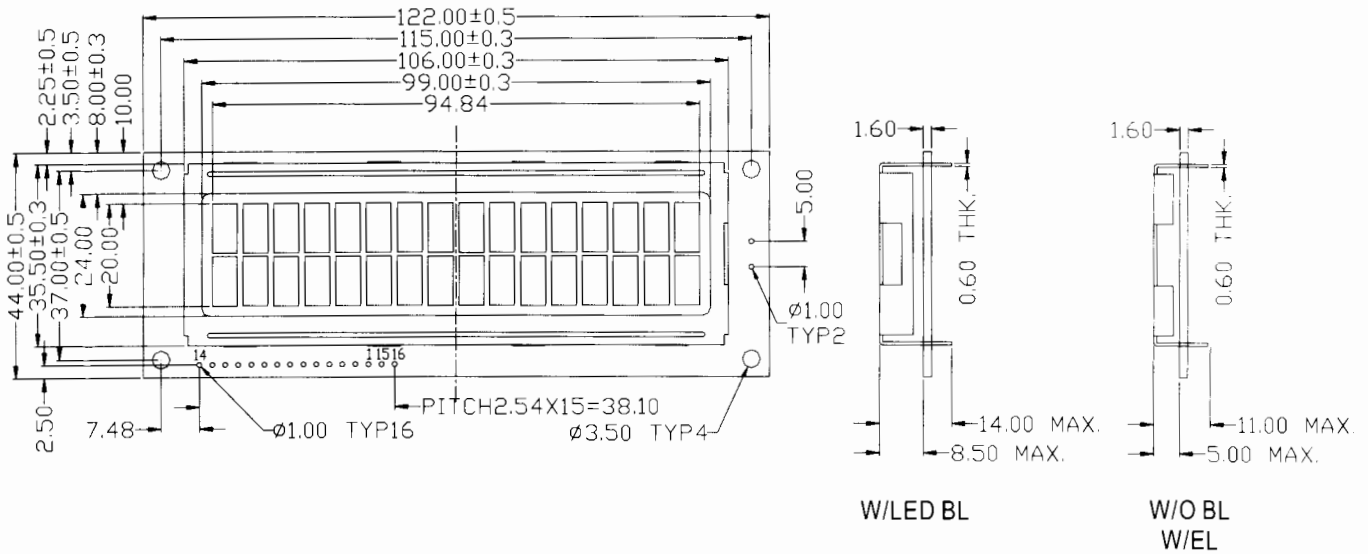
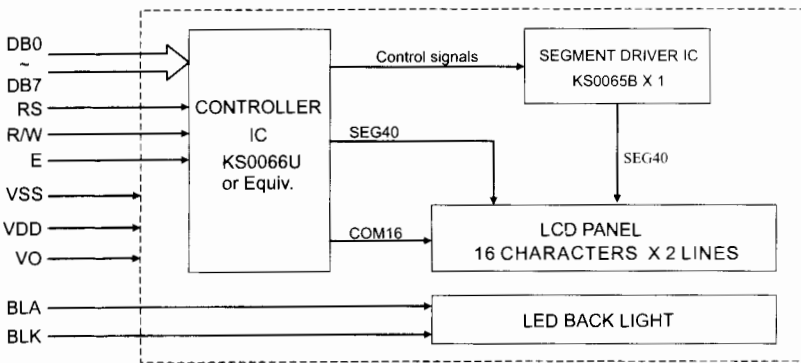


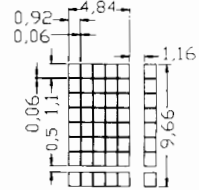
OUTLINE DIMENSION



BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions (w) X (H)	Unit
Overall Size	122 X 44.0	MM
View Area	99.0 X 24.0	MM
Character	4.84 X 9.66	MM
Dot Size	0.92 X 1.10	MM
Dot Pitch	0.98 X 1.16	MM

PIN ASSIGNMENT

Pin no.	Symbol	Function
1	Vss	Power Supply (GND)
2	Vdd	Power supply (+)
3	VO	Contrast 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 _{DD}	25°C	-0.3	7.0	V
LCD driving supply voltage	V _{DD} - V _O	25°C	-0.3	V _{DD} +0.3	V
Input voltage	V _I	25°C	-0.3	V _{DD} +0.3	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Unit
Supply voltage for logic	V _{DD}	---	4.5	5.0	5.5	V
Supply current for logic	I _{DD}	---	---	1.38	3	mA
Operation voltage for LCD	V _{DD} - V _O	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 _{IH}	---	2.2	---	V _{DD}	V
Input voltage "L" level	V _{IL}	---	-0.3	---	0.6	V
Supply voltage for back light	V _F	---	---	4.2	4.6	V
Supply current for back light	I _F	V _F =4.2V	---	100	180	mA

REMARKS:

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