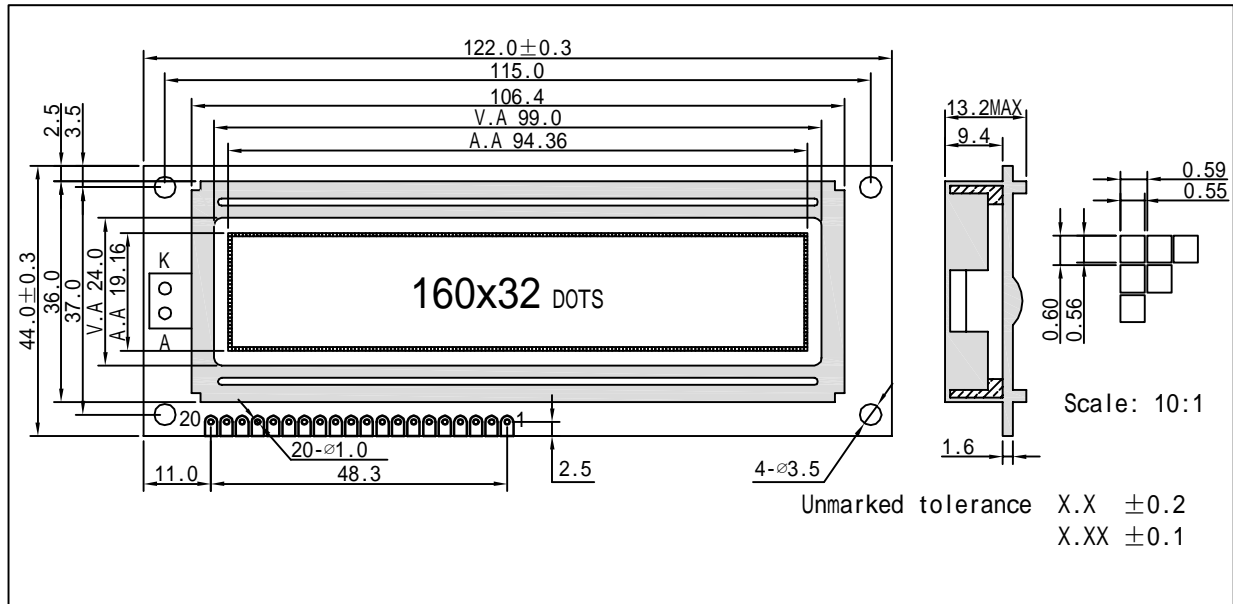


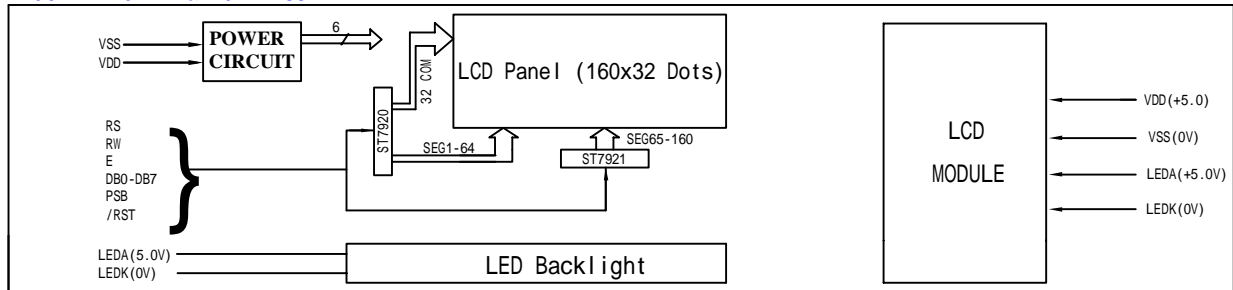
ZL16032A1 Series

160x32 DOTS
1/32 DUTY, 1/6 BIAS
GRAPHIC-COB

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

item	Normal Dimensions(mm)	Feature	
Module Size(W*H*T)	122.0x44.0x13.2MAX	LCD Type	STN FSTN
View Area(W*H)	99.0x24.0	LCD Colour	STN:Yellow-Green ,Gray Other:Gray
DotsxDots(W*H)	160x32	View Angle	6 O'clock , 12 O'clock
Dot Pitch(W*H)	0.59x0.60	Display Type	Positive Type,Negative Type
Dot Size(W*H)	0.55x0.56	Rear Polarizer	Transmissive,Reflective ,Transflective
---	---	Operating Temperature	0°C -50°C
---	---	Backlight	LED: Yellow

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	---	4.5V	---	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	---	150	---	mA

INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Level	Description
1	VSS	L	Ground for Logic
2	VDD	H	Power supply for Logic
3	NC	--	No connection
4	RS	H/L	H:Data,L:Instruction code(Chip enable for serial mode)
5	R/W	H/L	H:Read,L:Write(serial data for serial mode)
6	E	H/L → L	Enable signal (serial clock)
7-14	DB0-DB7	H/L	Data Bus Lines
15	PSB	H/L	1:Parallel mode 0:Serial mode
16	NC	--	No connection
17	/RST	L	Reset signal
18	NC	--	No connection
19	LEDA	H	Power supply for backlight(+5.0V)
20	LEDK	L	Power supply for backlight(0V)

REMARK

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