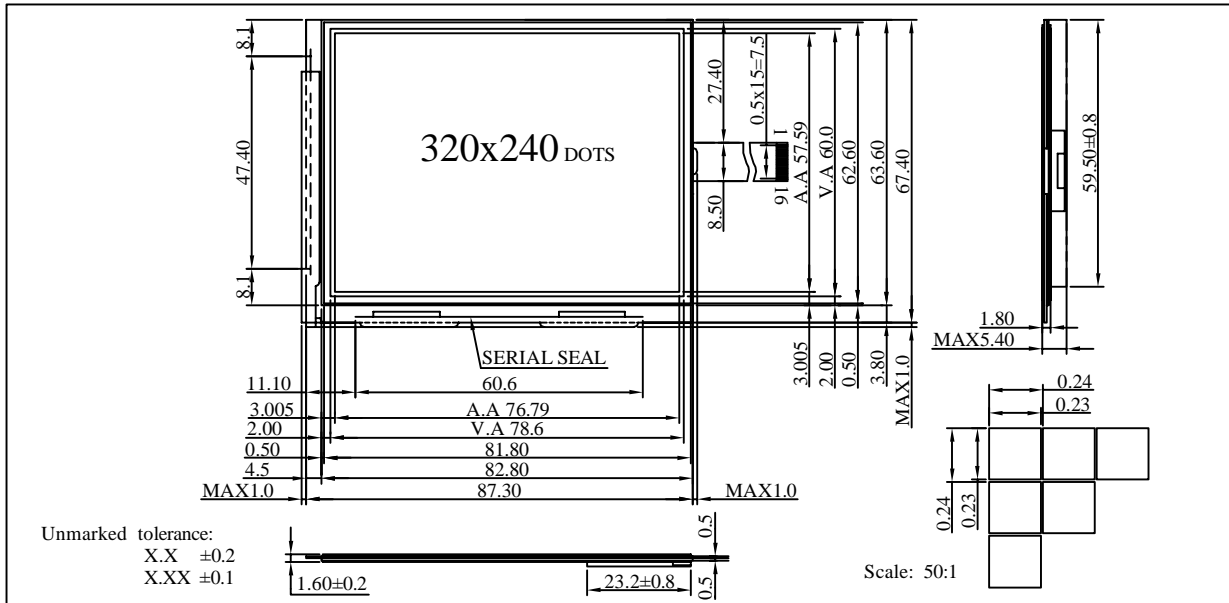


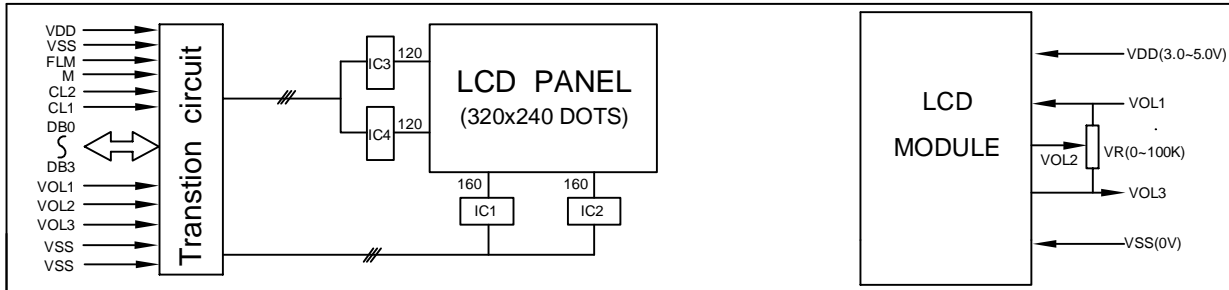
ZL320240C1CFE Series

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

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

item	Normal Dimensions(mm)	Feature	
Module Size(W*H*T)	87.3x67.4x5.4MAX	LCD Type	STN FSTN
View Area(W*H)	78.6x60.0	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)	0.24x0.24	Display Type	Positive Type,Negative Type
Dot Size (W*H)	0.23x0.23	Rear Polarizer	Transmissive,Reflective ,Transflective
-----	-----	Operating Temperature	0°C ~50°C , -20°C~70°C
-----	-----	Backlight	-----

ELECTRICAL CHARACTERISTICS

item	Symbol	Test Condition	Min.	Type.	Max.	Unit
Operating Voltage	V _{dd}	T _a =25°C	3.0V	5.0V	---	V
Operating Voltage for LCD	V _{lcd}	T _a =25°C	---	4.6V	---	V
Supply Current	I _{dd}	T _a =25°C, V _{dd} =5.0V	---	2.0	3.0	mA
Supply Current for Backlight	I _f	T _a =25°C, V _f =4.2V	---	40	---	mA

INTERFACE PIN CONNECTIONS

Pin No	Symbol	Level	Description
1	VDD	---	Power supply for logic (+5.0V)
2	VSS	---	Ground for logic(0V)
3	/DP	---	Display ON/OFF
4	FLM	---	Frame start signal
5	M	---	AC signal for LCD driving
6	CL2	---	Data shift pulse
7	CL1	---	Data latch pulse
8-11	DB0-DB3	H/L	Data bus lines
12	VOL1	---	Adjust Voltage1
13	VOL2	---	Adjust Voltage2
14	VOL3	---	Adjust Voltage3
15	VSS	---	Ground for logic(0V)
16	VSS	---	Ground for logic(0V)

REMARK

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