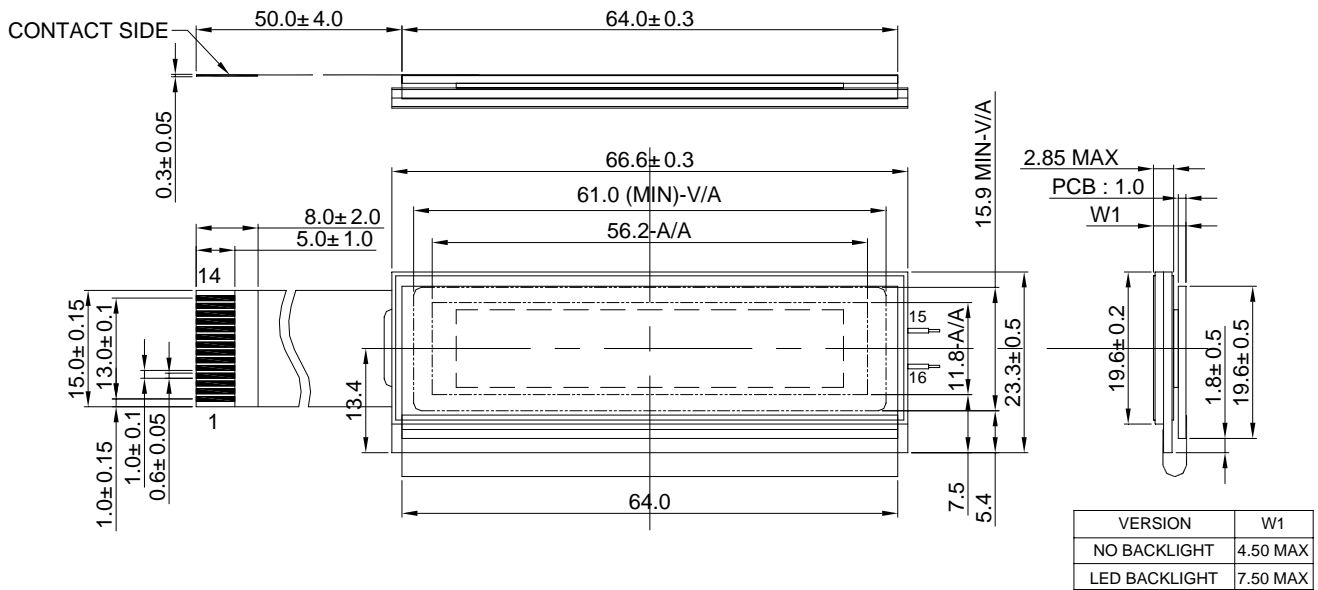


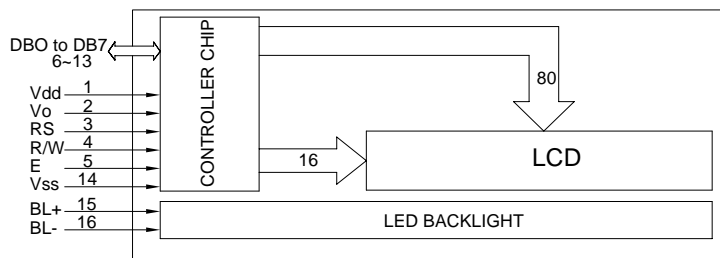
Standard LCD module

MC1602-05

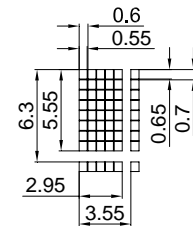
OUTLINE DIMENSION



BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	66.6x23.3(without FFC length)	MM
View Area	16.0x15.9	MM
Character	2.95x5.55	MM
Dot Size	0.55x0.65	MM
Dot Pitch	0.60x0.70	MM

PIN ASSIGNMENT

Pin	Symbol	Function
1	VDD	Power Supply(+)
2	Vo	Power supply for LCD driver
3	RS	Command data input
4	R/W	Data read / write
5	E	Enable signal
6-13	DB0~DB7	Data bus line
14	VSS	Power Supply(Ground)
15	BL+	Back light power anode
16	BL-	Back light power 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	---	---	1.0	2.0	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 light	IBL	---	According to back light type			mA

REMARKS:

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