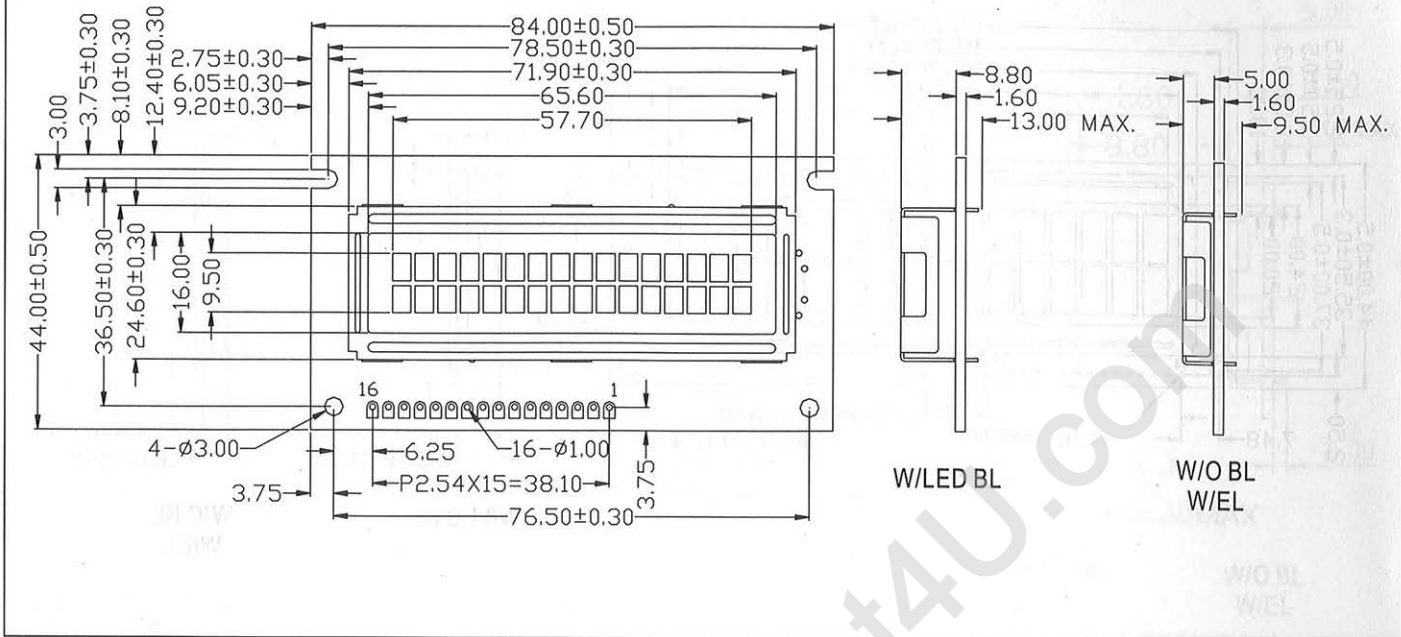
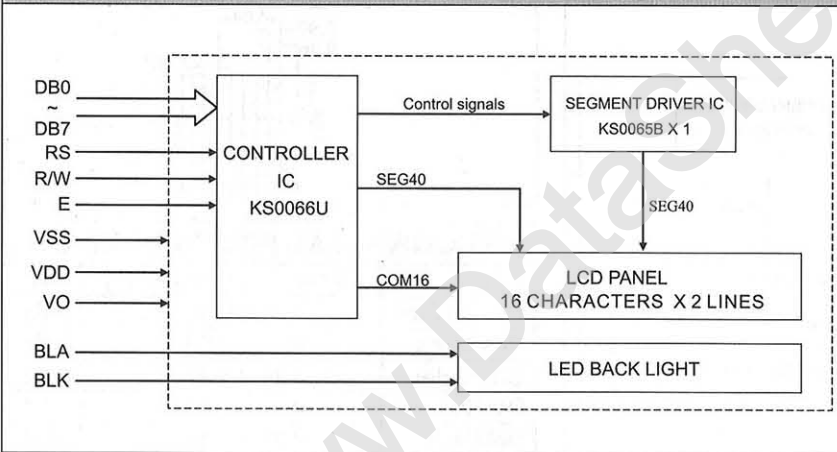


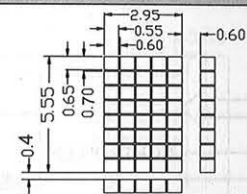
OUTLINE DIMENSION



BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions (w) X (H)	Unit
Overall Size	84.0 X 44.0	MM
View Area	65.6 X 16.0	MM
Character	2.95 X 5.55	MM
Dot Size	0.55 X 0.65	MM
Dot Pitch	0.60 X 0.70	MM

PIN ASSIGNMENT

Pin no.	Symbol	Function
1	BLK	Back light cathode
2	BLA	Back light anode
3	VSS	Power Supply (GND)
4	VDD	Power supply (+)
5	VO	Contrast Adjust
6	RS	Command data input
7	RW	Data read / write
8	E	Enable signal
9~16	DB0 ~ DB7	Data bus line

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Unit
Supply for logic voltage	VDD	25°C	-0.3	7.0	V
LCD driving supply voltage	VDD - VO	25°C	-0.3	VDD+0.3	V
Input voltage	VI	25°C	-0.3	VDD+0.3	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Unit
Supply voltage for logic	VDD	---	4.5	5.0	5.5	V
Supply current for logic	IDD	---	---	1.38	3	mA
Operation voltage for LCD	VDD - VO	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	VIH	---	2.2	---	VDD	V
Input voltage "L" level	VIL	---	-0.3	---	0.6	V
Supply voltage for back light	VF	---	---	4.2	4.6	V
Supply current for back light	IF	VF=4.2V	---	150	230	mA

REMARKS:

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