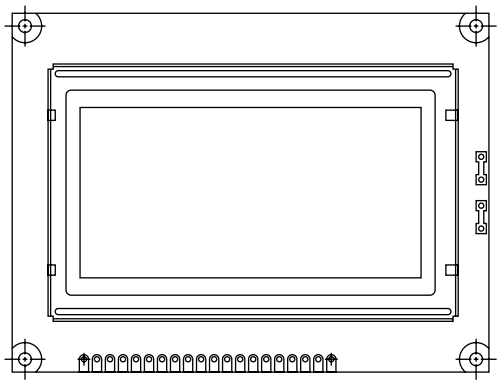
160 x 80 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 160 x 80 dots
- Built-in controller: Sanyo LC7981 (or equivalent)
- Duty cycle: 1/80
- + 5 V power supply
- Built-in N.V.
- Compliant to RoHS directive 2002/95/EC

Pb-free
RoHS COMPLIANT

MECHANICAL DATA

ITEM	STANDARD VALUE	UNIT
Module Dimension	93.0 x 70.0	mm
Viewing Area	72.0 x 40.0	
Dot Size	0.39 x 0.39	
Dot Pitch	0.42 x 0.42	
Mounting Hole	88.0 x 65.0	
Character Size	N/a	

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	V_{DD} to V_{SS}	4.75	5.0	5.25	V
Input Voltage	V_I	0	-	V_{DD}	

Note

- V_{SS} = 0 V, V_{DD} = 5.0 V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	V_{DD}	V_{DD} = + 5 V	4.5	5.0	5.5	V
Supply Current	I_{DD}	V_{DD} = + 5 V	-	0.6	0.8	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	-	-	14.5	V
		0 °C	-	-	14.0	
		25 °C	-	13.5	-	
		50 °C	13.0	-	-	
		70 °C	12.5	-	-	
LED Forward Voltage	V_F	25 °C	-	4.2	4.6	V
LED Forward Current	I_F	25 °C	-	330	660	mA
EL Power Supply Current	I_{EL}	V_{EL} = 110 V_{AC}, 400 Hz	-	-	5.0	mA

OPTIONS

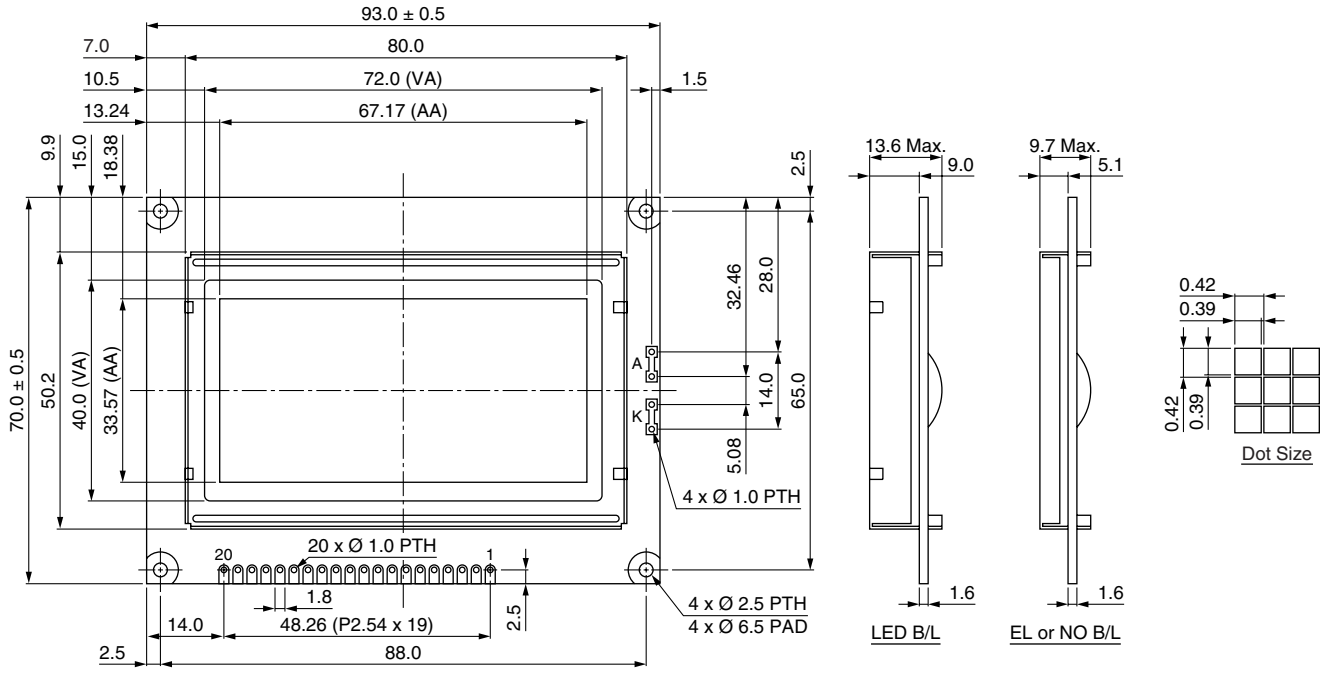
PROCESS COLOR						BACKLIGHT			
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	x	x	x	x		x	x	x	

For detailed information, please see the “Product Numbering System” document.

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	V_{SS}	Ground
2	V_{DD}	Power supply (+ 5 V)
3	V_0	Contrast adjustment
4	D/I	H/L register select signal
5	R/$\overline{W}$	H/L read/write signal
6	E	H → L enable signal
7	DB0	DB0 data bus line
8	DB1	DB1 data bus line
9	DB2	DB2 data bus line
10	DB3	DB3 data bus line
11	DB4	DB4 data bus line
12	DB5	DB5 data bus line
13	DB6	DB6 data bus line
14	DB7	DB7 data bus line
15	CS	L: Chip enable
16	DISOFF	L: Display off signal
17	RST	Reset signal
18	V_{EE}	Negative voltage output
19	A	+ 4.2 V for LED
20	K	0 V for LED

DIMENSIONS in millimeters



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