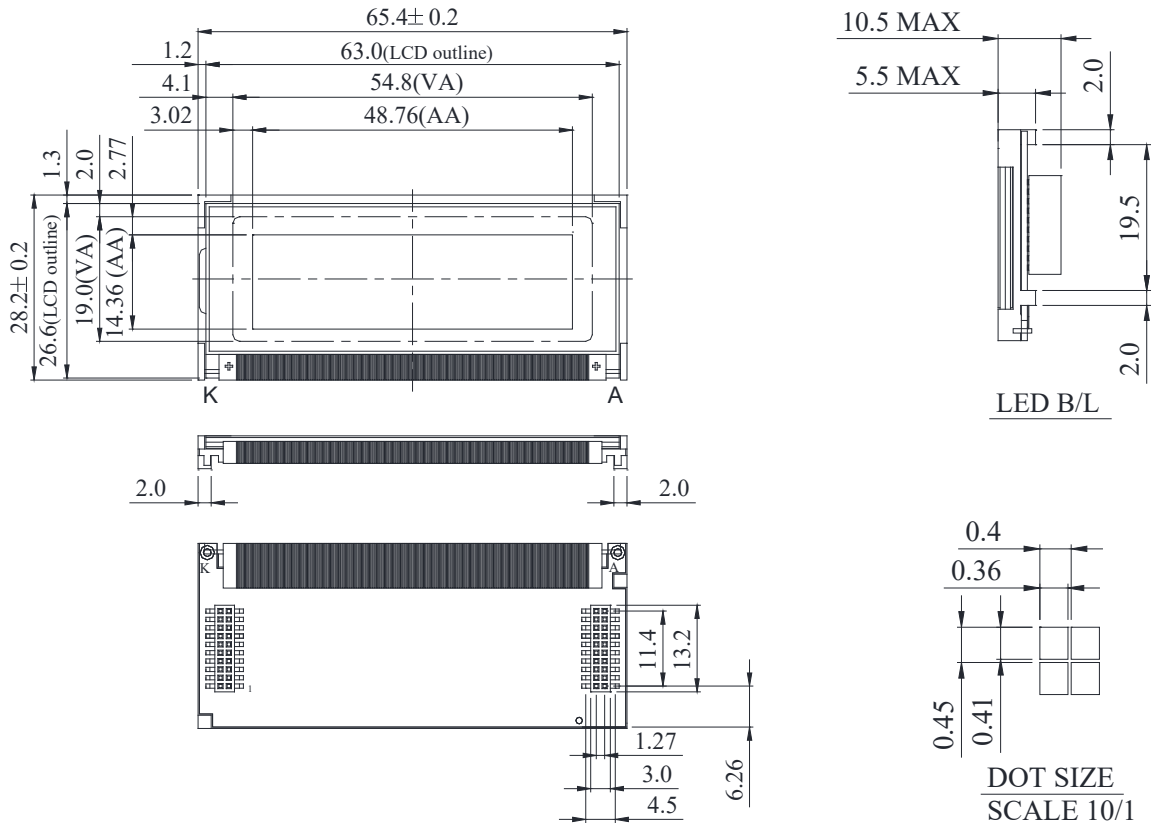


NTG12232BP1 Graphic 122x32 dots



Feature

1. Available for internal oscillation 2KHz
2. Built-in controller Avant (SBN1661G or equivalent)
3. 1/32 duty cycle
4. 5V power supply
5. White LED backlight not available

| Pin No. | Symbol | Description |
|---------|-----------------|-------------------------------------|
| 1 | V _{DD} | Power supply for logic |
| 2 | V _{SS} | Ground |
| 3 | V _O | Contrast Adjustment |
| 4 | RES | Controller reset signal, Active Low |
| 5 | E1 | Enable signal |
| 6 | E2 | Enable signal |
| 7 | R/W | Read/Write select signal |
| 8 | A0 | Data/ Instruction select signal |
| 9 | DB0 | Data bus line |
| 10 | DB1 | Data bus line |
| 11 | DB2 | Data bus line |
| 12 | DB3 | Data bus line |
| 13 | DB4 | Data bus line |
| 14 | DB5 | Data bus line |
| 15 | DB6 | Data bus line |
| 16 | DB7 | Data bus line |
| 17 | A | Power supply for B/L + |
| 18 | K | Power supply for B/L - |

Mechanical Data

| Item | Standard Value | Unit |
|------------------|----------------|------|
| Module Dimension | 65.4 x 28.2 | mm |
| Viewing Area | 54.8 x 19.0 | mm |
| Dot Pitch | 0.40 x 0.45 | mm |
| Dot Size | 0.36 x 0.41 | mm |

Electrical Characteristics

| Item | Symbol | Standard Value | Unit |
|---|--------------------|----------------|------|
| | | typ. | |
| Input Voltage | V _{DD} | 5.0 | V |
| Recommended LCD Driving Voltage for Normal Temp. Version module @25°C | V _{DD-VO} | 4.70 | V |