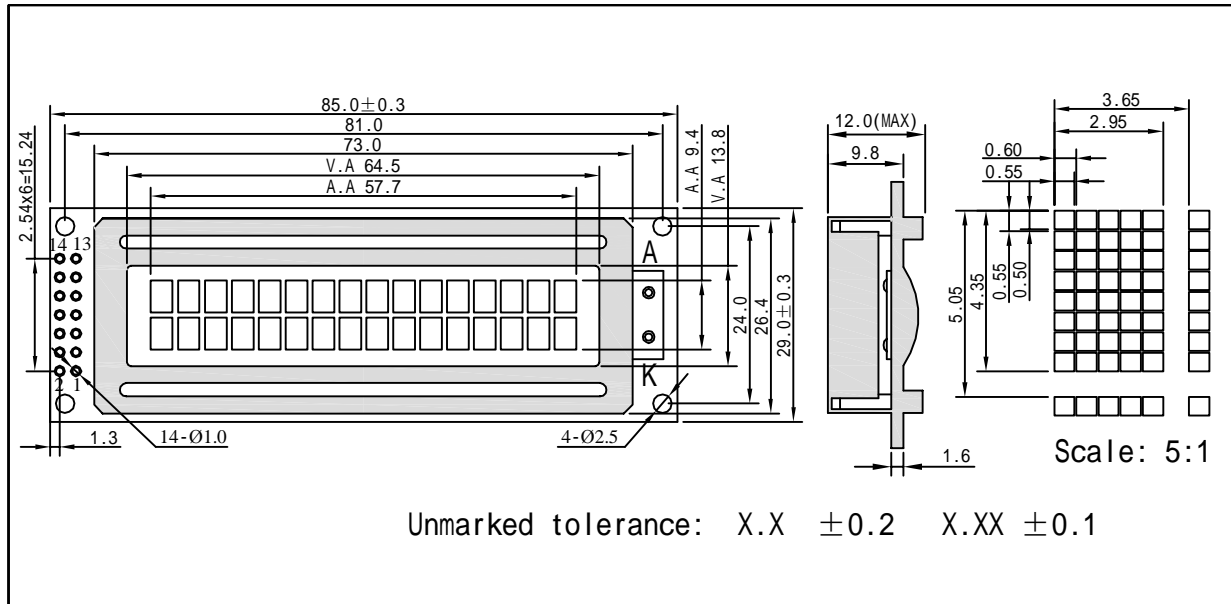


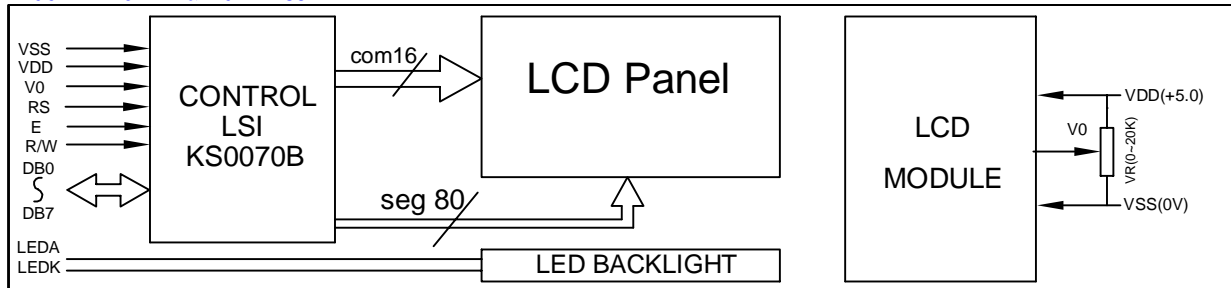
ZL1602B4 Series

16x2 CHARACTERS
1/16 DUTY, 1/5 BIAS
CHARACTER-COB

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATIONS & FEATURE

item	Normal Dimensions(mm)	Feature	
Module Size(W*H*T)	85.0x29.0x12.0MAX	LCD Type	STN FSTN
View Area(W*H)	64.5x13.8	LCD Colour	STN:Yellow-Green ,Gray Other:Gray
Character Pitch(W*H)	3.65x5.05	View Angle	6 O'clock , 12 O'clock
Character Size(W*H)	2.95x4.35	Display Type	Positive Type,Negative Type
Character Font	5x8	Rear Polarizer	Transmissive,Reflective ,Transflective
Dot Pitch(W*H)	0.60x0.55	Operating Temperature	0°C ~50°C , -20°C~70°C
Dot Size(W*H)	0.55x0.50	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	---	100	---	mA

INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Level	Description
1	VDD	H	Power supply for Logic
2	VSS	L	Ground for Logic
3	V0	---	Power supply for LCD drive
4	RS	H/L	Register selection (H:Data register,L:Instruction register)
5	R/W	H/L	Read/Write selection (H:read,L:Write)
6	E	H/L → L	Enable signal for LCM
7~14	DB0~DB7	H/L	Data Bus Lines

REMARK

- Negative type LCD colour : Bule.
- CGROM font option:English,Japanese,Russian,Etc.
- File Version:02