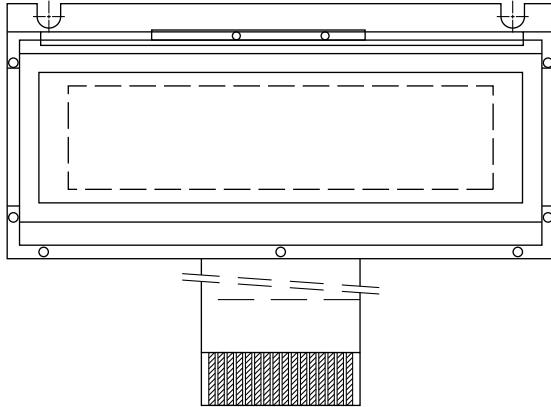


122 x 32 Graphic LCD



FEATURES

- Type: graphic
- Display format: 122 x 32 dots
- Built-in controller: SBN1661G
- Duty cycle: 1/32
- FFC
- Same size with LCD-122H032D
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

| MECHANICAL DATA | | |
|------------------|--------------------|------|
| ITEM | STANDARD VALUE | UNIT |
| Module dimension | 59.0 x 29.3 x 5.55 | mm |
| Viewing area | 52.0 x 15.0 | |
| Dot size | 0.345 x 0.345 | |
| Dot pitch | 0.375 x 0.375 | |
| Mounting hole | 50.0 x 1.5 | |
| Character size | n/a | |

| ABSOLUTE MAXIMUM RATINGS | | | | | |
|--------------------------|----------------------|----------------|------|----------|------|
| ITEM | SYMBOL | STANDARD VALUE | | | UNIT |
| | | MIN. | TYP. | MAX. | |
| Power supply | V_{DD} to V_{SS} | 2.75 | 5.0 | 5.25 | V |
| Input voltage | V_I | 0 | - | V_{DD} | |

Note

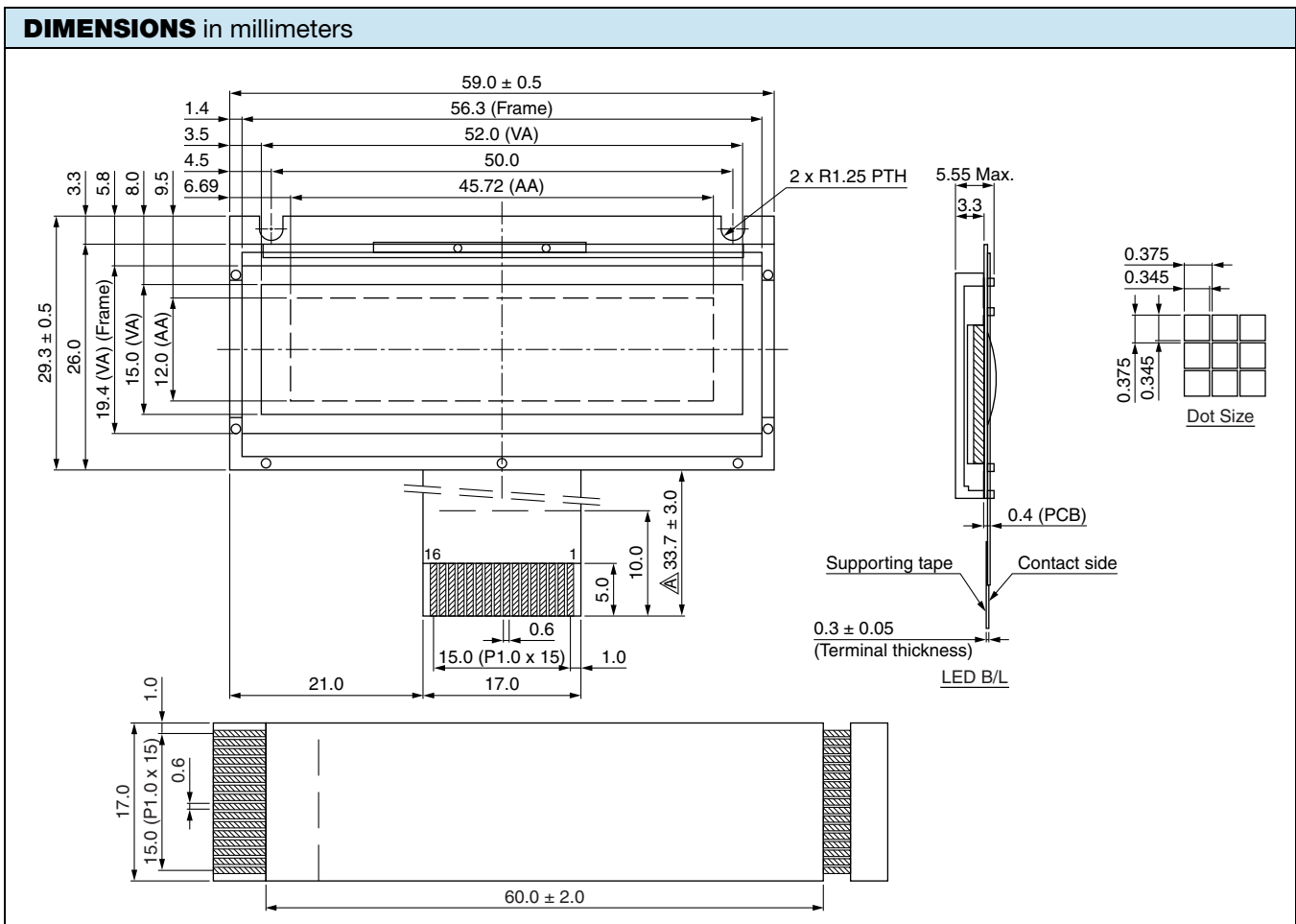
- $V_{SS} = 0$ V, $V_{DD} = 5.0$ V

| ELECTRICAL CHARACTERISTICS | | | | | | |
|--|-------------------|------------------------------------|----------------|------|------|------------|
| ITEM | SYMBOL | CONDITION | STANDARD VALUE | | | UNIT |
| | | | MIN. | TYP. | MAX. | |
| Input voltage | V_{DD} | - | - | 5.0 | - | V |
| Supply current | I_{DD} | $V_{DD} = +5$ V | - | 1.0 | - | mA |
| Recommended LC driving voltage for normal temperature version module | V_{DD} to V_0 | -20 °C | - | - | - | V |
| | | 25 °C | - | 4.85 | - | |
| | | 70 °C | - | - | - | |
| CCFL starting voltage | V_{FLS} | 25 °C | - | - | - | V_{RMS} |
| CCFL driving voltage | V_{FLD} | 25 °C | - | - | - | V_{RMS} |
| CCFL driving current | I_{FLD} | $V_{FQ} = 450$ V_{RMS} , 300 kHz | - | - | - | mA_{RMS} |
| LED forward voltage | V_F | 25 °C | - | 4.2 | - | V |
| LED forward current | I_F | 25 °C | - | 40.0 | - | mA |
| EL power supply current | I_{EL} | $V_{EL} = 110$ V_{AC} , 400 Hz | - | - | 5.0 | mA |

| OPTIONS | | | | | | | | | |
|---------------|----------|------------|----------|----------|-----------|-----------|-----|----|------|
| PROCESS COLOR | | | | | | BACKLIGHT | | | |
| TN | STN GRAY | STN YELLOW | STN BLUE | FSTN B&W | STN COLOR | NONE | LED | EL | CCFL |
| - | x | x | - | x | - | x | x | x | - |

For detailed information, please see the "Product Numbering System" document.

| INTERFACE PIN FUNCTION | | |
|------------------------|-----------------|------------------------------|
| PIN NO. | SYMBOL | FUNCTION |
| 1 | \bar{V}_{LED} | Backlight selected |
| 2 | V_{SS} | Ground |
| 3 | V_{DD} | Supply voltage for logic |
| 4 | V_0 | Operating voltage for LCD |
| 5 | A_0 | H: data / L: instruction |
| 6 | E1 | Enable chip 1 |
| 7 | E2 | Enable chip 2 |
| 8 | DB0 | Data bus line |
| 9 | DB1 | Data bus line |
| 10 | DB2 | Data bus line |
| 11 | DB3 | Data bus line |
| 12 | DB4 | Data bus line |
| 13 | DB5 | Data bus line |
| 14 | DB6 | Data bus line |
| 15 | DB7 | Data bus line |
| 16 | R / \bar{W} | H: read data / L: write data |





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