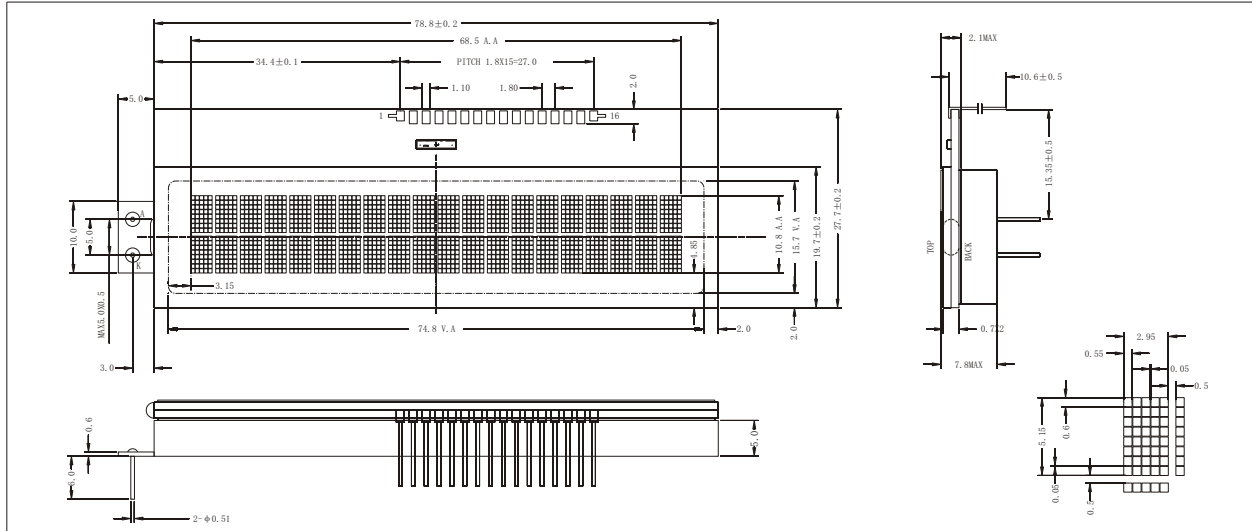


YMS202-04

20CHARx2LINE
1/16DUTY, 1/5BIAS

1 EXTERNAL DIMENSION AND DISPLAY PATTERN



2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size(W*H*T)	78.8×27.7×7.8	mm
Viewing Area(W*H)	74.8×15.7	mm
Character Font(W*H)	5×7 with Cursor	mm
Character Size (W*H)	2.95×5.15	mm
Dot Size (W*H)	0.55×0.6	mm

3 PIN CONFIGURATION

PIN No.	SYMBOL	FUNCTION
1	NC	No Connection
2	V _{SS}	GND (0V)
3	V _L	Voltage Control for LCD
4	V _{DD}	Power Supply (5V)
5	RS	Register Select-LOW=Instruction, HIGH=Data
6	R/W	Read/Write LOW=MPU to LCM, HIGH=LCM to MPU
7	E	Eable R/w=LOW:Data are talking over at falling edge R/w=HIGH:Data can be read at E=1
8 to 15	DB ₇ to DB ₀	Data bus-Software Selectable 4 or 8bit mode
16	NC	No Connection

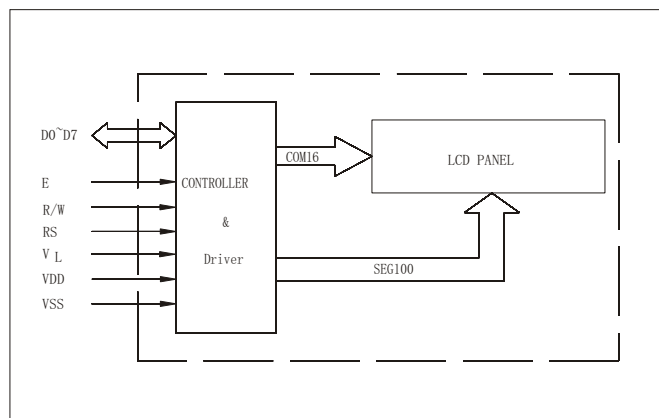
4 ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Supply Voltage Logic	V _{DD} -V _{SS}	-0.3	7.0	V
Supply Voltage Driver	V _{DD} -V _{EE}	-0.3	7.0	V
Intut Voltage	V _{IN}	-0.3	V _{DD} +0.3	V
Operating Temp	See page 9			
Storage Temp				

5 ELECTRICAL CHARACTERISTICS(Ta=25 °C)

ITEM	SYMBOL	CONDITION	SPEC.VALUE			UNIT
			MIN.	TYP.	MAX.	
Supply Voltage (Logic)	V _{DD} -V _{SS}		4.5	5.0	5.5	V
Supply Current (Logic)	I _{DD}	V _{DD} =5V	-	1.0	2.0	mA
Input Voltage	HIGH	V _{HI}	0.8V _{DD}	-	V _{DD}	V
	LOW	V _{LI}	-0.3	-	0.2V _{DD}	V
Output Voltage	HIGH	V _{OH}	I _{OH} =1.2mA	V _{DD} -0.6	-	V
	LOW	V _{OL}	I _{OL} =1.2mA	-	GND+0.6	V
LCD Operating Voltage	V _{DD} -V _{EE}	V _{DD} =5V Ta=25 °C	-	4.7	5.0	V
Supply Voltage LCD Drive	I _{EE}		-	1.0	1.5	mA

6 BLOCK DIAGRAM



7 BACKLIGHTING CHARACTERISTICS(Ta=25 °C)

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIX
Supply Voltage	V _{LED}	IF=110mA	3.8	4.1	4.2	V
Power Consumption	P _{LED}			451		mW
Luminous						cd/m ²