

LMG-S24I12	240 Dots X 128 Dots	1/128 Duty	1/12 Bias
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FEATURE		
LCD TYPE	STN , FSTN	
LCM CONTROLLER IC	T6963C or Equivalent	
LCM BACKLIGHT TYPE	LED	
POWER SUPPLY FOR LCM	DC +5V	
LED BACKLIGHT INPUT	DC +5V	
LCM DIMENSION	91.8 (W) X 74.0 (H)	mm
LCM VIEWING	83.2 (W) X 54.0 (H)	mm
ACTIVE DISPLAY AREA	79.17 (W) X 46.05 (H)	mm
LCD DOT SIZE	0.30 (W) X 0.33 (H)	mm
LCD DOT PITCH	0.33 (W) X 0.36 (H)	mm

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYM.	MIN.	TYP.	MAX.	UNIT
OPERATING TEMP.	T _{OP}	-20	--	+70	°C
STORAGE TEMP.	T _{ST}	-30	--	+80	°C
INPUT VOLTAGE	V _I	V _{SS}	--	V _{DD}	V
SUPPLY VOL. FOR LOGIC	V _{DD} -V _{SS}	--	5.0	6.5	V
SUPPLY VOL. FOR LCD	V _{DD} -V _O	--	13.0	17.0	V

INTERFACE PIN CONNECTIONS (JP1)			
NO.	SYM.	LEVEL	FUNCTION
1	FGND	--	Frame ground
2	V _{SS}	--	Ground potential (Logic)
3	V _{DD}	--	Power supply for Logic Circuit
4	V _O	--	Power supply for LCD Circuit
5	/WR	L	Data write
6	/RD	L	Data read
7	/CE	L	Chip enable
8	C/D	H/L	Command/Data
9	V _{EE}	--	Negative Voltage
10	/RST	L	Controller reset
11	DB0	H/L	Data Bit 0
12	DB1	H/L	Data Bit 1
13	DB2	H/L	Data Bit 2
14	DB3	H/L	Data Bit 3
15	DB4	H/L	Data Bit 4
16	DB5	H/L	Data Bit 5
17	DB6	H/L	Data Bit 6
18	DB7	H/L	Data Bit 7
19	FS	H/L	Font select : H:6x8 L:8x8
20	A(+)	--	LED Backlight +

ELECTRICAL						
ITEM	SYM.	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V _{DD} -V _{SS}	Ta=25°C	4.5	5.0	5.5	V
Supply Voltage For LCD Driver	V _{LCD}	Ta=25°C	12.7	13.0	13.3	V
Input High Voltage	V _{IH}	--	2.2	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.6	V
Supply Current For Logic	I _{DD}	V _{DD} =+5V	--	9.0	12.0	mA
LED Current	I _F	Ta=25°C	--	104	--	mA

