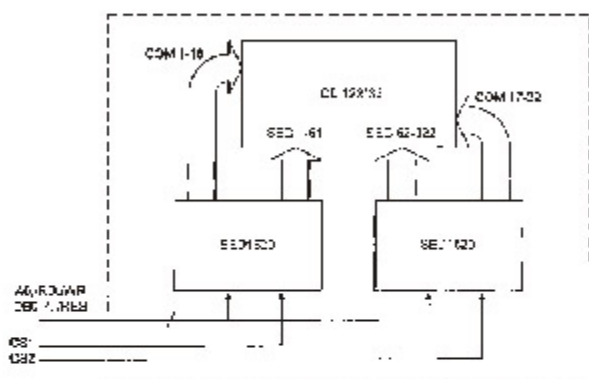


## FEATURE

1. Construction : STN/FSTN LCD, Bezel, Zebra and PCB.
2. Optional LED or EL back-light.
3. Controller : SED1520DOA or equivalent.
4. Besides +5V for logic circuit, -5V is needed for LCD driving.  
(Optional DC/DC Converter)
5. Normal / Extended temperature type.

## BLOCK DIAGRAM & POWER SUPPLY

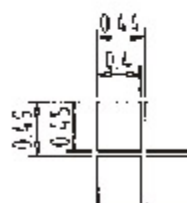
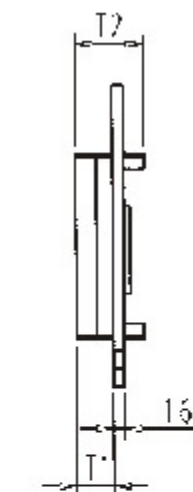
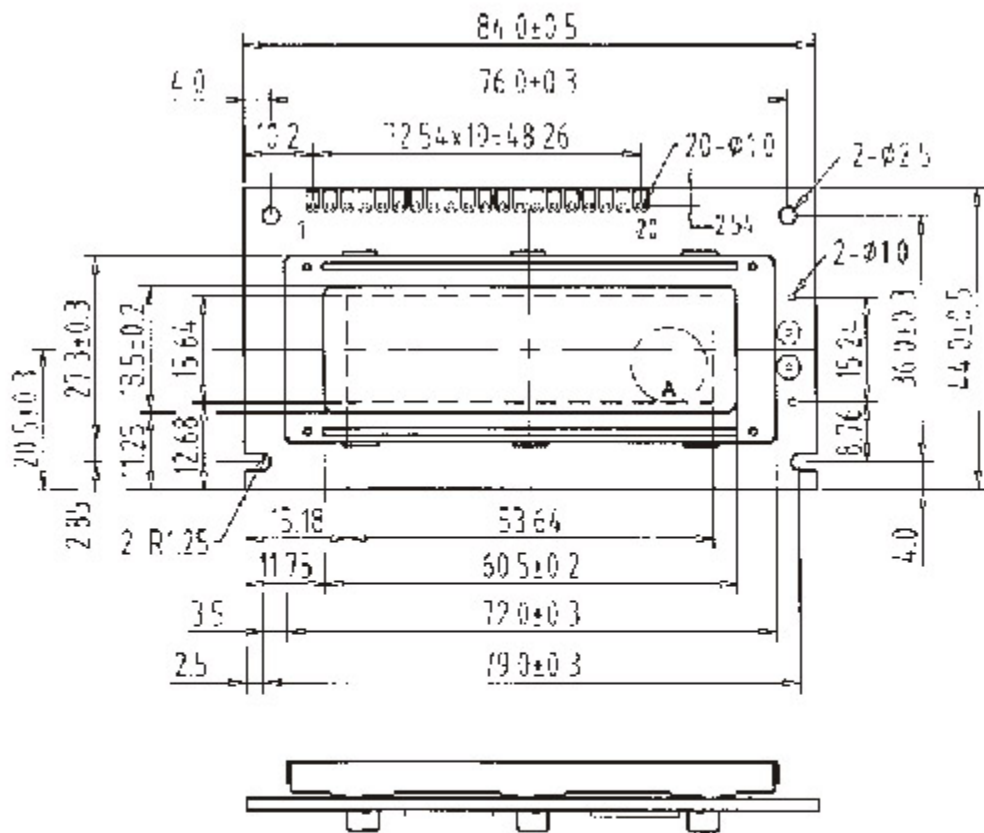
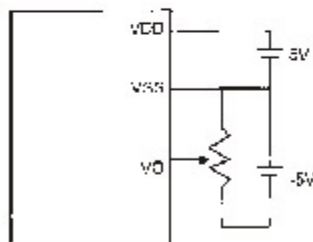


## ELECTRICAL CHARACTERISTICS

| Item                | Symbol | Condition | Typ. Value | Unit. |
|---------------------|--------|-----------|------------|-------|
| LCD Driving Voltage | VDD-VO | 25°C      | 6.4        | V     |
| Supply Current      | IDD    | VDD=5.0V  | 0.5        | mA    |

## INTERFACE

| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   |
|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| VSS | VDD | VO  | AO  | CS1 | CS2 | CL  | /RD | /WR  | DE0  |
| 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19   | 20   |
| DB1 | DB2 | DB3 | DB4 | DB5 | DB6 | DB7 | RES | LEDA | LEDK |



**A BLOCK**

THICKNESS:

| VERSION           | T1       | T2      |
|-------------------|----------|---------|
| EL & NO BACKLIGHT | 5.4±0.3  | 10.5Max |
| LED BACKLIGHT     | 10.4±0.3 | 15.5Max |