

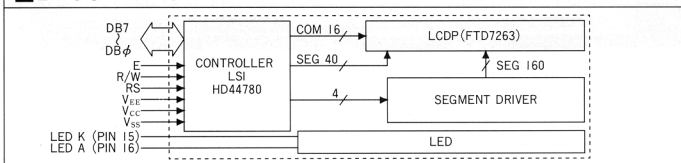
LCD-90

These specs are for a comparable display. Exact specs for LCD-90 aren't available.

■ABSOLUTE MAXIMUM RATINGS

| Item | Symbol | Test Condition | Standard Value | | Unit |
|------------------------------|-----------------|----------------|----------------|--------------|------|
| | | | min. | max. | |
| Supply Voltage for Logic | $V_{CC}-V_{SS}$ | — | -0.3 | 7 | V |
| Supply Voltage for LCD Drive | $V_{CC}-V_{EE}$ | — | $V_{CC}-13.5$ | $V_{CC}+0.3$ | V |
| Input Voltage | V_I | — | -0.3 | $V_{CC}+0.3$ | V |
| LED Forward Current | I_F | — | — | 500 | mA |
| LED Reverse Voltage | V_R | — | — | 8 | V |
| LED Power Loss | P_D | — | — | 2.1 | W |
| Operating Temperature | T_{opr} | — | 0 | +50 | °C |
| Storage Temperature | T_{stg} | — | -20 | +70 | °C |

■BLOCK DIAGRAM



■ELECTRICAL CHARACTERISTICS

| Item | Symbol | Test Condition | Standard Value | | | Unit |
|-----------------------|----------|-------------------|----------------|------|----------|-------------------|
| | | | min. | typ. | max. | |
| Input "High" Voltage | V_{IH} | — | 2.2 | — | V_{CC} | V |
| Input "Low" Voltage | V_{IL} | — | 0 | — | 0.6 | V |
| Output "High" Voltage | V_{OH} | $-I_{OH}=0.205mA$ | 2.4 | — | V_{CC} | V |
| Output "Low" Voltage | V_{OL} | $I_{OL}=1.2mA$ | 0 | — | 0.4 | V |
| LED Forward Voltage | V_F | $I_F=250mA$ | 3.8 | 4.0 | 4.2 | V |
| Brightness *1 | L | $I_F=250mA$ | 55 | 140 | — | cd/m ² |
| Supply Current | I_{CC} | $V_{CC}=5.0V$ | — | 2.5 | 5.0 | mA |

* $V_{CC}=5.0V\pm5%$, $T_a=25^\circ C$ *NOTE 1) Measured at the bare LED backlight unit.



■EXTERNAL DIMENSIONS

