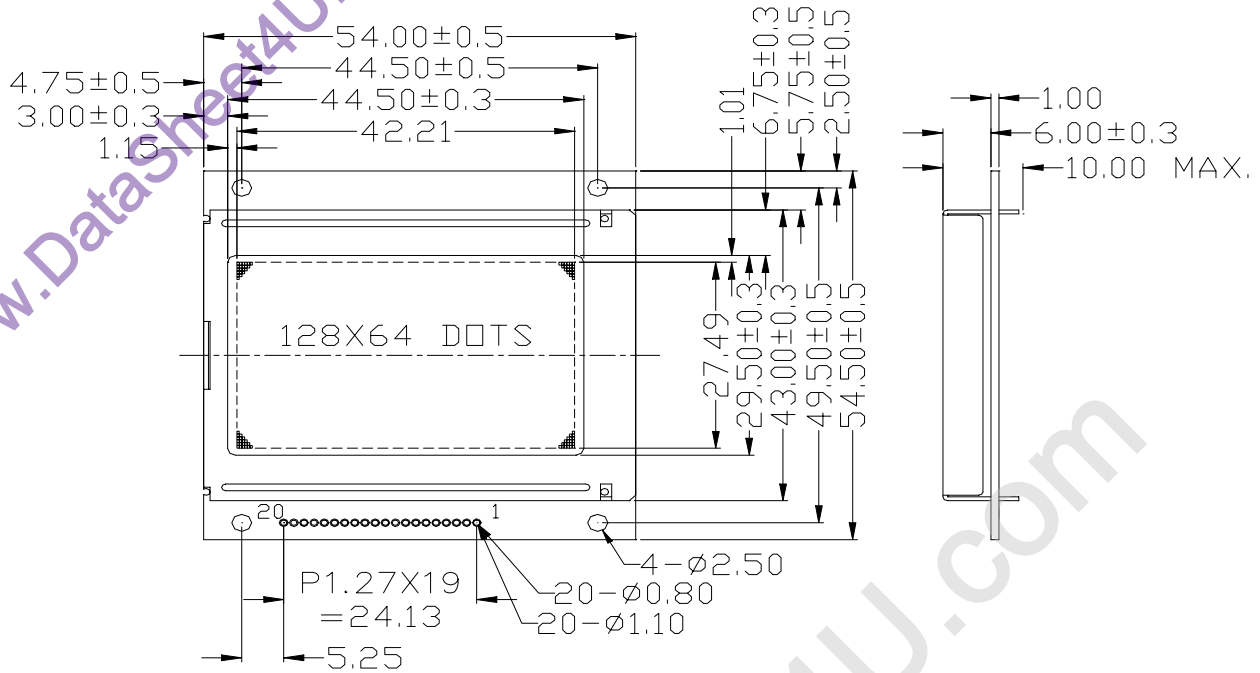
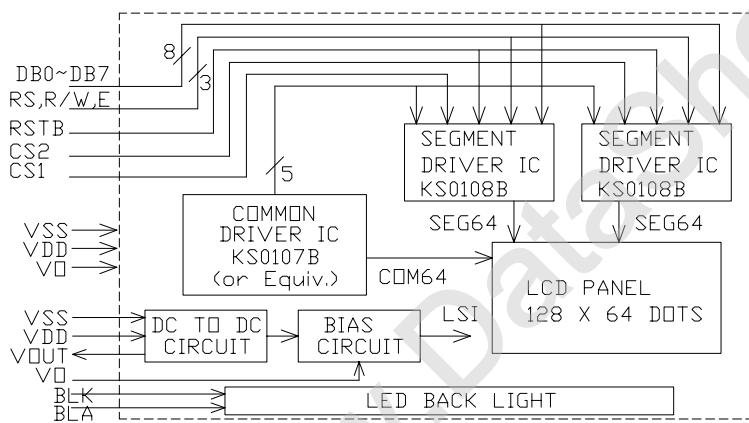


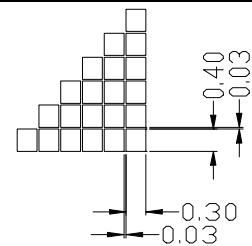
**OUTLINE DIMENSION**(The tolerance unless classified is +/-0.20mm)



**BLOCK DIAGRAM**



**DISPLAY PATTERN**



**MECHANICAL SPECIFICATION**

Item	Dimensions(W)X(H)	Unit
Overall Size	54.0x54.5	MM
View Area	44.5x29.5	MM
Dot Size	0.30x0.40	MM
Dot Pitch	0.33x0.43	MM

**PIN ASSIGNMENT**

Pin no	Symbol	Function
1	Vss	Power Supply(GND)
2	VDD	Power Supply(+)
3	VO	Input voltage for LCD
4	RS	H: Data signal, L: Instruction signal
5	R/W	H: Read mode, L: Write mode
6	E	Chip enable signal
7~14	DB0~7	Data bus 0~7
15	CS1	Chip select signal for KS0108B(1)
16	CS2	Chip select signal for KS0108B(2)
17	RSTB	Reset signal
18	VOUT	Output voltage for LCD
19	BLA	Back light anode
20	BLK	Back light cathode

**ABSOLUTE MAXIMUM RATING**

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	VDD	25	-0.3	7.0	V
LCD driving supply voltage	VDD-VO	25	-0.3	VDD+0.3	V
Input voltage	VI	25	-0.3	VDD+0.3	V

**ELECTRICAL CHARACTERISTICS**

Item	Symbol	Condition	Min	Typical	Max	Unit
Supply voltage for logic	VDD	---	4.5	5.0	5.5	V
Supply current for logic	IDD	---	---	2.2	4.0	mA
Operation voltage for LCD	VDD-VO	0	12.6	13.3	14.0	V
		25	12.3	13.0	13.7	V
		50	12.1	12.8	13.5	V
Input voltage H level	VIH	---	0.7VDD	---	VDD	V
Input voltage L level	VIL	---	0	---	0.3VDD	V
Supply voltage for back light	VF	---	---	4.2	4.6	V
Supply current for back light	IF	VF=4.2V	---	150	230	mA

**REMARKS:**

- LCD options:STN,FSTN.
- Back light Options:EL Back light feature, other Specs not available on catalog is under request.