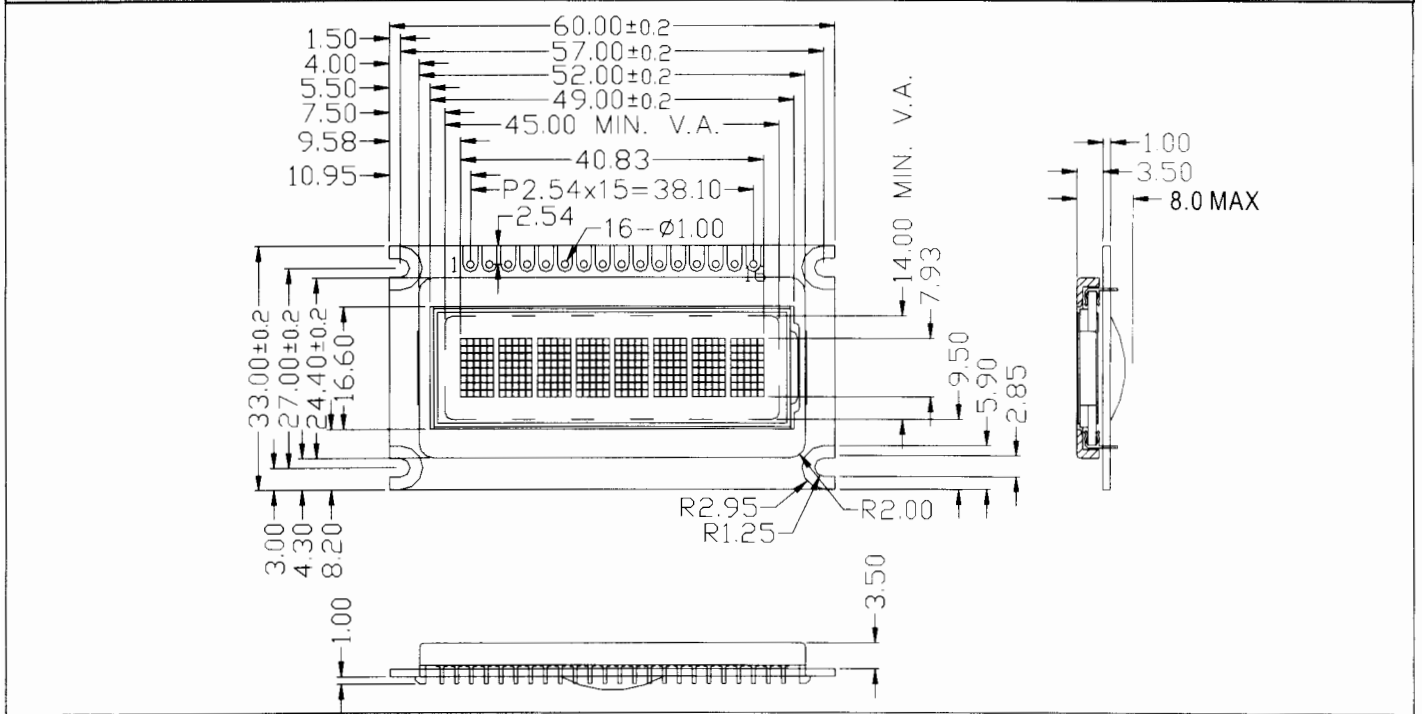
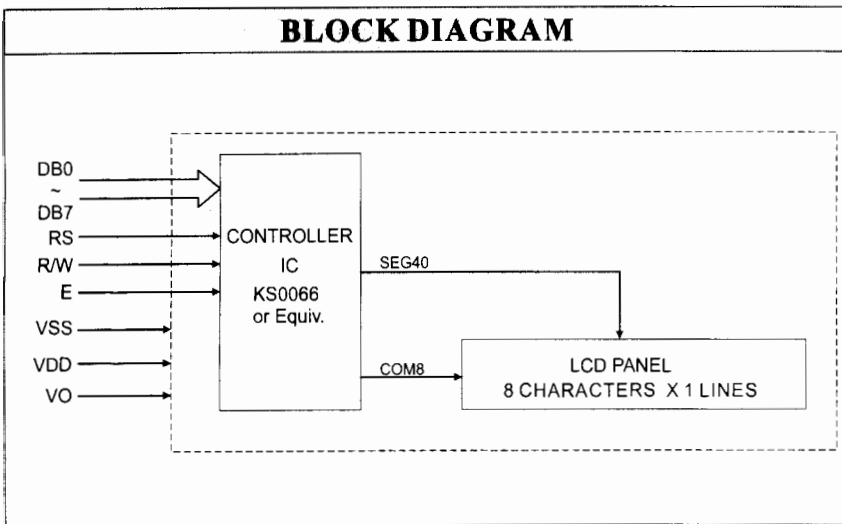


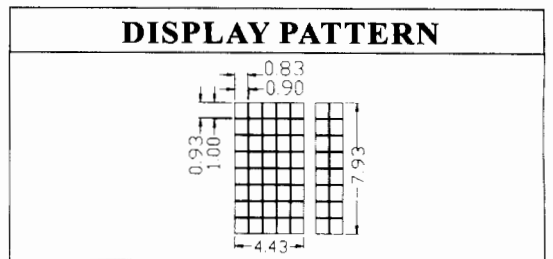
### OUTLINE DIMENSION



### BLOCK DIAGRAM



### DISPLAY PATTERN



### MECHANICAL SPECIFICATION

Item	Dimensions (w) X (H)	Unit
Overall Size	60.0 X 33.0	MM
View Area	45.0 X 14.0	MM
Character	4.43 X 7.93	MM
Dot Size	0.83 X 0.93	MM
Dot Pitch	0.90 X 1.00	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	NC	No connection
16	NC	No connection

### 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	---	---	0.35	0.6	mA
Operation voltage for LCD	VDD - VO	0°C	4.9	5.2	5.5	V
		25°C	4.7	5.0	5.3	V
		50°C	4.5	4.8	5.1	V
Input voltage "H" level	V <sub>IH</sub>	---	2.2	---	VDD	V
Input voltage "L" level	V <sub>IL</sub>	---	-0.3	---	0.6	V

### REMARKS:

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