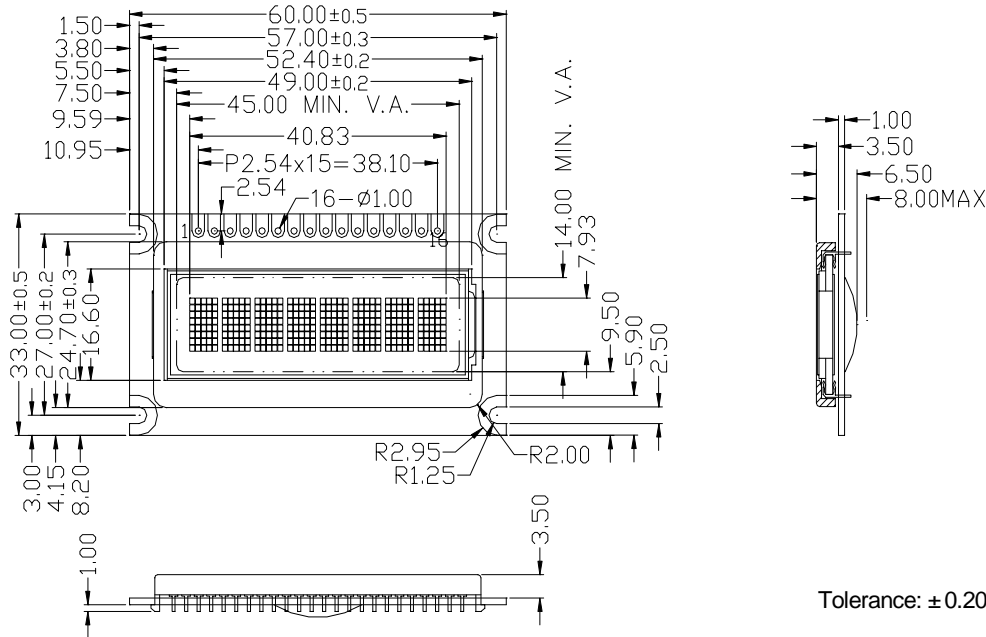
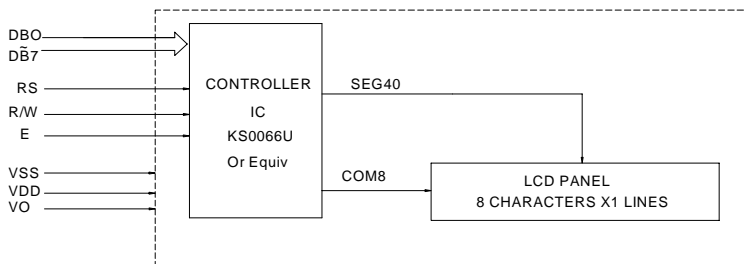
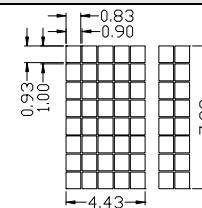


OUTLINE DIMENSION


Tolerance: ±0.20mm, unless otherwise specified.

Character Type
BLOCK DIAGRAM

DISPLAY PATTERN

MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	60.0x33.0	MM
View Area	45.0x14.0	MM
Character	4.43x7.93	MM
Dot Size	0.83x0.93	MM
Dot Pitch	0.90x1.00	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	VIH	---	2.2	---	VDD	V
Input voltage " L " level	VIL	---	-0.3	---	0.6	V

REMARKS:

- LCD options: STN, TN.
- Back light type: Without Back light feature.