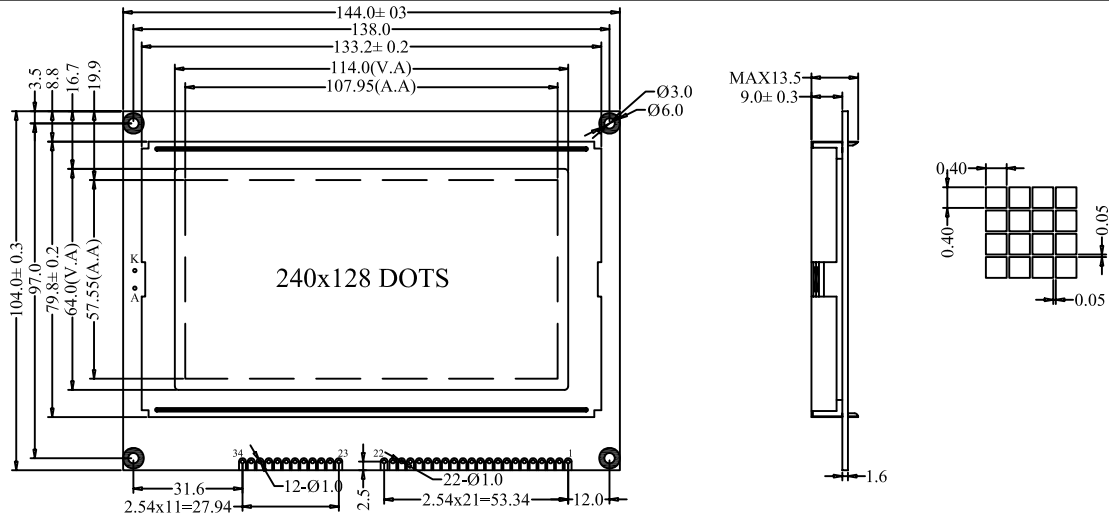


1. DIMENSION OUTLINE



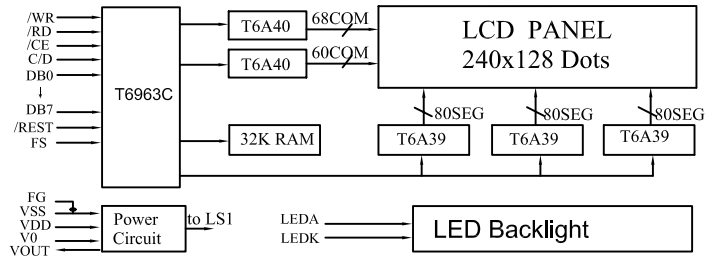
2. MECHANICAL SPECIFICATIONS

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 _{DD}	T _a =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
T _a =25°C				
Forward Voltage	V _f	4.05	4.25	V
Forward Current	I _f	720	—	mA
Emission Wave Length	λ _P	568	—	nm

7. ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYPE	MAX	UNIT
T _a =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}	—	15	25	mA
Operation Voltage For LCD	V _{DD} -V ₀	—	18	—	V

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	NC	—	No connection
10	/RES	L	Reset signal
11-18	D0-D7	H/L	Data Bus
19	FS	H/L	Font selection L:8x8 H:6x8
20	VOUT	—	Output voltage for LCD Driving
21	LEDA	+5V	Power supply for LED Backlight
22	LEDK	0V	
23	ED	H/L	Display Data Input
24	CDATA	H/L	Synchronous Signal For Row Driver
25	FR	—	Frame Signal
26	LP	H/L	Latch Pulse
27	HSCP	H/L	Shift Clock Pulse
28	NC	—	No connection
29	VDD	+5V	Power supply for logic
30	VSS	0V	Power Ground
31	V0	—	Contrast adjust
32	VOUT	—	Output voltage for LCD Driving
33	BLA	+5V	Power supply for LED Backlight
34	BLK	0V	