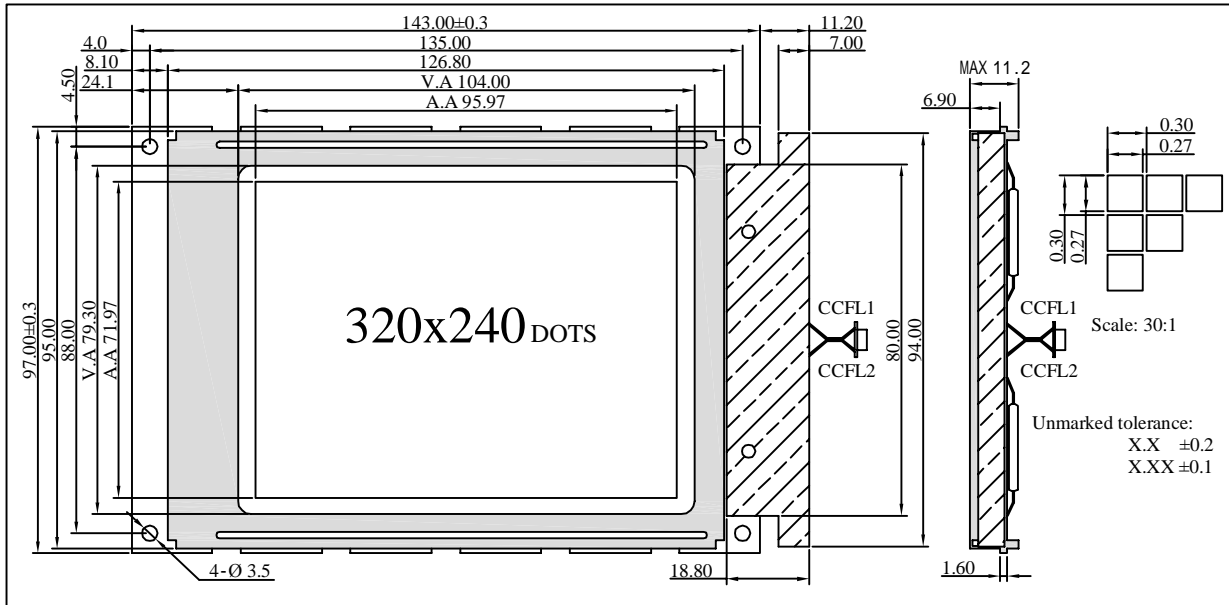


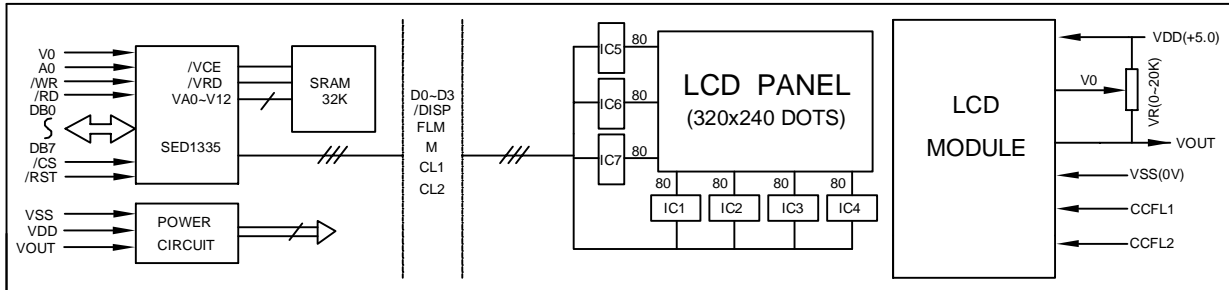
ZL320240B2 Series

320x240 DOTS
1/240 DUTY, 1/17 BIAS
GRAPHIC-COB

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

item	Normal Dimensions(mm)	Feature	
Module Size(W*H*T)	143.0x97.0x11.2MAX	LCD Type	STN FSTN
View Area(W*H)	104.0x79.3	LCD Colour	STN:Yellow-Green ,Gray Other:Gray
Dots x Dots (W*H)	320x240	View Angle	6 O'clock , 12 O'clock
Dot Pitch (W*H)	0.30x0.30	Display Type	Positive Type,Negative Type
Dot Size (W*H)	0.27x0.27	Rear Polarizer	Transmissive,Reflective ,Transflective
-----	-----	Operating Temperature	0°C ~50°C , -20°C~70°C
-----	-----	Backlight	LED: Yellow, Bule,White,Green

ELECTRICAL CHARACTERISTICS

item	Symbol	Test Condition	Min.	Type.	Max.	Unit
Operating Voltage	Vdd	Ta=25°C	---	5.0V	---	V
Operating Voltage for LCD	Vlcd	Ta=25°C	---	4.6V	---	V
Supply Current	Idd	Ta=25°C,Vdd=5.0V	---	2.0	3.0	mA
Supply Current for Backlight	If	Ta=25°C,Vf=4.2V	---	400	---	mA

INTERFACE PIN CONNECTIONS

J1				J2			
Pin No	Symbol	Level	Description	Pin No	Symbol	Level	Description
1	VSS	---	Ground for logic(0V)	1-4	DB0-DB3	H/L	Data bus lines
2	VDD	---	Power supply for logic (+5.0V)	5	/DISP	---	Display ON/OFF
3	V0	---	Supply power for LCD drive	6	FLM	---	Frame start signal
4	A0	H/L	Registr selection	7	M	---	AC signal for LCD drivng
5	/WR	L	Write signal	8	CL1	---	Data lach pulse
6	/RD	L	Read signal	9	CL2	---	Data shift pulse
7-14	DB0-DB7	H/L	Data bus lines	10	VDD	H	Power supply for logic (+5.0V)
15	/CS	L	Chip Selection	11	VSS	---	Ground for logic(0V)
16	/RST	L	Reset signal	12	VOUT	---	Negative Voltage Output
17	VOUT	---	Negative Voltage Output	13	V0	---	Supply power for LCD drive
18	FG	---	Frame Ground	14	FG	---	Frame Ground

REMARK

1.Negative type LCD colour : Bule. 2.File Version:01