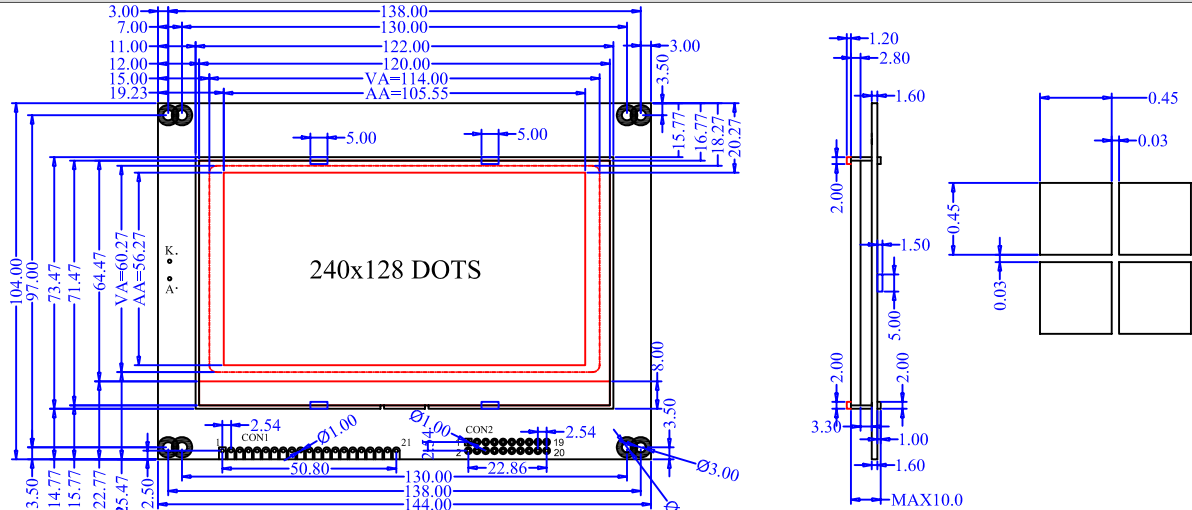


1. DIMENSION OUTLINE



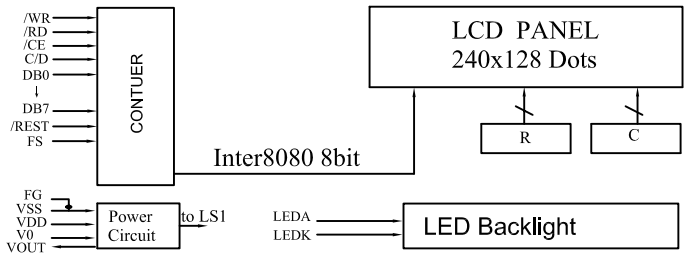
2. MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	144.0×104.0×10.0	mm	Reference Dimensional Outline
View Area(W×H)	114.0×60.27	mm	
Effective V/Area	105.55×56.27	mm	
Number of Characters	240×128	-	
Dot Pitch(W×H)	0.45×0.45	mm	
Dot Size(W×H)	0.48×0.48	mm	
Weight (Reflective/Led)	-	g	

3. ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	CONDITION	STANDARD	
			MIN	MAX
Logic Voltage	V _{DD}	Ta=25°C	-0.3V	3.7V
LCD Voltage	V _{LCD}		-0.3V	14.5V
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	2.6	2.7	V
Forward Current	I _f	30	—	mA
Emission Wavelength	λ _p	—	—	nm

7. ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Ta=25°C					
Logic Power	V _{DD}	-0.3	3.3	3.6	V
Input High Voltage	V _{IH}	0.8V _{DD}	—	—	V
Input Low Voltage	V _{IL}	—	—	0.2V _{DD}	V
Output High Voltage	V _{OH}	0.8V _{DD}	—	—	V
Output Low Voltage	V _{OL}	0	—	0.2V _{DD}	V
Logic Current	I _{DD}	—	15	5	mA
Operation Voltage For LCD	V _{DD} -V ₀	—	18	—	V

6. INTERFACE PIN CONNECTIONS

CON2	CON1	SYMBOL	LEVEL	FUNCTIONS
1	1	FG	—	Frame Ground
2	2	VSS	0V	Power Ground
3	3	VDD	3.3V	Power supply for logic
4	4	NC	—	Contrast adjust
5	5	/RD	L	Read signal
6	6	/WR	L	Write signal
7	7	/CE	L	Chip enable signal
8	8	C/D	H/L	H:command L:data
9	9	/RES	L	Reset signal
10		NC	—	No connection
11-18	10-17	D0-D7	H/L	Data Bus
19	18	NC	—	No connection
20	19	LEDA	+5V	Power supply for LED Backlight
21	20	LEDK	0V	