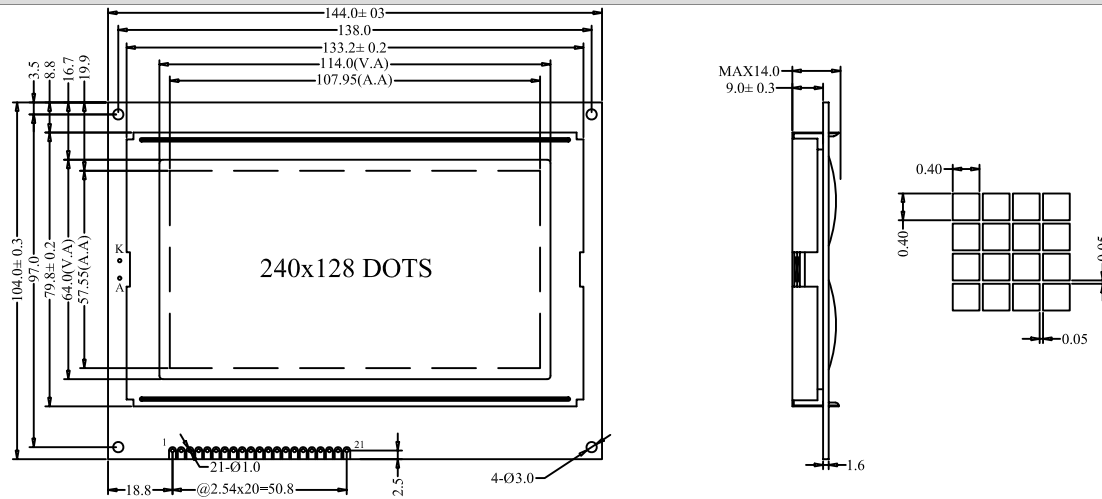


## 1.DIMENSION OUTLINE



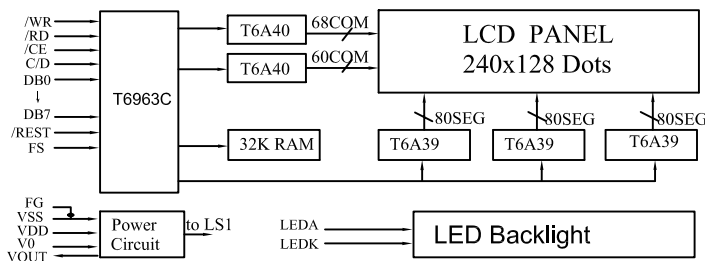
## 2.MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	144.0×104.0×14.0	mm	Reference Dimensional Outline
View Area(W×H)	114.0×64.0	mm	
Effective V/Area	107.95×57.55	mm	
Number of Characters	240×128	-	
Dot Pitch(W×H)	0.45×0.45	mm	
Dot Size(W×H)	0.40×0.40	mm	
Weight (Reflective/Led)	-	g	

## 3.ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	CONDITION	STANDARD	
			MIN	MAX
Logic Voltage	V <sub>DD</sub>	Ta=25°C	-0.3V	6V
LCD Voltage	V <sub>LCD</sub>		-0.3V	20V
Input Voltage	V <sub>I</sub>		-0.3V	V <sub>DD</sub> +0.3V
Operation Temperature	T <sub>OP</sub>	—	-20°C	70°C
Storage Temperature	T <sub>ST</sub>	—	-30°C	80°C

## 4.BLOCK DIAGRAM MECHANICAL



## 5.LED BACKLIGHT SPECIFICATIONS

ITEM	SYMBOL	COLOR	TYPE	MAX	UNIT
Ta=25°C					
Forward Voltage	V <sub>f</sub>	WHITE	3.0	3.15	V
Forward Current	I <sub>f</sub>		90	—	mA
Emission Wave Length	λ <sub>P</sub>		—	—	nm
Forward Voltage	V <sub>f</sub>	Y/G	4.0	4.25	V
Forward Current	I <sub>f</sub>		720	—	mA
Emission Wave Length	λ <sub>P</sub>		—	—	nm

## 6.INTERFACE PIN CONNECTIONS

ITEM	SYMBOL	LEVEL	FUNCTIONS
1	FG	—	Frame Ground
2	VSS	0V	Power Ground
3	VDD	+5V	Power Supply For Logic
4	V0	—	Contrast Adjust
5	/WR	L	Write Signal
6	/RD	L	Read Signal
7	/CE	L	Chip Enable Signal
8	C/D	H/L	H:command L:data
9	/REST	L	Reset Signal
10-17	DB0-DB7	H/L	Data Bus
18	FS	H/L	Font Selection L:8x8 H:6x8
19	LEDA	+5V	Power Supply For LED Backlight
20	LEDK	0V	
21	VOUT	—	Output Voltage For LCD Driving

## 7.ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
Ta=25°C					
Logic Power	V <sub>DD</sub>	4.5	5	5.5	V
Input High Voltage	V <sub>IH</sub>	V <sub>DD</sub> -2.2	—	V <sub>DD</sub>	V
Input Low Voltage	V <sub>IL</sub>	0	—	0.8	V
Output High Voltage	V <sub>OH</sub>	V <sub>DD</sub> -0.3	—	V <sub>DD</sub>	V
Output Low Voltage	V <sub>OL</sub>	0	—	0.3	V
Logic Current	I <sub>DD</sub>	—	15	25	mA
Operation Voltage For LCD	V <sub>DD</sub> -V <sub>0</sub>	—	18	—	V