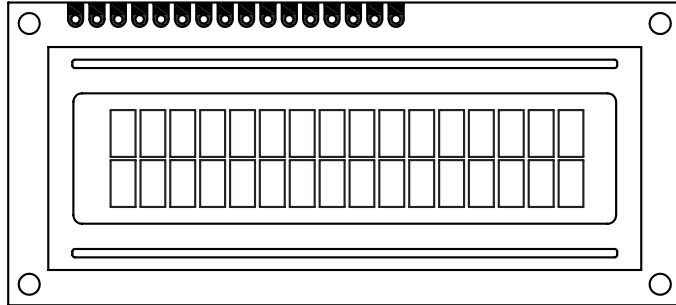


## CS 1602 G

## LCD- Standard Charaktermodul



### Hauptmerkmale

- 16 Charakter / 2 Zeilen
- Ziffernhöhe 5.56 mm
- Single Supply +5 Volt
- STN-Technologie
- Einstellbarer Kontrast
- Option LED / EL-Beleuchtung

Kontroller: S6A0069

### PIN Belegung

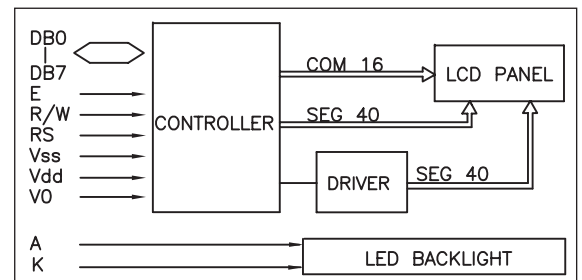
| PIN | SYMBOL | SIGNAL DESCRIPTION               |
|-----|--------|----------------------------------|
| 1   | Vss    | Power Supply (GND)               |
| 2   | Vdd    | Power Supply (+5V)               |
| 3   | Vo     | Contrast Adjust                  |
| 4   | RS     | Instruction/Data Register Select |
| 5   | R/W    | Data Read/Write                  |

| PIN  | SYMBOL  | SIGNAL DESCRIPTION       |
|------|---------|--------------------------|
| 6    | E       | Enable Signal            |
| 7-14 | DB0-DB7 | Data Bus Line            |
| 15   | K       | Power Supply for LED (-) |
| 16   | A       | Power Supply for LED (+) |

### Spezifikationen (TA=25 °C)

| ITEM                   | SYMBOL          | CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------|-----------------|-----------|------|------|------|------|
| Supply Voltage (Logic) | Vdd-Vss         | -         | 4.5  | 5.0  | 5.5  | V    |
| Supply Current (Logic) | Idd             | Vdd=5.0V  | -    | 1    | 1.2  | mA   |
| Supply Current (LCD)   | Io              | -         | 0.15 | 0.22 | 0.27 | mA   |
| Supply Voltage (LCD)   | Vdd-Vo          | Vdd=5.0V  | 4.3  | 4.7  | 4.8  | V    |
| Input Voltage "H"      | V <sub>IH</sub> | H         | 2.2  | -    | Vdd  | V    |
| Input Voltage "L"      | V <sub>IL</sub> | L         | Vss  | -    | 0.6  | V    |
| Supply Voltage (LED)   | V <sub>BL</sub> | -         | 4.1  | 4.2  | 4.6  | V    |
| Supply Current (LED)   | I <sub>BL</sub> | -         | -    | 180  | 250  | mA   |

### Block Diagramm



### Mechanische Abmessung

