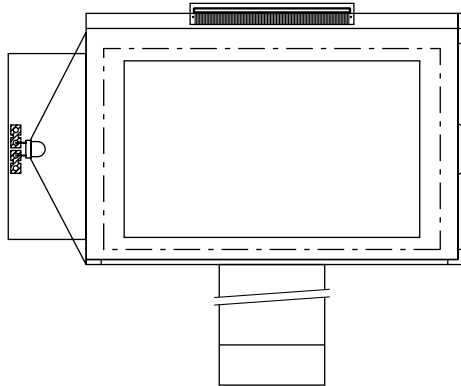


128 x 64 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 128 x 64 dots
- Built-in controller: Epson SED15605 (or equivalent)
- Duty cycle: 1/64
- + 3 V power supply
- N.V. built-in
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	90.5 x 50.0	mm
Viewing Area	67.0 x 40.0	
Dot Size	0.42 x 0.50	
Dot Pitch	0.46 x 0.55	
Mounting Hole	N/a	
Character Size	N/a	

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDARD VALUE			UNIT
		MIN.	TYP.	MAX.	
Power Supply	V_{DD} to V_{SS}	2.7	3.0	3.3	V
Input Voltage	V_I	0	-	V_{DD}	

Note

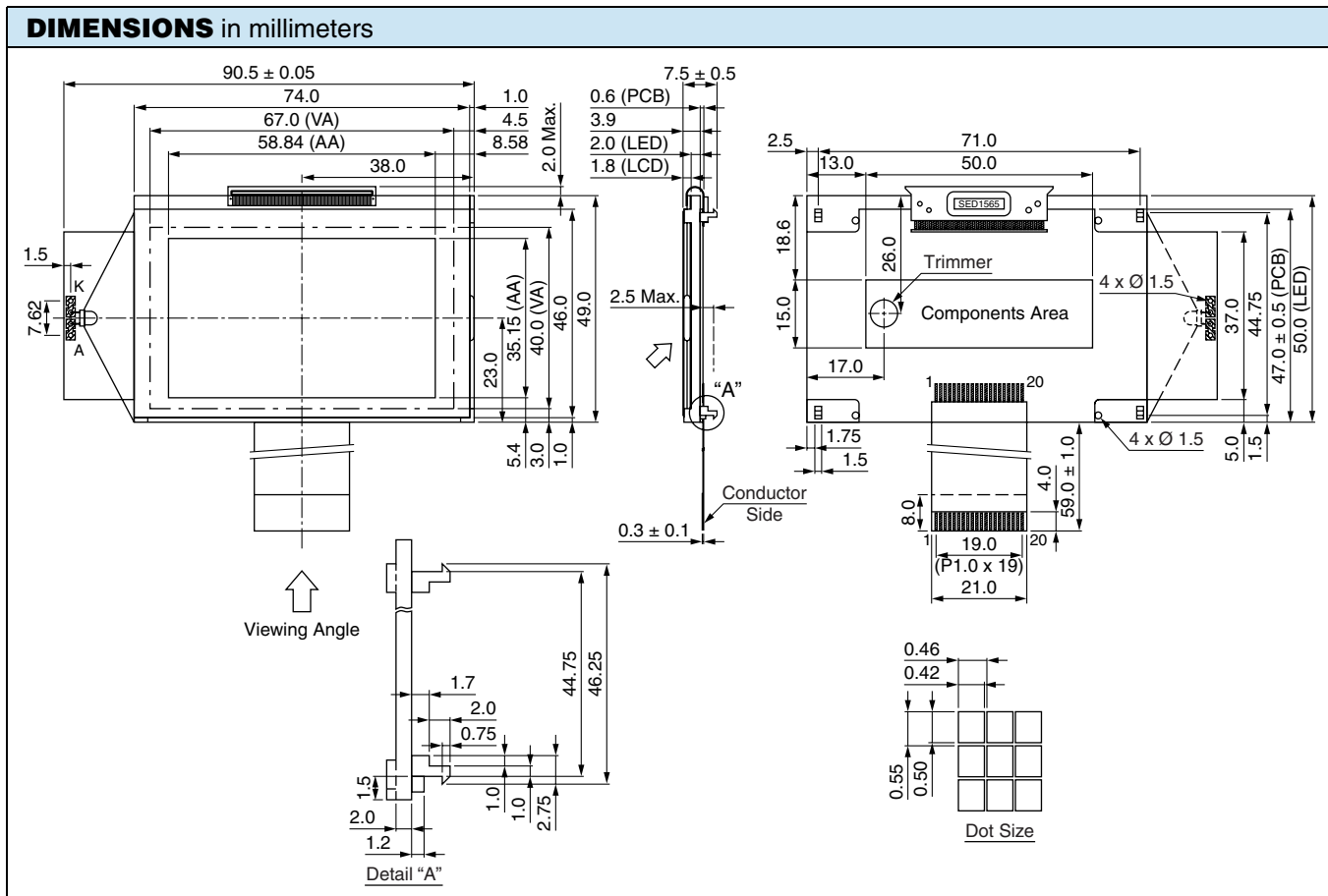
- $V_{SS} = 0$ V, $V_{DD} = 5.0$ V

ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
Input Voltage	V_{DD}	$V_{DD} = +5$ V	2.7	3.0	3.3	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	8.7	8.8	8.9	V
		0 °C	8.5	8.6	8.7	
		25 °C	8.4	8.5	8.6	
		50 °C	8.1	8.2	8.4	
		70 °C	7.9	8.0	8.2	
LED Forward Voltage	V_F	25 °C	-	3.5	3.8	V
LED Forward Current	I_F	25 °C	-	20	-	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	

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 (+ 3 V)
3	V ₀	Contrast adjustment
4	A ₀	H/L: Data/command select signal
5	R/W	H/L read/write signal
6	E	H → L enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
15	CS1	Low: Chip enable
16	P/S	H/L: Parallel data/serial data input
17	RST	Reset signal
18	C86	H/L: 6800 MPU/8080 MPU interface
19	A	+ 3.5 V for LED
20	K	0 V for LED





Disclaimer

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