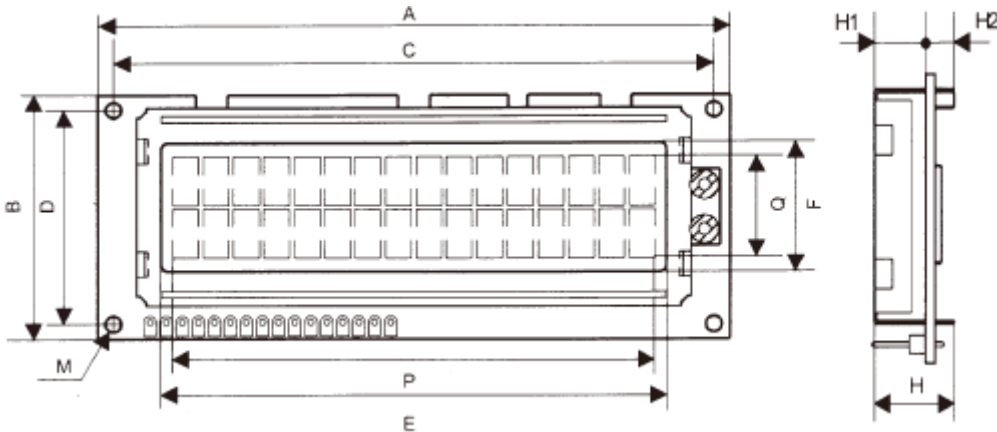


## Check List for Custom Designed LCD Modules

### Dimensions



### DISPLAY Contents

- Character type:**  Characters  lines ; **Character font:**  x  dots + cursor
- Graphics type:**  x  dots ; **Dot pitch:**  mm ; **Dot size:**  x  mm
- Others** (segment type, annunciator, etc.)

### LCD

**View angle:**  6'o clock;  12'o clock;   'o clock;

#### Type:

- TN
- STN:  yellow green  Gray  Blue
- FATN (Black & White)
- Others:
- Positive type
- Negative type
- Reflective
- Transflective
- Transmissive

**Visual Specifications:**  Normal  Anti-glare

**Polarize Color:**  Normal (neutral gray)

### I/O Terminals

**Specifying allocation:**  Yes  No

**Specifying position:**  Yes  No

### IC

#### LCE driver:

- Segment Driver
- Common Driver

**Controller:**   Build-in  External

**MPU:**   Build  External

### Power Source

#### LCD driver:

Single power supply  5V

2 Power suppliers

**For logic:**  $V_{DD} - V_{SS} =$   V

**For LCD drive:**  $V_{DD} - V_{LCD} =$   V

### Connectors

Without  With Model No.

Build-in  External

**A x B:** Module size  x  mm

**E x F:** View area  x  mm

**P x Q:** DISPLAY area  x  mm

**C:** Length between mounting holes  mm

**D:** Width between mounting holes  mm

**M:** Diameter of mounting holes  mm

**H:** Total thickness  mm

**H1:** Upper thickness  mm

**H2:** Lower thickness  mm

### Current Consumption

**For logic:** typ.  mA, max.  mA

**For LCD drive:** typ.  mA, max.  mA

**Others:** , typ.  mA, max.  mA

### Contrast Adjustment

**Method:** ,  Build-In  External

### Driving method

**Multiplexing:** 1/  duty, 1/  bias

**Frame frequency:**  Hz

### Temperature Compensation Circuit

**Compensation range:**  0°C to 50°C,   °C to  °C

### Backlight

Without

With

**EL :**  Green  White

**LED :**  Yellow Green  Amber

**CCFL :**  White  Bottom type  Edge type

**Brightness:**  cd/m<sup>2</sup>

**Inverter:**  Unnecessary  Necessary

**Brightness adjustment:**  Unnecessary  Necessary

### Temperature Range

**Operating temperature range:**  0°C to 50°C,   °C to  °C

**Storage temperature range:**  -20°C to 60°C,   °C to  °C

### Application

### Schedule

**Estimate:**

**Sample:** dilivery  quantity  pcs

**Mass production:** dilivery  quantity per month  pcs; total quantity