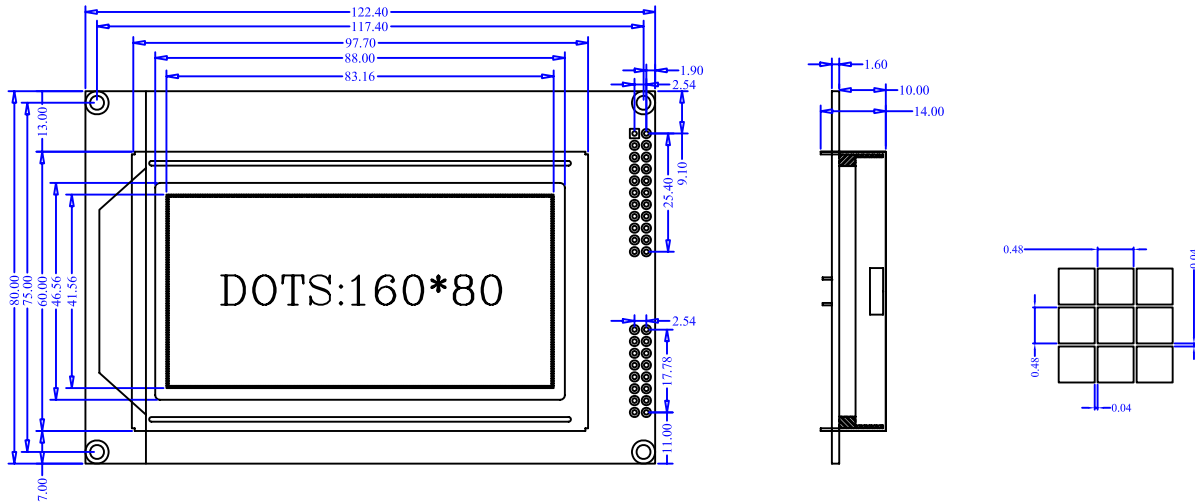


1. DIMENSION OUTLINE



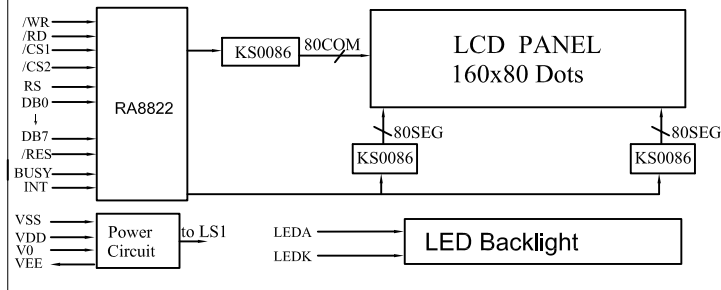
2. MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	122.4×80.0×11.0	mm	Reference Dimensional Outline
View Area(W×H)	88.0×46.56	mm	
Effective V/Area	83.16×41.56	mm	
Number of Characters	1600×80	-	
Dot Pitch(W×H)	0.52×0.52	mm	
Dot Size(W×H)	0.48×0.48	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	25V
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



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	—	23	—	V

6. INTERFACE PIN CONNECTIONS

ITEM (PIN1)	SYMBOL	LEVEL	FUNCTIONS
1	LEDK	0V	Backlight Cathode
2	LEDA	+5V	Backlight Anode
3	VSS	0V	Power Ground
4	VDD	+3.3V	Power supply for logic
5	V0	—	Contrast adjust
6	BUSY	H	Busy signal
7	INT	L	Intermit signal
8	/CS1	L	Chip enable signal
9	/CS2	H	Chip enable signal(This signal must pull high)
10	RS	H/L	H:command L:data
11	/WR	L	Write signal
12	/RD	L	Read signal
13	DB0	-	Data Bus
14	DB1	-	
15	DB2	-	
16	DB3	-	
17	DB4	-	
18	DB5	-	
19	DB6	-	
20	DB7	-	
21	/REST	L	Reset signal
22	VEE	—	Output voltage for lcd driving

ITEM (PIN2)	SYMBOL	LEVEL	FUNCTIONS (external Controller)
K10	KS0	H/L	Key Pad Input/Key Pad Output
K11	KS1	H/L	Key Pad Input/Key Pad Output
K12	KS2	H/L	Key Pad Input/Key Pad Output
K13	KS3	H/L	Key Pad Input/Key Pad Output
K14	KS4	H/L	Key Pad Input/Key Pad Output
K15	KS5	H/L	Key Pad Input/Key Pad Output
K16	KS6	H/L	Key Pad Input/Key Pad Output
K17	KS7	H/L	Key Pad Input/Key Pad Output