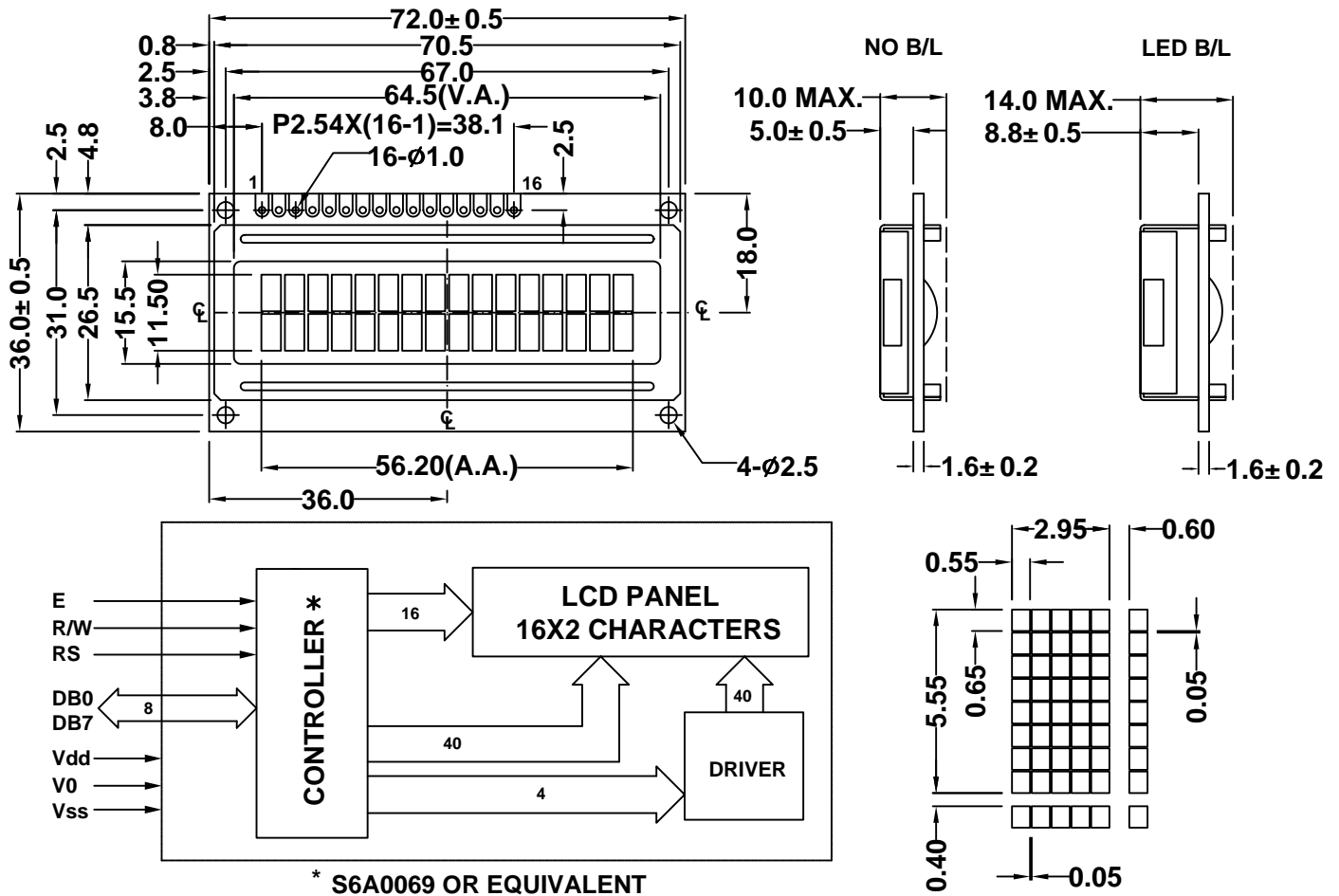


# BHC1602C

## CONTOUR DRAWING & BLOCK DIAGRAM



| MECHANICAL SPECIFICATION |                     |      |
|--------------------------|---------------------|------|
| ITEM                     | SPECIFICATION       | UNIT |
| Module Size              | 72.0X36.0X10.0/14.0 | mm   |
| Viewing Area             | 64.5X15.5           | mm   |
| Character Font           | 5 x 7 + cursor      | dots |
| Character Size           | 2.95X5.55           | mm   |
| Character Pitch          | 3.55X5.95           | mm   |
| Dot Size                 | 0.55X0.65           | mm   |

| ABSOLUTE MAXIMUM RATINGS |              |          |         |      |
|--------------------------|--------------|----------|---------|------|
| PARAMETER                | SYMBOL       | MIN.     | MAX.    | UNIT |
| Supply Voltage           | Vdd          | -0.3     | 7.0     | V    |
| LCD Supply Voltage       | Vlcd(Vdd-V0) | Vdd-12.0 | Vdd+0.3 | V    |
| Input Voltage            | Vin          | -0.3     | Vdd+0.3 | V    |
| Operating Temperature*   | Top          | 0/-20    | 50/70   | ° C  |
| Storage Temperature*     | Tstr         | -10/-30  | 60/80   | ° C  |

\*T1/T2: T1 for standard temperature LCM, T2 for wide temperature LCM

| PIN CONNECTIONS |         |                       |
|-----------------|---------|-----------------------|
| PIN             | SYMBOL  | DESCRIPTION           |
| 1               | Vss     | Power Supply : 0V     |
| 2               | Vdd     | Power Supply : +5V    |
| 3               | V0      | Power Supply for LCD  |
| 4               | RS      | Register Select       |
| 5               | R/W     | Read/Write            |
| 6               | E       | Enable                |
| 7 to 14         | DB0-DB7 | Data Bus              |
| 15              | A       | Anode for backlight   |
| 16              | K       | Cathode for backlight |

| ELECTRICAL CHARACTERISTICS(Ta=25° C) |        |           |      |      |      |      |
|--------------------------------------|--------|-----------|------|------|------|------|
| ITEM                                 | SYMBOL | CONDITION | MIN. | TYP. | MAX. | UNIT |
| Supply Voltage(logic)                | Vdd    | -         | 4.5  | 5.0  | 5.5  | V    |
| Supply Current(logic)                | Idd    | Vdd=5.0   | 0.8  | 1.2  | 1.5  | mA   |
| Driving Voltage(LCD)                 | Vlcd   | -         | 4.7  | 5.0  | 5.7  | V    |
| Driving Current(LCD)                 | Ilcd   | -         | -    | 0.2  | 0.4  | mA   |

| BACKLIGHT CHARACTERISTICS (Ta=25° C) |        |           |      |      |      |      |
|--------------------------------------|--------|-----------|------|------|------|------|
| PARAMETER                            | SYMBOL | CONDITION | MIN. | TYP. | MAX. | UNIT |
| Supply Voltage                       | Vf     | -         | 3.8  | 4.1  | 4.4  | V    |
| LED Forward Current                  | If     | Vf=4.1V   | -    | 120  | -    | mA   |
| LED Dissipation                      | Pd     | -         | -    | 490  | -    | mW   |