

LMG-S19A32	192 Dots X 32 Dots	1/32 Duty	1/6 Bias
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FEATURE		
LCD TYPE	STN , FSTN	
LCM CONTROLLER IC	ST7920 or Equivalent	
NUMBER OF CHARACTER	12 CHARACTERS X 2 LINES (192*32 Dots)	
CHARACTER FORMAT	16X16 Dots	
CHINESE CODE SYSTEM	BIG-5 or GB Code	
LCM BACKLIGHT TYPE	LED	
POWER SUPPLY FOR LCM	DC +5V	
LED BACKLIGHT INPUT	DC +5V	
LCM DIMENSION	115.0 (W) X 36.0 (H)	mm
LCM VIEWING	85.0 (W) X 18.6 (H)	mm
ACTIVE DISPLAY AREA	80.61 (W) X 14.37 (H)	mm
LCD DOT SIZE	0.39 (W) X 0.42 (H)	mm
LCD DOT PITCH	0.42 (W) X 0.45 (H)	mm

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYM.	MIN.	TYP.	MAX.	UNIT
OPERATING TEMP.	T _{OP}	0	--	+50	°C
STORAGE TEMP.	T _{SP}	-10	--	+60	°C
INPUT VOLTAGE	V _I	V _{SS}	--	V _{DD}	V
SUPPLY VOL. FOR LCD	--	--	--	--	V

INTERFACE PIN CONNECTIONS				
NO.	SYM.	LEVEL	FUNCTION	
1	VSS	--	GND (0V)	
2	VDD	--	DC +5V	
3	N.C	--	--	
4	RS	H/L	Register select	
5	R/W	H/L	Read/Write	
6	E	H,H→L	Enable signal	
7	DB0	H/L	Data Bit 0	
8	DB1	H/L	Data Bit 1	
9	DB2	H/L	Data Bit 2	
10	DB3	H/L	Data Bit 3	
11	DB4	H/L	Data Bit 4	
12	DB5	H/L	Data Bit 5	
13	DB6	H/L	Data Bit 6	
14	DB7	H/L	Data Bit 7	

ELECTRICAL						
ITEM	SYM.	CONDITION	MIN.	TYP.	MAX	UNIT
Supply Voltage For LCD Driver	V _{LCD}	Ta=0°C	--	6.0	--	V
		Ta=25°C	--	5.8	--	
		Ta=50°C	--	5.5	--	
Operating Voltage For LCD Module	V _{DD} -V _{SS}	--	4.5	5.0	5.5	V
Input High Voltage	V _{IH}	--	2.2	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.6	V
Output High Voltage	V _{OH}	--	2.4	--	--	V
Output Low Voltage	V _{OL}	--	--	--	0.4	V
Supply Current For Logic	I _{DD}	V _{DD} =5V	--	4.0	5.5	mA
LED Current	I _F	Ta=25°C	--	60/140	--	mA

