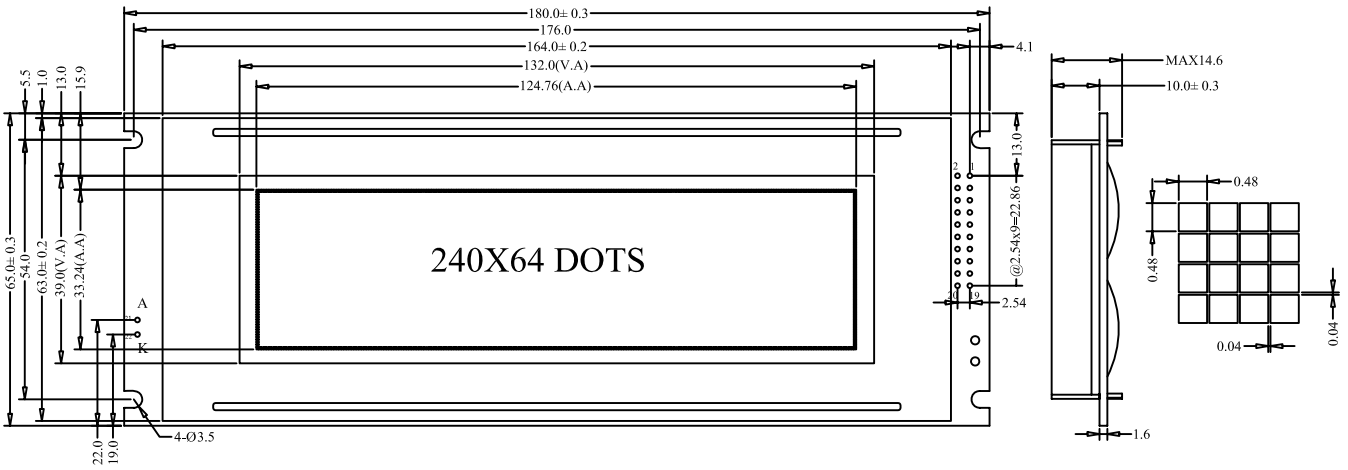


## 1. DIMENSION OUTLINE



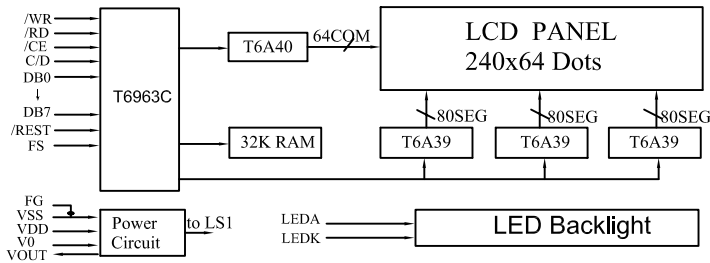
## 2. MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATIONS	ITEM	REMARK
Module Size(L×W×H)	180.0×65.0×14.5	mm	Reference Dimensional Outline
View Area(W×H)	132.0×39.0	mm	
Effective V/Area	124.76×33.24	mm	
Number of Characters	240×64	-	
Dot Pitch(W×H)	0.52×0.52	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 <sub>DD</sub>	Ta=25°C	-0.3V	7V
LCD Voltage	V <sub>LCD</sub>		-0.3V	25V
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	TYPE	MAX	UNIT
Ta=25°C				
Forward Voltage	V <sub>f</sub>	4.05	4.25	V
Forward Current	I <sub>f</sub>	660	—	mA
Emission Wave Length	λ <sub>P</sub>	568	—	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	/CS	L	Chip selection
8	C/D	H/L	H:command L:data
9	NC	—	No connection
10	/REST	L	Reset signal
11-18	DB0-DB7	H/L	Data Bus
19	FS	H/L	Font selection L:8x8 H:6x8
20	VOUT	—	Output voltage for lcd driving
21	LEDA	+4.2V	Power supply for led backlight
22	LEDK	0V	

## 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>	—	—	20	mA
Operation Voltage For LCD	V <sub>DD</sub> -V <sub>0</sub>	—	12	—	V