

LMC-S2A20	20 Char X 2 Line	1/16 Duty	1/4 Bias
------------------	-------------------------	------------------	-----------------

FEATURE		
LCD TYPE	TN, STN, FSTN	
LCM CONTROLLER IC	SPLC780 or Equivalent	
CHARACTER FONTS	5X8 Dots (With Cursor)	
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	83.0 (W) X 18.6 (H)	mm
ACTIVE DISPLAY AREA	73.5 (W) X 11.5 (H)	mm
CHARACTER SIZE	3.20 (W) X 5.55 (H)	mm
CHARACTER PITCH	3.70 (W) X 5.95 (H)	mm
LCD DOT SIZE	0.60 (W) X 0.65 (H)	mm
LCD DOT PITCH	0.65 (W) X 0.70 (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 _{DD} -V _O	--	--	6.5	V

INTERFACE PIN CONNECTIONS			
NO.	SYM.	LEVEL	FUNCTION
1	VSS	--	GND (0V)
2	VDD	--	DC +5V
3	Vo	--	Contrast Adjust
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
15	A(+)	DC+5V	LED Backlight +
16	K(-)	0V	LED Backlight -

ELECTRICAL						
ITEM	SYM.	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For LCD Driver	V _{DD} -V _O	Ta=0°C	--	4.6	--	V
		Ta=25°C	--	4.3	--	V
		Ta=50°C	--	4.0	--	V
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	--	3.0	4.5	mA
LED Current	I _F	Ta=25°C	--	39/140	--	mA

