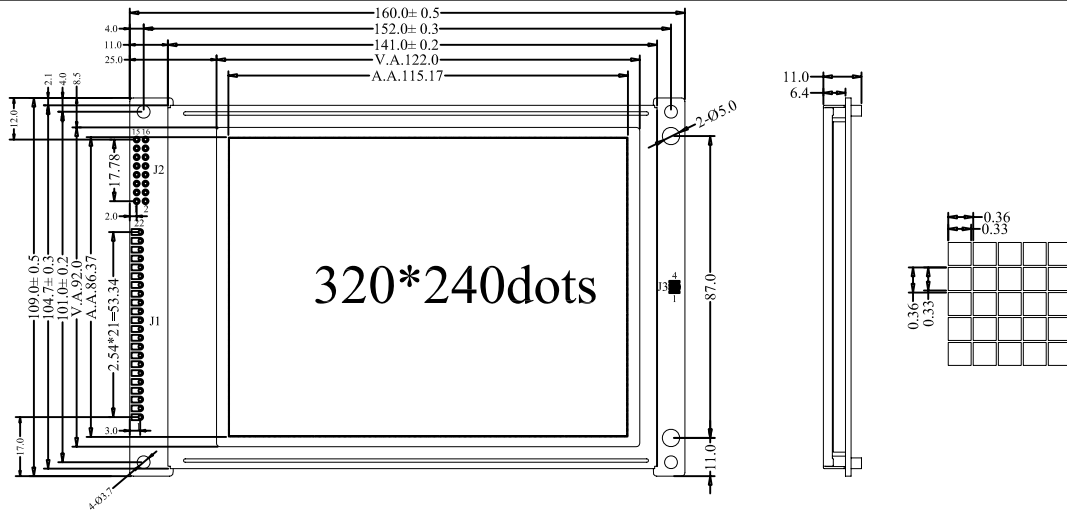


1. DIMENSION OUTLINE



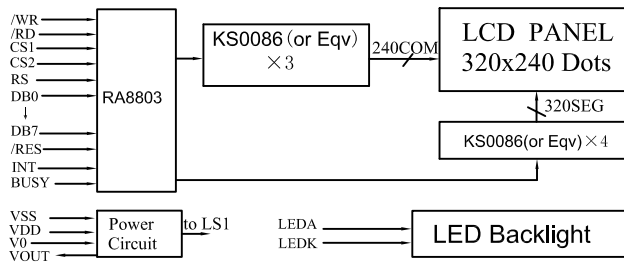
2. MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L × W × H)	160.0 × 109.0 × 11.0	mm	Reference Dimensional Outline
View Area(W × H)	122.0 × 92.0	mm	
Effective V/Area	115.17 × 86.37	mm	
Number of Characters	320 × 240	-	
Dot Pitch(W × H)	0.36 × 0.36	mm	
Dot Size(W × H)	0.33 × 0.33	mm	
Weight (Reflective/Led)	-	g	

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 DIAGRAMMECHANICAL



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	150	—	mA
Emission Vave Length	λ _P	white	—	nm

7. INTERFACE PIN CONNECTIONS (J1)

ITEM	SYMBOL	LEVEL	FUNCTIONS
1	VSS	0V	Power Ground
2	VDD	+5V	Power supply for logic
3	V0	—	Contrast adjust
4	RS	H/L	H:data L:command
5	/WR	L	Write signal
6	/RD	L	Read signal
7	/CS1	L	When /CS1=L,CS2=H, RA8803 is selected
8	CS2	H	
9	BUSY	H/L	Busy signal
10	INT	H/L	halt signal
11	/REST	L	Reset signal
12-19	DB0-DB7	H/L	Data Bus
20	VOUT	—	Output voltage for LCD driving
21	LEDA	+5V	Power supply for LED backlight
22	LEDK	0V	

6. ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Ta=25 °C					
Logic Power	V _{DD}	4.5	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}	—	—	120	mA
Operation Voltage For LCD	V _{DD} -V ₀	—	21.5	—	V

8. KEYPAD INTERFACE (J2)

ITEM	SYMBOL	FUNCTIONS
1,3,5,7,9,11,13,15	KR0-KR7	Keypad inputs
2,4,6,8,10,12,14,16	KC0-KC7	Keypad outputs