LMG - SS16B80	160 DOTS?/font>80 DOTS	1/80 DUTY	1/9 BIAS

Part Numbering System

1. FEATURE:

LCD TYPE	STN/FSTN
LCM BACKLIGHT TYPE	LED/EL BACKLIGHT
LCM CONTROLLER IC	BUILT IN LC7981 OR EQUIVALENT
POWER SUPPLY FOR LCM	DC +5.0V
LED BACKLIGHT INPUT	DC +5.0V
EL BACKLIGHT INPUT	AC90~100V(400~700HZ)
EL INVERTER	SDEC-I002A
FL BACKLIGHT INPUT	-
FL INVERTER	-
LCM DIMENSION	100.0x54.0x9.5(14.0) mm
LCM VIEWING AREA	72.0x39.0 mm
LCD DOT SIZE	0.39x0.39 mm
LCD DOT PITCH	0.42x0.42 mm

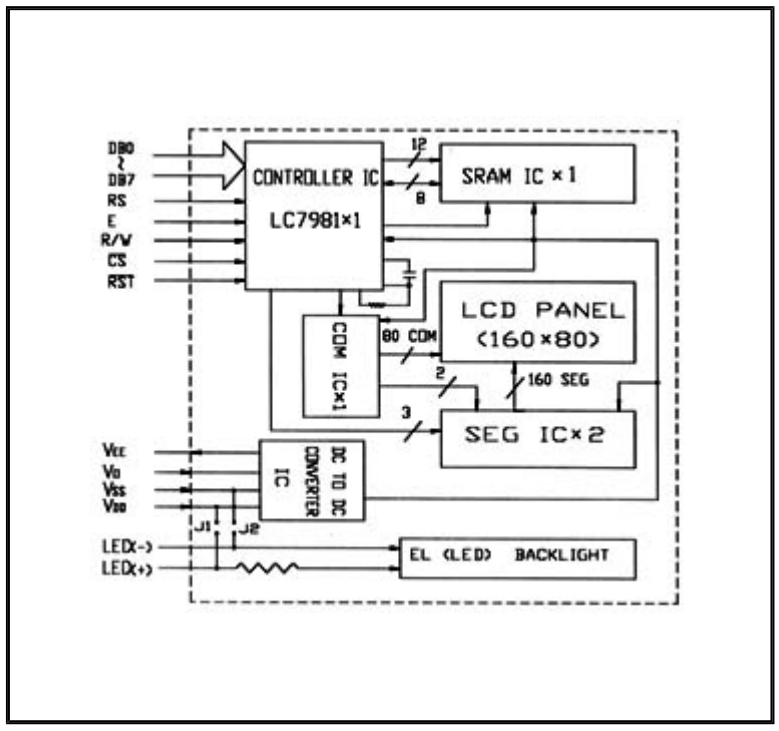
2. ELECTRICAL CHARACTERISTICS:

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_{EE}-V_{SS}	Ta=25 ° C	-	-	-5.0	V
OPERATING VOL. FOR LCD MODULE	V_{DD}-V_O	Ta=25 ° C	-	8.5	-	V
INPUT HIGH VOL.	V_{IH}	-	0.7V_{DD}	-	V_{DD}	V
INPUT LOW VOL .	V_{IL}	-	0	-	0.3V_{DD}	V
SUPPLY CURRENT FOR LOGIC	I_{DD}	V_{DD}=5.0V	-	-	10.0	V
SUPPLY CURRENT FOR LCD	I_{LCD}	V_O=-3.5V	-	-	15.0	mA
LED CURRENT	I_F	Ta=25 ° C	-	300	-	mA
LED DISSIPATION	P_D	Ta=25 ° C	-	1500	-	mW

3. ABSOLUTE MAXIMUM RATINGS:

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
OPERATING TEMP.	T_{OP}	0	-	+50	° C
STORAGE TEMP.	T_{ST}	-10	-	+60	° C
INPUT VOLTAGE	V_I	V_{SS}	-	V_{DD}	V
SUPPLY VOL-LOGIC	V_{DD}-V_{SS}	-	-	7.0	V
SUPPLY VOL-LCD	V_{DD}-V_{EE}	-	-	10.0	V

4. BLOCK DIAGRAM:



5. INTERFACE PIN CONNECTIONS:

NO	SYM	LEVEL	FUNCTION
1	V_{SS}	-	0V
2	V_{DD}	-	+5V
3	V_O	-	CONTRAST ADJ.
4	D/I	H/L	H:DATA, L:INSTRUCTION CODE
5	R/W	H/L	H:READ(LCD -- MPU) L:WRITE(MPU -- LCD)
6	E	H.H.-- L	ENABLE SIGNAL
7	DB_0	H/L	DATA BIT 0
8	DB_1	H/L	DATA BIT1
9	DB_2	H/L	DATA BIT 2
10	DB_3	H/L	DATA BIT 3
11	DB_4	H/L	DATA BIT 4
12	DB_5	H/L	DATA BIT 5
13	DB_6	H/L	DATA BIT 6
14	DB_7	H/L	DATA BIT 7
15	$\overline{CS}$	H/L	CHIP ENABLE SIGNAL
16	$\overline{RST}$	L	RESET SIGNAL
17	VEE	-	NEGATIVE VOLTAGE OUTPUT (-5.0V)
18	N.C	-	NO CONNECTION
19	A(+)	+5.0V	BACKLIGHT (+)
20	K(-)	0V	BACKLIGHT (-)

7. DIMENSIONAL DRAWING: