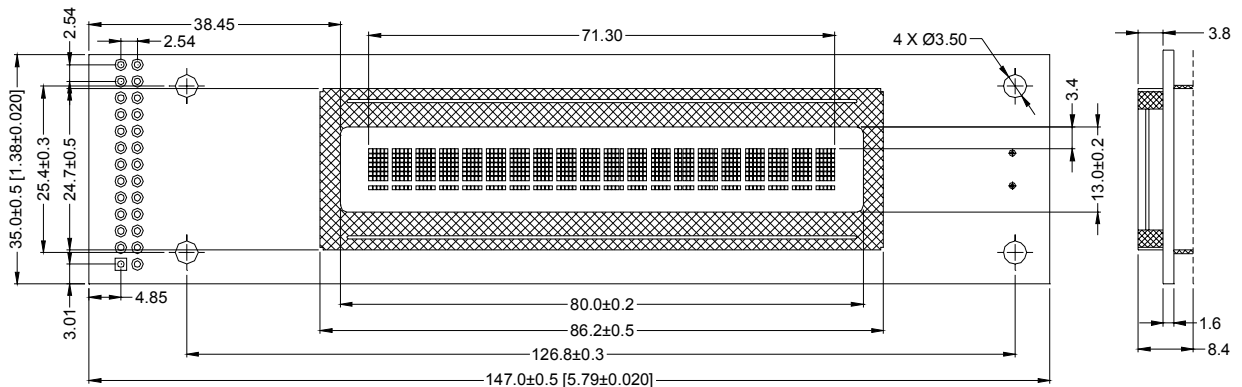
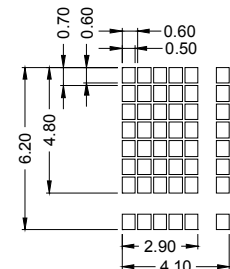
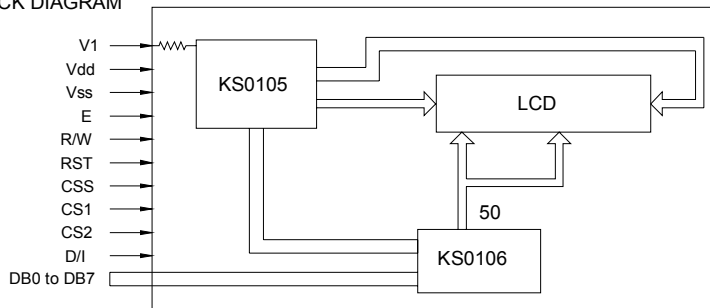


## LM20103 [20 x 1, 1/16 MUX]

DIMENSION IN MM



### BLOCK DIAGRAM



[ \* ] DIMENSIONS FOR LED BACKLIGHT VERSION

### TABULATED DATA

MODEL	DISPLAY FORMAT CHAR. x LINE	FONT MATRIX W x H	DRIVING DUTY	DOT SIZE W x H	CHARACTER SIZE W x H	VIEWING AREA W x H	PCB SIZE W x H
<b>LM20103</b>	20 x 1	5 x 8	1/16	1.25 x 1.30	6.65 x 11.80	155.0 x 16.0	147.0 x 35.0

### ELECTRICAL DATA (Ta = 25°C, Vdd = +5V ± 0.25V)

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUES			UNITS
			MIN.	TYP.	MAX.	
Input High Voltage	V <sub>iH</sub>	-	2.2	-	V <sub>dd</sub>	V
Input Low Voltage	V <sub>iL</sub>	-	-0.3	-	0.6	V
Output High Voltage	V <sub>oH</sub>	I <sub>oH</sub> = 0.2mA	2.4	-	-	V
Output Low Voltage	V <sub>oL</sub>	I <sub>oL</sub> = 1.2mA	-	-	0.4	V
Supply Current	I <sub>dd</sub>	V <sub>dd</sub> = 5.0V	-	1.2	2.0	mA
Operating Voltage for LCD	V <sub>dd</sub> -V <sub>o</sub>	Ta = 0°C	-	4.7	-	V
		Ta = 25°C	-	4.5	-	V

### PIN DETAILS

PIN No.	SIGNAL	PIN No.	SIGNAL	PIN No.	SIGNAL	PIN No.	SIGNAL
1	DB0	7	DB3	13	DB6	20	CS2
2	D/I	8	RST	15	DB7	21	V1
3	DB1	9	DB4	16,17	R/W	23,25	V <sub>ss</sub> (0V)
4	CSS	11	DB5	18	CS1	6,10,14, 22,24,26	NC
5	DB2	12	E	19	V <sub>dd</sub> (+5V)		

### MAX. RATING

Item	MAX.
Top	-15 to +65°C
T <sub>st</sub>	-20 to +70°C
V <sub>dd</sub>	+5 Volts
RH%	90 %

### OPTIONAL DETAILS

Wide configurations available. Kindly contact **LAMPPEX** while ordering. Refer **LAMPPEX LCM Catalog** for more information. **LAMPPEX** reserves all rights. Specification might alter without prior notice.

**CAUTION: STATIC SENSITIVE DEVICES**