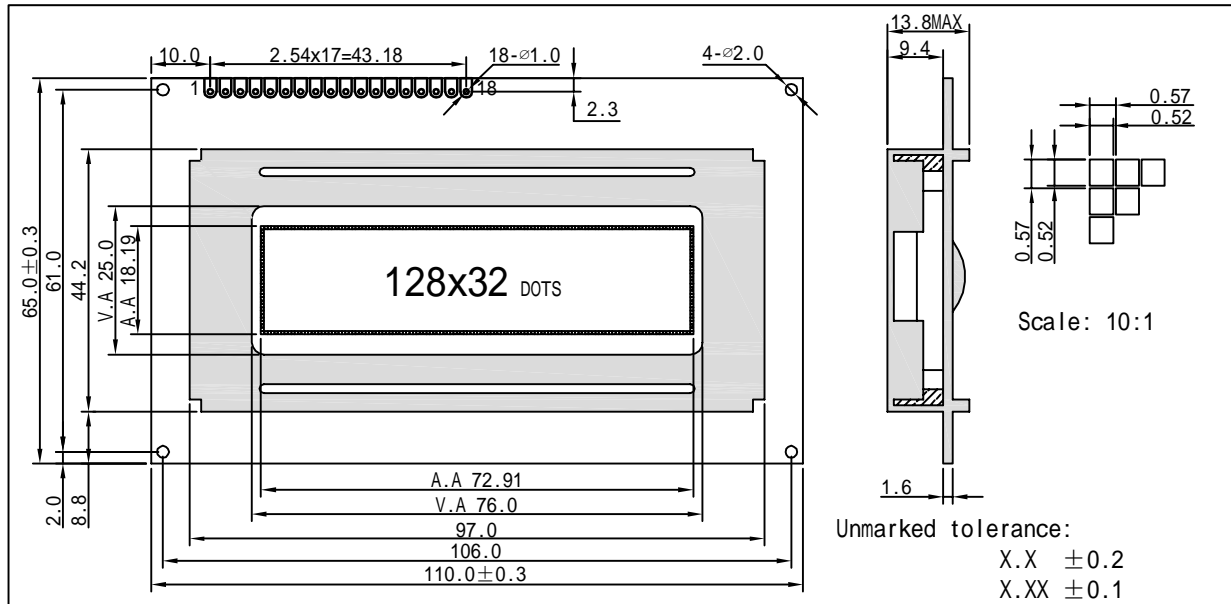


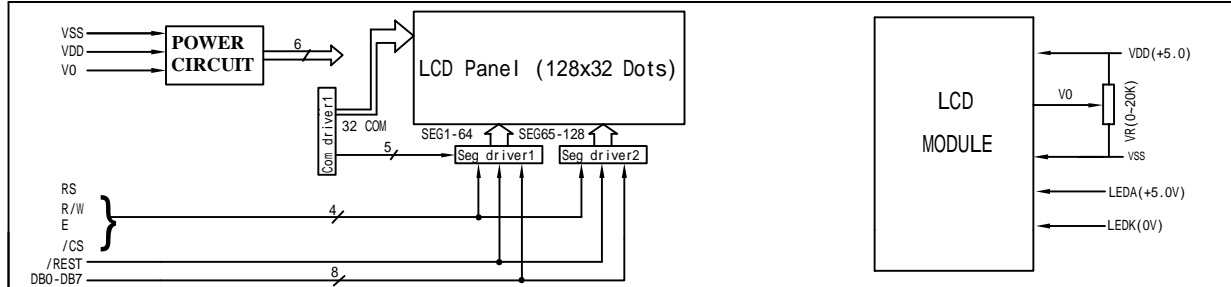
ZL12832A1 Series

128x32 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)	110.0x65.0x13.8MAX	LCD Type	STN FSTN
View Area(W*H)	76.0x25.0	LCD Colour	STN:Yellow-Green ,Gray Other:Gray
DotsxDots(W*H)	128x32	View Angle	6 O'clock , 12 O'clock
Dot Pitch(W*H)	0.57x0.57	Display Type	Positive Type,Negative Type
Dot Size(W*H)	0.52x0.52	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	LEDK	L	Power supply for backlight(0V)
2	LEDA	H	Power supply for backlight(+5.0V)
3	V0	--	Power supply for LCD drive
4	VDD	H	Power supply for Logic
5	VSS	L	Ground for Logic
6	E	L	Enable signal for LCM
7	RS	H/L	Register selection (H:Data register,L:Instruction register)
8	R/W	H/L	Read/write selection (H:Read,L:Write)
9	CS	H/L	Chip select(L:left half panel,H:right half panel)
10	/RST	L	Reset signal
11-18	DB0-DB7	H/L	Data Bus Lines

REMARK

- Negative type LCD colour : Blue.
- File Version:01