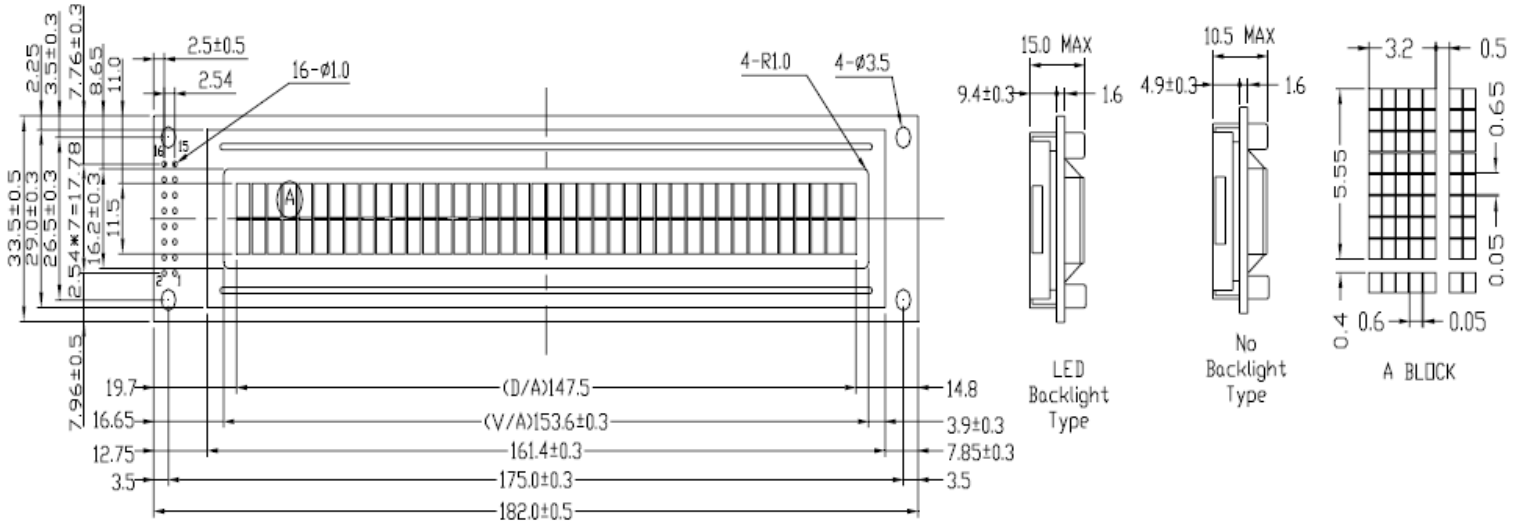




Basic Character LCD Drawing

Part Number: FDS40x2(175x26.5)SBC



- Features:**
1. 5x8 Dots , 40 Characters x 2 Lines
 2. Built-in controller (SPLC780D or Equivalent)
 3. +5V power supply
 4. BKL to be driven pin15, pin16, or A,K

Mechanical Data

| ITEM | STANDARD | UNIT |
|------------------|--------------|------|
| MODULE DIMENSION | 182.0 X 33.5 | mm |
| VIEWING AREA | 153.6 X 16.2 | mm |
| DOT SIZE | 0.60 X 0.65 | mm |
| CHARACTER SIZE | 3.20 X 5.55 | mm |

Interface Pin Connections

| NO | SYM | LEVEL | FUNCTION | NO | SYM | LEVEL | FUNCTION |
|----|-----------------|-------|-----------------|----|-----------------|---------|-----------------|
| 1 | V _{SS} | - | GND (0V) | 9 | DB ₂ | H/L | Data Bit 2 |
| 2 | V _{DD} | - | DC +5V | 10 | DB ₃ | H/L | Data Bit 3 |
| 3 | V _O | - | Contrast Adjust | 11 | DB ₄ | H/L | Data Bit 4 |
| 4 | RS | H/L | Register Select | 12 | DB ₅ | H/L | Data Bit 5 |
| 5 | R/W | H/L | Read/Write | 13 | DB ₆ | H/L | Data Bit 6 |
| 6 | E | H,H→L | Enable Signal | 14 | DB ₇ | H/L | Data Bit 7 |
| 7 | DB ₀ | H/L | Data Bit 0 | 15 | A(+) | DC+5.0V | LED Backlight + |
| 8 | DB ₁ | H/L | Data Bit 1 | 16 | K(-) | 0V | LED Backlight - |

Absolute Maximum Rating

| ITEM | SYMBOL | MIN | TYP | MAX | UNIT |
|-----------------------------|--------------------------------|-----------------|-----|-----------------|------|
| Supply Voltage for Logic | V _{DD-V_{SS}} | -- | 5.0 | 6.5 | V |
| Supply Voltage for LCD | V _{DD-V_O} | -- | -- | 6.5 | |
| Input Voltage | V _I | V _{SS} | -- | V _{DD} | |
| Operating Temperature Range | V _{OP} | -20 | -- | +70 | °C |
| Storage Temperature Range | V _{ST} | -30 | -- | +80 | |

Electrical Characteristics

| ITEM | SYM | CONDITION | MIN | TYP | MAX | UNIT |
|--------------------------|--------------------------------|--------------------------|-----|---------|-----------------|------|
| Supply Voltage for Logic | V _{DD-V_{SS}} | -- | 4.5 | 5.0 | 5.5 | V |
| Supply Voltage for LCD | V _{DD-V_O} | T _a =0/-20C | -- | 4.6/4.8 | -- | |
| | | T _a =+25C | 4.1 | 4.3 | 4.5 | |
| | | T _a =+50/+70C | -- | 4.0/3.9 | -- | |
| "H" Input Voltage | V _{IH} | -- | 2.5 | -- | V _{DD} | |
| "L" Input Voltage | V _{IL} | -- | 0 | -- | 0.6 | |
| "H" Output Voltage | V _{OH} | -- | 2.4 | -- | -- | |
| "L" Output Voltage | V _{OL} | -- | -- | -- | 0.4 | |
| Supply Current | I _{DD} | V _{DD} =+5V | -- | 4.0 | 5.5 | mA |