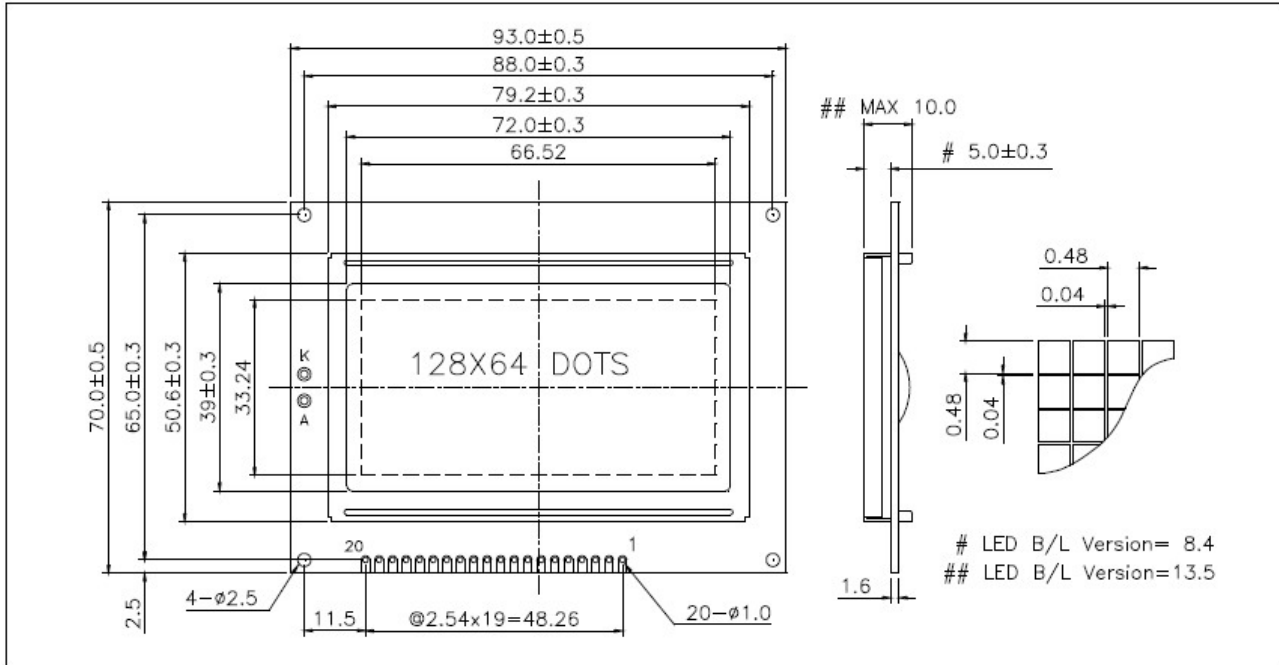
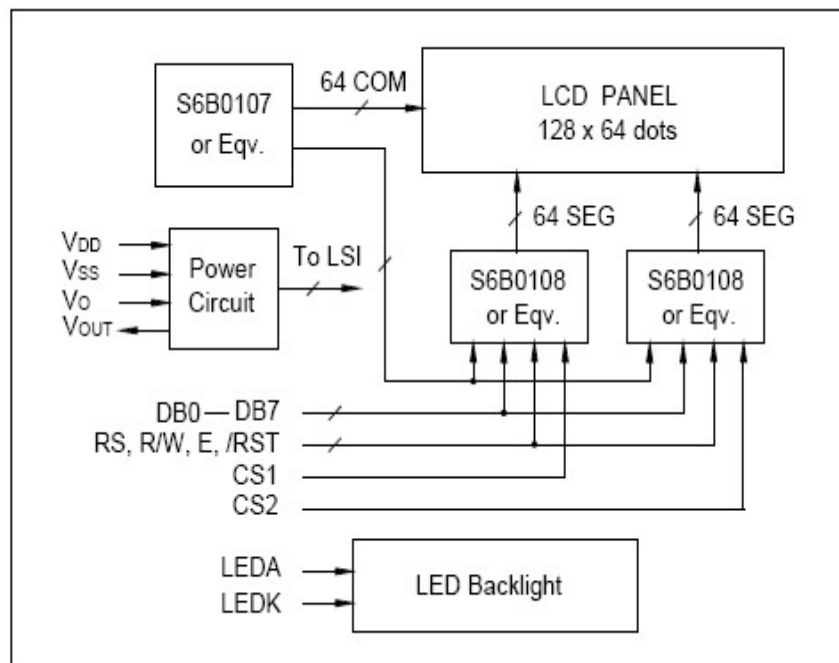


1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 ELECTRICAL CHARACTERISTICS Ta=25 °C VDD=5.0V±0.25V

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	—	2.0	—	V _{DD}	V
Input Low Voltage	V _{IL}	—	- 0.3	—	0.8	V
Output High Voltage	V _{OH}	I _{OH} = - 0.2mA	2.4	—	V _{DD}	V
Output Low Voltage	V _{OL}	I _{OL} =1.6mA	0	—	0.4	V
Supply Current	I _{DD}	V _{DD} =5.0V	—	6.0	8.0	mA
LCD Driving Voltage	V _{DD} - V _O	Ta=25°C	—	11.2	—	V

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Standard Value		
		Min.	Max.	Unit
Supply Voltage (Logic)	V _{DD} - V _{SS}	-0.3	7.0	V
Supply Voltage (LCD)	V _{DD} - V _O	-0.3	19.0	V
Input Voltage	V _I	-0.3	V _{DD} +0.3	V
Operating Temp	Top.	-20	70	°C
Storage Temp	T _{ST} .	-30	80	°C

5.0 PIN ASSIGNMENT

PIN NO.	NAME	RECOMMEND CONNECTION
1	V _{SS}	GND
2	V _{DD}	Power Supply for logic
3	V _O	Operating Supply for LCD
4	DB0	Data bus line
5	DB1	
6	DB2	
7	DB3	
8	DB4	
9	DB5	
10	DB6	
11	DB7	
12	CS1	Chip selection for IC1, active "H"
13	CS2	Chip selection for IC2, active "H"
14	/RST	Reset signal, active "L"
15	R/W	H: Read; L: Write
16	RS	H: Data ;L: Instruction code
17	E	Enable signal
18	V _{OUT}	Output voltage for LCD driving
19	LEDA	Power supply for LED backlight
20	LEDK	

Remark

1. LCD option: STN, FSTN .

2. Customized module.

3. Backlight option: EL backlight feature, other specs not available on catalog is under request.