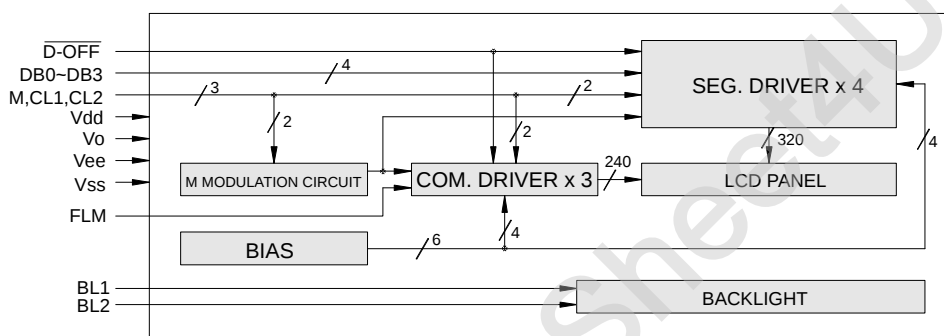
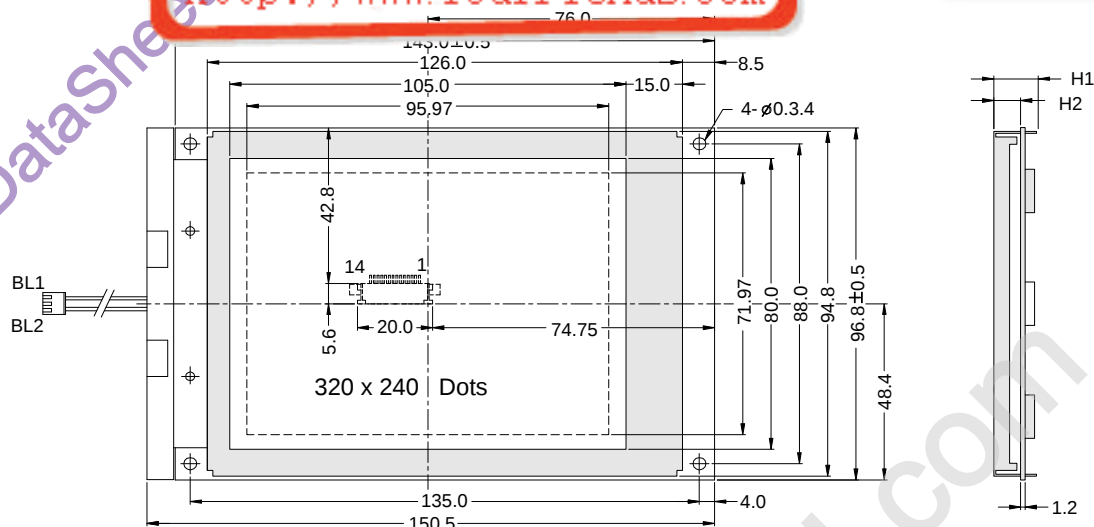




The tolerance unless classified $\pm 0.3\text{mm}$

MECHANICAL SPECIFICATION

Overall Size	143.0 x 96.8	Module	H2 / H1
View Area	105.0 x 80.0	W / O B/L	5.9 / 10.1
Dot Size	0.27 x 0.27	EL B/L	5.9 / 10.1
Dot Pitch	0.30 x 0.30	LED / CCFL B/L	8.0 / 11.7

PIN ASSIGNMENT

Pin no.	Symbol	Function
1	FLM	Shift direction select
2	M	Synchronous signal input
3	CL1	Display data input clock
4	CL2	Display data input clock
5	D-OFF	Column output control
6-9	DB0-DB3	Data bus line
10	Vdd	Power supply(+)
11	Vss	Power supply(GND)
12	Vee	Negative voltage input
13	Vo	Contrast Adjust
14	FG	Frame ground

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Units
Supply for logic voltage	Vdd-Vss	25°C	-0.3	7.0	V
LCD driving supply voltage	Vdd-Vee	25°C	0	35.0	V
Input voltage	Vin	25°C	-0.3	Vdd+0.3	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Units
Power supply voltage	Vdd-Vss	25°C	4.5	—	5.5	V
LCD operation voltage	Vop	Top	N	W	N	W
		-20°C	—	26.9	—	29.9
		0°C	25.5	—	27	—
		25°C	23.5	24.4	25	25.9
		50°C	21	—	22.5	—
		70°C	—	22	23.5	—
LCM current consumption (No B/L)	Idd	Vdd=5V	—	7	—	mA
Backlight current consumption	LED/edge	VB/L=4.2V	—	180	—	mA
	LED/white	VB/L=3.5V	—	120	—	mA

REMARK

LCD option: STN, TN, FSTN

Backlight Option: LED, EL Backlight feature, other Specs not available on catalog is under request.