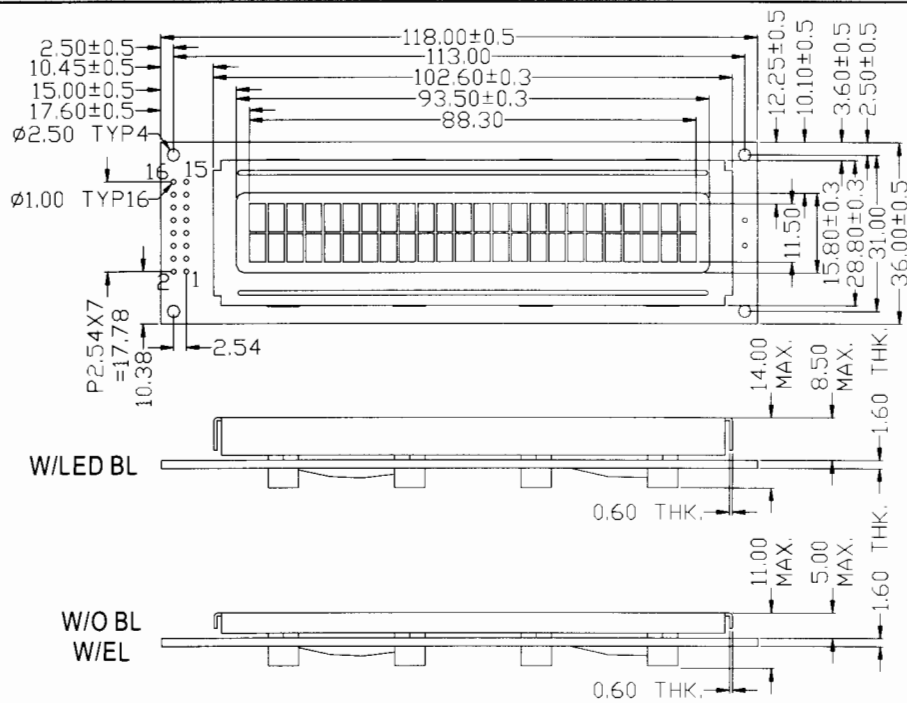
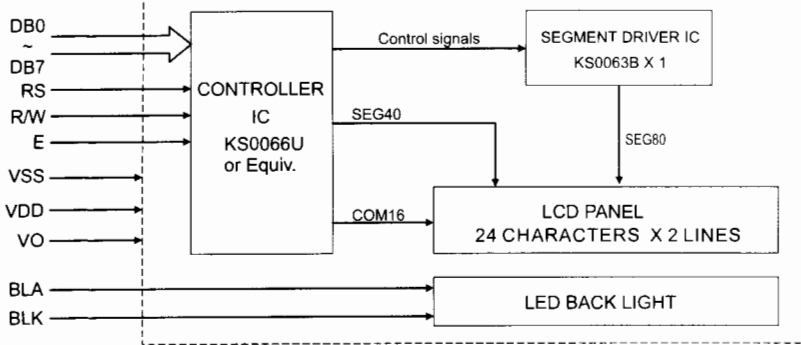


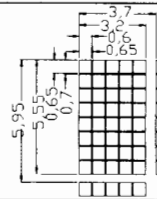
### OUTLINE DIMENSION



### BLOCK DIAGRAM



### DISPLAY PATTERN



### MECHANICAL SPECIFICATION

Item	Dimensions (w) X (H)	Unit
Overall Size	118.0 x 36.0	MM
View Area	93.5 x 15.8	MM
Character	3.20 X 5.55	MM
Dot Size	0.60 X 0.65	MM
Dot Pitch	0.65 X 0.70	MM

### PIN ASSIGNMENT

Pin no.	Symbol	Function
1	VSS	Power Supply (GND)
2	VDD	Power supply (+)
3	VO	Contract Adjust
4	RS	Command data input
5	R/W	Data read / write
6	E	Enable signal
7-14	DB0 ~ DB7	Data bus line
15	BLA	Back light anode
16	BLK	Back light cathode

### ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Unit
Supply for logic voltage	V <sub>DD</sub>	25°C	-0.3	7.0	V
LCD driving supply voltage	V <sub>DD</sub> - V <sub>O</sub>	25°C	-0.3	V <sub>DD</sub> +0.3	V
Input voltage	V <sub>I</sub>	25°C	-0.3	V <sub>DD</sub> +0.3	V

### ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Unit
Supply voltage for logic	V <sub>DD</sub>	---	4.5	5.0	5.5	V
Supply current for logic	I <sub>DD</sub>	---	---	1.38	4	mA
Operation voltage for LCD	V <sub>DD</sub> - V <sub>O</sub>	0°C	4.7	5.0	5.3	V
		25°C	4.5	4.8	5.1	V
		50°C	4.4	4.7	5.0	V
Input voltage "H" level	V <sub>IH</sub>	---	V <sub>DD</sub> -2.2	---	V <sub>DD</sub>	V
Input voltage "L" level	V <sub>IL</sub>	---	0	---	0.8	V
Supply voltage for back light	V <sub>F</sub>	---	---	4.2	4.6	V
Supply current for back light	I <sub>F</sub>	V <sub>F</sub> =4.2V	---	280	480	mA

### REMARKS:

- LCD options: STN, TN, FSTN.
- Back light Options: EL Back light feature, other Specs not available on catalog is under request.