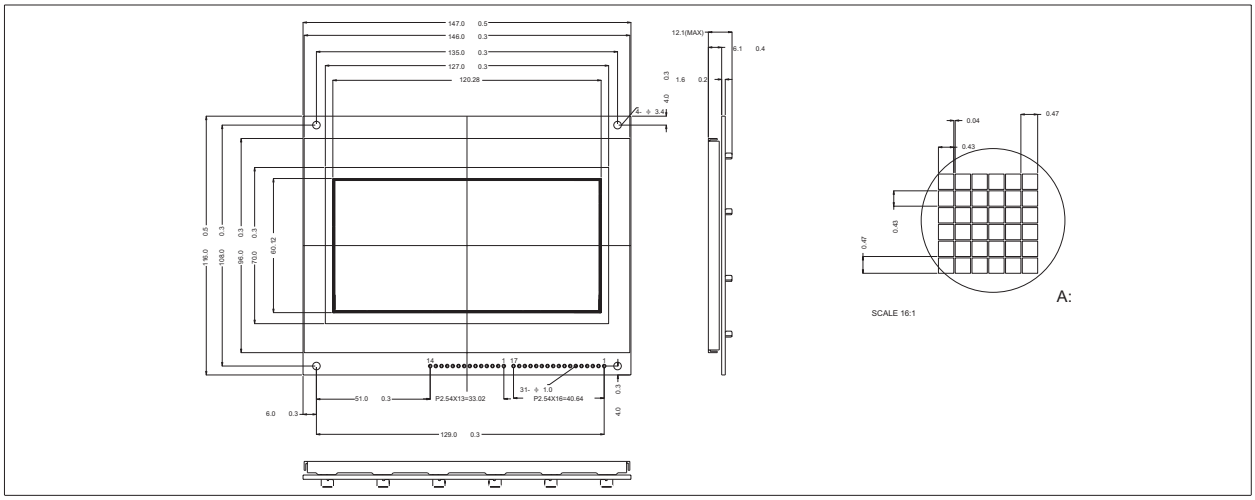
YMS256128-01

256x128DOTS
1/128DUTY, 1/12.2BIAS

1 EXTERNAL DIMENSION AND DISPLAY PATTERN



2 MECHANICAL DATA

ITEM	SPECIFICATION	UNIT
Module Size(W*H*T)	147.0 116.0 12.1	mm
Viewing Area(W*H)	127.0 70.0	mm
Number of Dots	256 128 with Cursor	mm
Dot Pitch (W*H)	0.47 0.47	mm
Dot Size (W*H)	0.43 0.43	mm

3 PIN CONNECTIONS(1)

PIN No.	SYMBOL	FUNCTION
1	Vdd	Logic Supply Voltage(+5.0v)
2	Vss	Ground(0v)
3	V0	Regulate LCD
4	CL1	Data latch clock
5	M	Frame signal
6、7	NC	No connect
8	FLM	Frame pulse
9	CL2	Data shift clock
10	NC	No connect
11-14	DB0-DB4	Data Bus Line

PIN CONNECTIONS(2)

PIN No.	SYMBOL	FUNCTION
1	FGND	Frame ground
2	Vss	Ground(0v)
3	Vdd	Logic Supply Voltage(+5.0v)
4	V0	Regulate LCD
5	RESET	Reset signal
6	/RD	Read signal
7	/WR	Write signal
8	/CS	Chip select
9	A0	Data type
10-14	DB0-DB7	Data Bus Line

4 ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN	MAX	UNIT
Supply Voltage Logic	VDD-VSS	-0.3	7.0	V
Supply Voltage Driver	VDD-VEE	-0.3	30.0	V
Intut Voltage	VIN	-0.3	Vdd+0.3	V

Operating Temp Storage Temp	See page 9

5 ELECTRICAL CHARACTERISTICS(Ta=25 ℃)

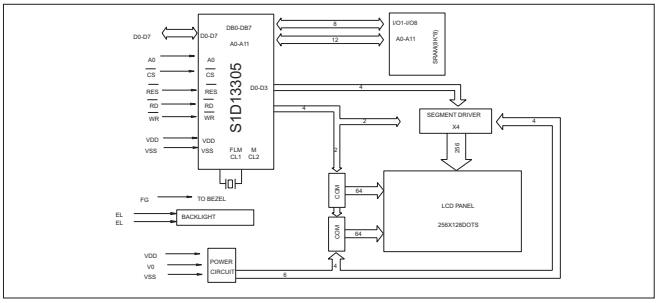
ITEM		SYMBOL	CONDITION	SPEC.VALUE MIN.	SPEC.VALUE TYP.	SPEC.VALUE MAX.	UNIT
Supply Voltage (Logic)		V_{DD}-V_{SS}		4.5	5.0	5.5	V
Supply Current (Logic)		I_{DD}	V_{DD}=5V	–	8.7	13.0	mA
Input Voltage	HIGH	V_{IH}		V_{DD}-2.2	–	V_{DD}	V
	LOW	V_{IL}		0	–	0.8	V
Output Voltage	HIGH	V_{OH}		V_{DD}-0.3	–	V_{DD}	V
	LOW	V_{OL}		–	–	0.3	V
LCD Operating Voltage		V_{DD}-V_{EE}	V_{DD}=5V Ta=25 ℃		19.0	–	V
Supply Voltage LCD Drive		I_{EE}			5.87	–	mA

6 BACKLIGHTING CHARACTERISTICS(Ta=25 ℃)

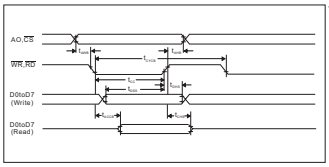
EL

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIX
Supply Voltage	V_{EL}			100		V
Power Consumption	F_{EL}			400		Hz
Luminous				30		cd/m²

7 BLOCK DIAGRAM



8 8080 FAMILY INTERFACE TIMING



Ta=-20to75℃

Signal	Symbol	Parameter	V_{DD}=4.5to5.5V min	V_{DD}=4.5to5.5V max	V_{DD}=2.7to4.5V min	V_{DD}=2.7to4.5V max	Unit	Condition
A0,$\overline{CS}$	tAH8	Address hold time	10	-	10	-	ns	CL=100pF
	tAW8	Address setup time	0	-	0	-	ns	
$\overline{WR}$,$\overline{RD}$	tCYC8	System cycle time	see note.	-	see note.	-	ns	
	tCC	Strobe pulsewidth	120	-	150	-	ns	
D0toD7	tDS8	Data setup time	120	-	120	-	ns	
	tDH8	Data hold time	5	-	5	-	ns	
	tACC8	$\overline{RD}$ access time	-	50	-	50	ns	
	tOH8	Output disable time	10	50	10	80	ns	

Note:For memory control and sysem control commands:t_{CYC8}=2t_L+t_{LC}+t_{DH}+75>t_{CYC8}+245
For all other commands:t_{CYC8}=4t_L+t_{LC}+30