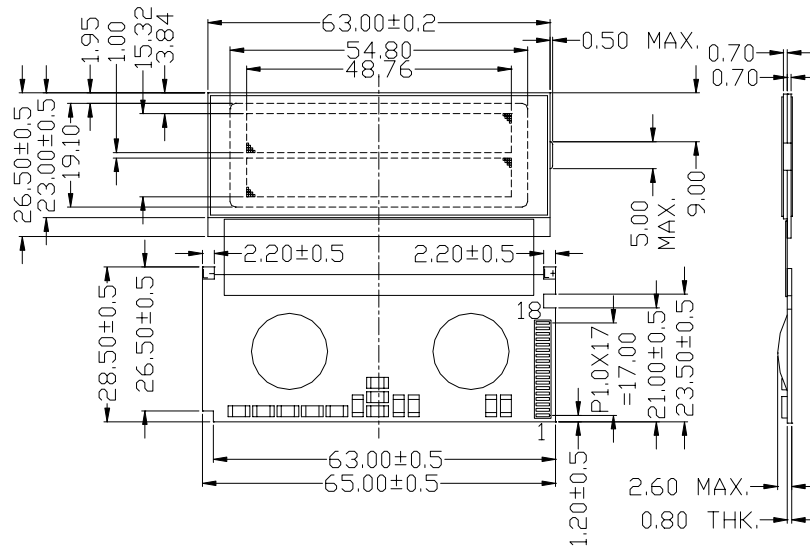


Standard LCD module

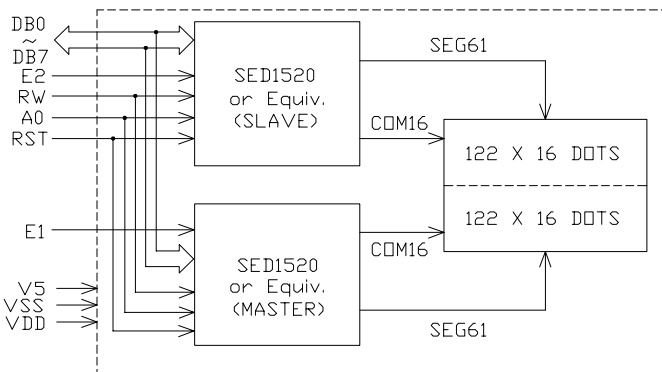
MG12232-11

OUTLINE DIMENSION

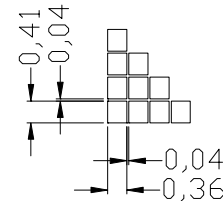


Tolerance: ±0.20mm, unless otherwise specified.

BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	63.0x26.5	MM
View Area	54.8x19.1	MM
Dot Size	0.36x0.41	MM
Dot Pitch	0.40x0.45	MM

PIN ASSIGNMENT

Pin no	Symbol	Function
1	V _{DD}	Power Supply(+)
2	V _{SS}	Power Supply(GND)
3	V ₅	Contrast Adjust
4	RST	Reset
5	E1	Enable driver 1
6	E2	Enable driver 2
7	R/W	Data read / write
8	A0	Data/Instruction signal
9~16	DB0~DB7	Data bus line
17	NC	No connection
18	NC	No connection

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	V _{DD}	25°C	0	6.7	V
LCD driving supply voltage	V _{LCD}	25°C	0	10	V
Input voltage	V _I	25°C	0	V _{DD}	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min	Typical	Max	Unit
Supply voltage for logic	V _{DD}	---	2.7	---	4.5	V
Supply current for logic	I _{DD}	---	---	0.3	1	mA
Operation voltage for LCD	V _{DD} - V ₅	0°C	5.4	5.7	6.0	V
		25°C	5.2	5.5	5.8	V
		50°C	4.8	5.1	5.4	V
Input voltage "H" level	V _{IH}	---	0.8V _{DD}	---	V _{DD}	V
Input voltage "L" level	V _{IL}	---	0	---	0.2V _{DD}	V

REMARKS:

1. LCD Options: STN, FSTN.
2. Back light type: Without Back light feature.