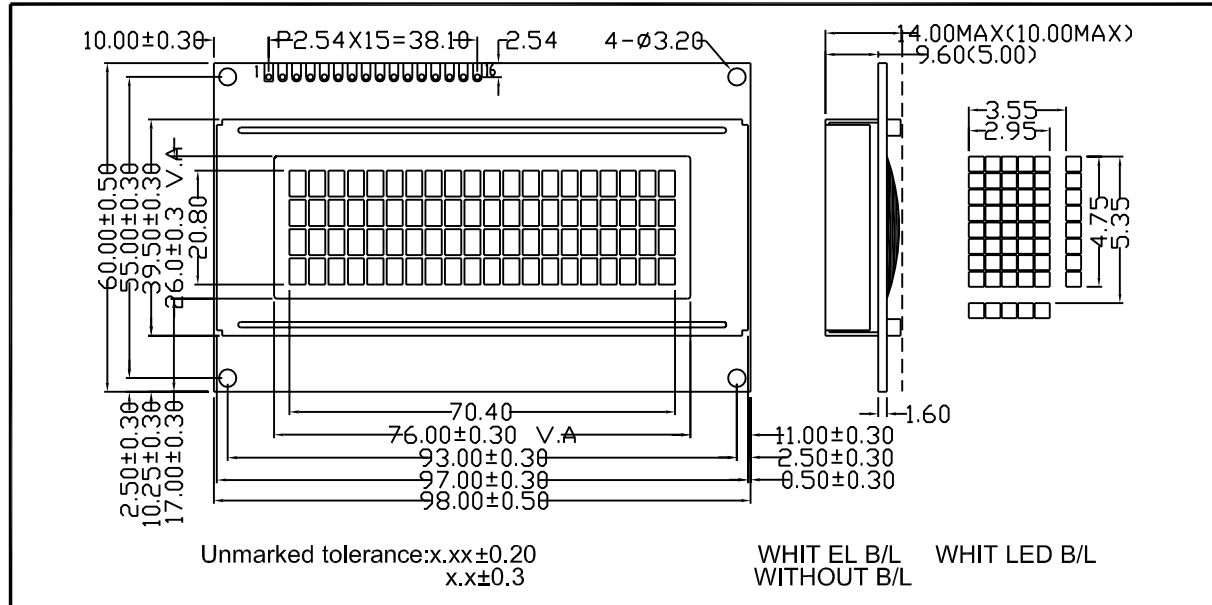


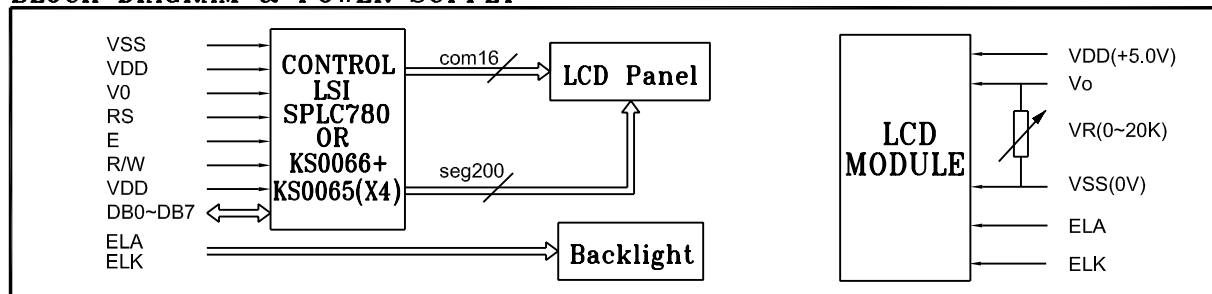
LCD-DISPLAY YM-2004A Series

20X4 CHARACTERS
1/16 DUTY, 1/5 BIAS

OUTLINE DIMENSIONS



BLOCK DIAGRAM & POWER SUPPLY



MECHANICAL SPECIFICATION & FEATURE

Item	Normal Dimensions(mm)	FEATURE	
Module Size(W*H*T)	98.0X60.0X10.0/14.0	LCD Type	STN, TN, HTN, FSTN
View Area(W*H)	76.0X26.0	LCD Colour	STN:Yellow-Green, Grey Other:Gray
Character Pitch(W*H)	3.55X5.35	View Angle	6 O'Clock, 12 O'Clock
Character size(W*H)	2.95X4.75	Display Type	Positive Type, Negative Type
Character Font	5X8	Real polarizer	Transmissive, Reflective, Transflective
Dot Pitch(W*H)	0.60X0.60	Operating Temperature	-10°C~60°C, -20°C~70°C
Dot Size(W*H)	0.55X0.55	Backlight	LED:Yellow EL:Green,Blue-Green,blue Without

ELECTRICAL CHARACTERISTICS

Item	Symbol	Symbol	Min.	Typ.	Max.	Unit
Operating Voltage	Vdd	Ta=25°C	---	5.0	---	V
Operating Voltage LCD	Vlcd	Ta=25°C	---	4.7	---	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	---	---	---	mA

INTERFACE PIN CONNECTIONS

Pin No.	Symbol	Level	Description
1	VSS	---	Ground for Logic
2	VDD	---	Power supply for Logic(+5.0V)
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	Enable signal for LCM
7~14	DB0~DB7	H/L	Data Bus lines
15	A	---	Backlight(+5.0V)
16	K	---	Backlight(0V)

REMARK

Operating voltage option : 5.0V or 3.0V
CGROM font option : English Japanese Russian etc