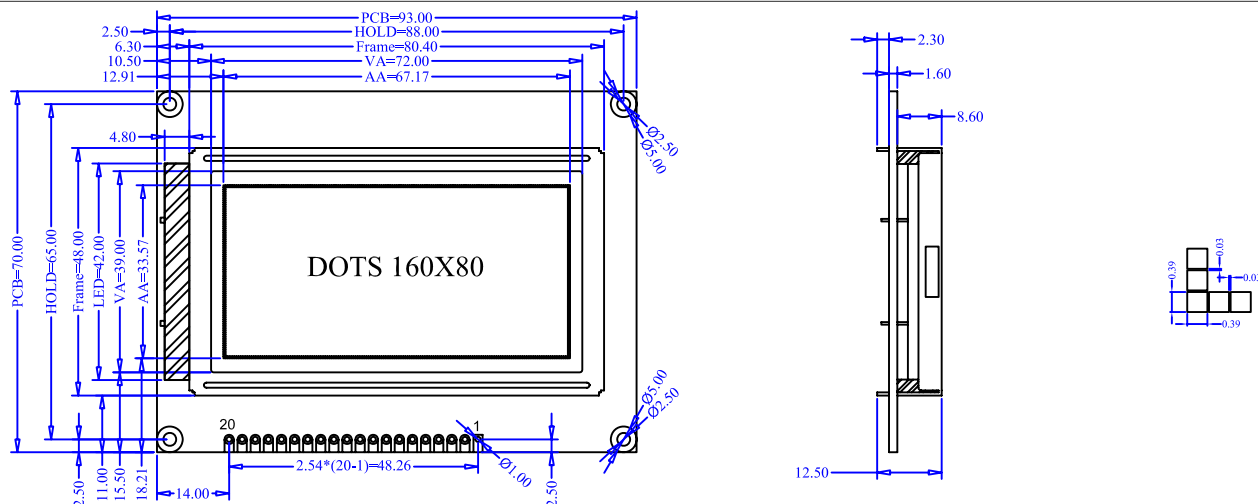


1. DIMENSION OUTLINE



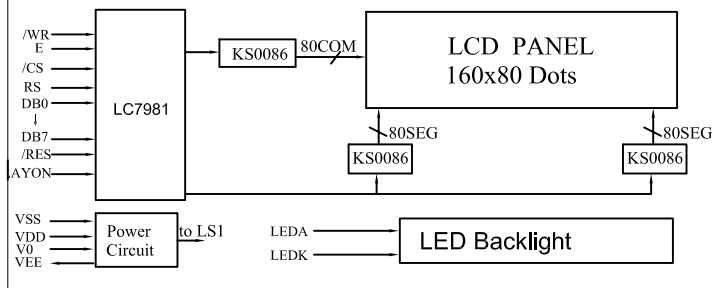
2. MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	93.0×70.0×12.5	mm	Reference Dimensional Outline
View Area(W×H)	72.0×39.0	mm	
Effective V/Area	67.17×33.57	mm	
Number of Characters	160×80	-	
Dot Pitch(W×H)	0.42×0.42	mm	
Dot Size(W×H)	0.42×0.42	mm	

3. ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	CONDITION	STANDARD	
			MIN	MAX
Logic Voltage	V _{DD}	Ta=25°C	-0.3V	7V
LCD Voltage	V _{LCD}		-0.3V	-15V
Input Voltage	V _I		-0.3V	V _{DD} +0.3V
Operation Temperature	T _{OP}	—	-20°C	70°C
Storage Temperature	T _{st}	—	-30°C	80°C

4. BLOCK DIAGRAM MECHANICAL



6. INTERFACE PIN CONNECTIONS

ITEM (PIN1)	SYMBOL	LEVEL	FUNCTIONS
1	VSS	0V	Power Ground
2	VDD	+3.3V	Power supply for logic
3	V0	—	Contrast adjust
4	RS	H/L	H:command L:data
5	/WR	L	Write signal
6	E	H/L	Enable signal
7	DB0	-	Data Bus
8	DB1	-	
9	DB2	-	
10	DB3	-	
11	DB4	-	
12	DB5	-	
13	DB6	-	
14	DB7	-	
15	/CS1	L	Chip enable signal
16	Display	H	Display Control
17	/REST	L	Reset signal
18	VEE	—	Output voltage for lcd driving
19	LEDA	+5V	Backlight Anode
20	LEDK	0V	Backlight Cathode

5. LED BACKLIGHT SPECIFICATIONS

ITEM	SYMBOL	TYPE	MAX	UNIT
Ta=25°C				
Forward Voltage	V _f	3.0	3.1	V
Forward Current	I _f	60	—	mA
Emission Wave Length	λ _P	White	—	nm

7. ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Ta=25°C					
Logic Power	V _{DD}	3.0	5	5.5	V
Input High Voltage	V _{IH}	V _{DD} -2.2	—	V _{DD}	V
Input Low Voltage	V _{IL}	0	—	0.8	V
Output High Voltage	V _{OH}	V _{DD} -0.3	—	V _{DD}	V
Output Low Voltage	V _{OL}	0	—	0.3	V
Logic Current	I _{DD}	—	—	170	mA
Operation Voltage For LCD	V _{DD} -V ₀	—	-15	—	V