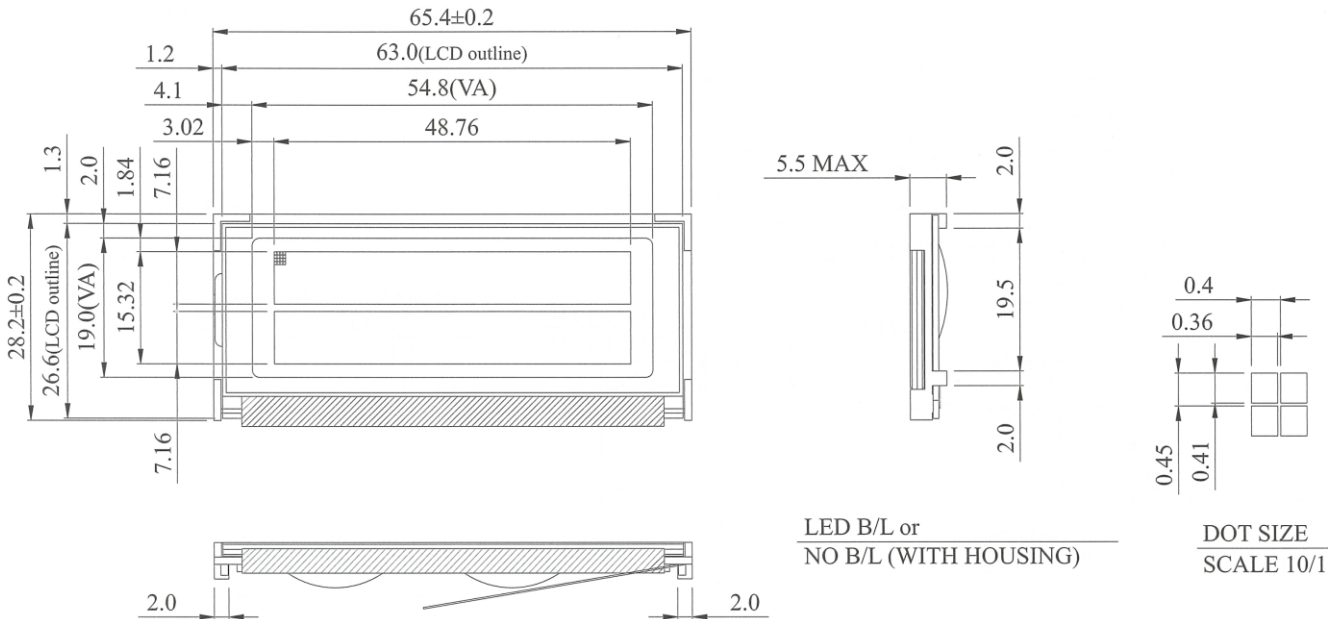


# MSG12232M

Graphic 122x32 dots

# GMS.

■ ■ ■ DISPLAY SYSTEMS



LED B/L or  
NO B/L (WITH HOUSING)

DOT SIZE  
SCALE 10/1

Feature		
1. Built-in Controller (ST7920)		
2. 1/32 duty cycle		
3. +5.0V power supply		
4. Chinese Version		
5. Same size with MSG12232B		
6. White LED Backlight not available		
Pin	Symbol	Function
1	Vdd	Power supply +5V
2	Vss	GND
3	Vo	Contrast Adjustment
4	RES	L: Reset the LCM
5	E	Enable
6	Vout	Positive voltage output
7	R/W	H: read data / L: write data
8	RS	H/L register select signal
9	DB0	Data bus line
10	DB1	Data bus line
11	DB2	Data bus line
12	DB3	Data bus line
13	DB4	Data bus line
14	DB5	Data bus line
15	DB6	Data bus line
16	DB7	Data bus line
17	A	Power supply for B/L (+)
18	K	Power supply for B/L (-)

Mechanical Data					
Item	Standard Value	Unit			
Module Dimension	65.4 x 28.2	mm			
Viewing Area	54.8 x 19.0	mm			
Dot Size	0.36 x 0.41	mm			
Dot Pitch	0.40 x 0.45	mm			
Absolute Maximum Rating					
Item	Symbol	Standard Value			Unit
Power Supply	Vdd - Vss	min	typ	max	V
Input Voltage	Vi	0	---	Vdd	V

Note: Vss=0 V, Vdd=5.0 V

Electrical Characteristics						
Item	Symbol	Condition	Standard Value			Unit
			min	typ	max	
Input Voltage	Vdd	Vdd=±5V	4.5	5.0	5.5	V
Supply Current	Idd	Vdd=5V	0.8	1.0	1.2	mA
Recommended LC Driving Voltage for normal Temperature Version module	Vdd-Vo	-20°C	---	---	5.3	V
		25°C	---	4.8	---	
		70°C	4.2	---	---	

See Specification for Backlight information.

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