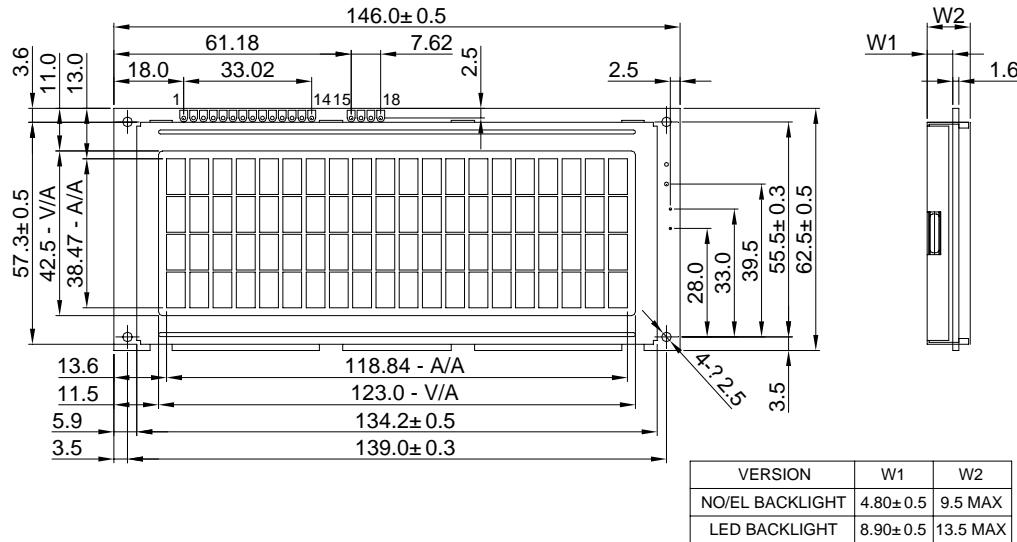


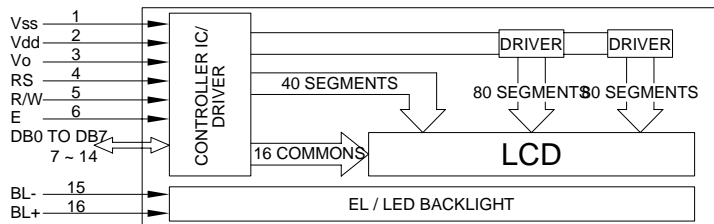
# Standard LCD module

# MC2004-07

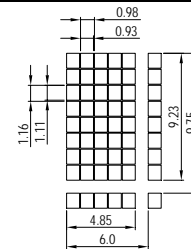
## OUTLINE DIMENSION



## BLOCK DIAGRAM



## DISPLAY PATTERN



## MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	146.0x62.5	MM
View Area	123.0x42.5	MM
Character	4.85x9.23	MM
Dot Size	0.93x1.11	MM
Dot Pitch	0.98x1.16	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	BL-	Back light cathode
16	BL+	Back light anode
17	NC	
18	NC	
OPTION		
15	BL+	Back light anode
16	BL-	Back light cathode

## 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	---	---	2.00	3.30	mA
Operation voltage for LCD	VDD-Vo	0°C	---	---	---	V
		25°C	4.3	4.5	4.7	V
		50°C	---	---	---	V
Input voltage "H" level	VIH	---	0.7VDD	---	VDD	V
Input voltage "L" level	VIL	---	-0.3	---	0.6	V
Supply voltage for back light	VBL	---	According to back light type			V
Supply current for back lihgt	IBL	---	According to back light type			mA

### REMARKS:

- LCD options: STN, TN, FSTN.
- Back light type: LED/EL Back light feature.