6       | CS1             | Chip Select Signal for IC1          |
| 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      | V <sub>EE</sub> | Negative Voltage Output             |
| 16      | RES             | Controller reset signal, Active Low |
| 17      | A               | Power supply for B/L +              |
| 18      | K               | Power supply for B/L -              |
| 19      | CS2             | Chip Select Signal for IC2          |
| 20      | CS3             | Chip Select Signal for IC3          |

### Mechanical Data

| Item             | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 146.0 x 43.0   | mm   |
| Viewing Area     | 123.0 x 23.0   | mm   |
| Mounting Hole    | 139.0 x 36.0   | mm   |
| Dot Pitch        | 0.59 x 0.59    | mm   |
| Dot Size         | 0.57 x 0.57    | mm   |

### Electrical Characteristics

| Item  | Symbol             | Standard Value | Unit |
|---|--------------------|----------------|------|
|   |                    | typ.           |      |
| Input Voltage   | V <sub>DD</sub>    | 5.0            | V    |
| Recommended LCD Driving Voltage for Normal Temp. Version module @25°C | V <sub>DD-VO</sub> | 5.0            | V    |