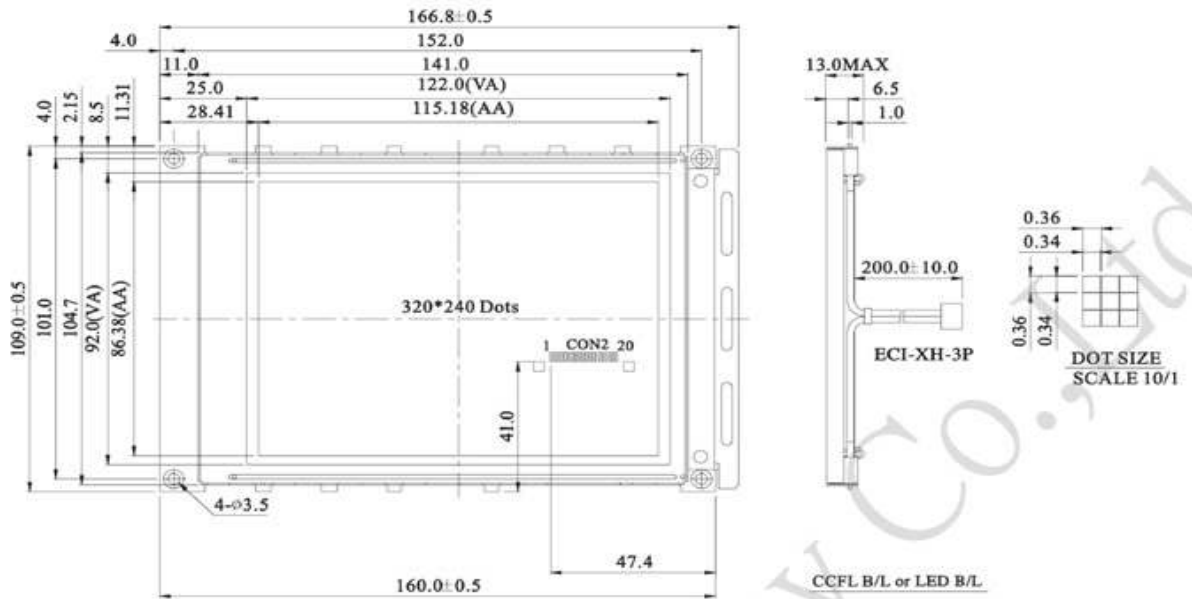


WG320240B Graphic 320x240dots

Dimension drawing



Feature

1. Built-in Epson SED 1335 controller and SRAM
2. Built-in Negative Voltage generator
3. 1/240 duty cycle
4. Touch screen option (analog type)
5. Temperature compensation option

Mechanical Data

Item	Standard Value	Unit
Module Dimension	166.8x109.0	mm
Viewing Area	122.0x92.0	mm
Dot Size	0.34x0.34	mm
Dot Pitch	0.36x0.36	mm
Mounting hole	152.0 x 101.0	mm

Pin NO.	Symbol	Function
1	Vss	Ground
2	Vdd	Power supply for Logic
3	Vo	Driving voltage for LCD
4	Ao	Data type select
5	WR	8080 family: Write signal, 6800 family: R/W signal
6	RD	8080 family: Read signal, 6800 family: Enable clock
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
15	CS	Chip select, Active L
16	RES	Controller reset signal Active L
17	Vee	Negative Voltage output
18	NC	No connection
19	NC	No connection
20	NC	No connection

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	4.75	5.0	5.25	V
Input Voltage	VI	-0.3	---	VDD	V

Note : VSS=0 Volt, VDD=5.0 Volt.

Electrical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	L level	0.7VDD	---	VDD	V
	VIO	H level	0	---	0.3VDD	V
Supply Current	IDD	VDD=5V	---	100	105	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	0°C	22.0	23.0	24.0	V
		25°C	21.3	22.2	23.0	
		50°C	19.5	20.8	22.1	
CCFL Starting Voltage	VFLS	25°C	---	600	---	Vrms
CCFL Driving Voltage	VFLD	25°C	---	268	---	Vrms
CCFL Driving Current	IFLD	VFQ=450Vrms 30KHZ	---	5.0	---	mA/rms

NO	Code value	Description	Remark							
1	W	WINSTAR products	Winstar Display							
2	H,G,X	H:Character ; G: Graphic ; X:TAB	LCM type							
3	08,16,20,24... 122,128,240...	Words per line Row dots	Character Graphic							
	01,02,04... 32,64,128...	Lines Column dots	Character Graphic							
5	A~Z	Serials number	Model name							
6	N	Without backlight	Backlight type							
	B	EL backlight , Blue								
	D	EL backlight , Green								
	W	EL backlight , White								
	Y	LED backlight , Yellow-Green								
	A	LED backlight , Amber								
	R	LED backlight , Red								
	G	LED backlight , Green								
	T	LED backlight , White								
	F	CCFL backlight , White								
7	B	TN positive , Gray	LCD type							
	N	TN negative , Black								
	H	HTN positive , Gray								
	I	HTN negative , Black								
	G	STN positive , Gray								
	Y	STN positive , Yellow-Green								
	M	STN negative , Blue								
	F	FSTN positive , White								
T	FSTN negative , Black									
8	Temperature	Normal temp.				Wide temp.				Polarizer type Temperature rangeView direction
	View angle	6:00	12:00	3:00	9:00	6:00	12:00	3:00	9:00	
	Reflective	A	D	M	P	G	J	S	V	
	Transflective	B	E	N	Q	H	K	T	W	
	Transmissive	C	F	O	R	I	L	U	X	
9	Character					Graphic			Temperature Compensatio	
	English/ Japanese	English/ Europe	English/ Europe	English/ Cyrillic	English/ Hebrew	Negative Voltage	Without Negative Voltage			
10	**	Special Code						Touch panel, Backlight		