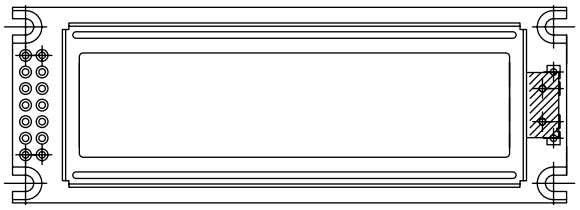
144 x 32 Graphic LCD



FEATURES

- Type: Graphic
- Display format: 144 x 32 dots
- Built-in controller: (ST7920)
- Duty cycle: 1/32
- + 5 V power supply
- LED can be driven by pin 15, pin 16 or A, K
- Chinese version
- Same size with LCD-016N002D series
- Compliant to RoHS directive 2002/95/EC

Pb-free
RoHS COMPLIANT

MECHANICAL DATA

ITEM	STANDARD VALUE	UNIT
Module Dimension	85.0 x 30.0 x 13.2	mm
Viewing Area	66.0 x 16.0	
Dot Size	0.38 x 0.38	
Dot Pitch	0.42 x 0.42	
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}	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}	-	4.5	5.0	5.5	V
Supply Current	I_{DD}	V_{DD} = + 5 V	-	1.2	1.5	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	-	-	6.0	V
		25 °C	-	4.7	-	
		70 °C	4.0	-	-	
CCFL Starting Voltage	V_{FLS}	25 °C	-	-	-	
CCFL Starting Voltage	V_{FLD}	25 °C	-	-	-	
CCFL Starting Voltage	I_{FLD}	V_{FQ} = 450 V_{RMS}, 30 kHz	-	-	-	
LED Forward Voltage	V_F	25 °C	-	4.0	4.3	V
LED Forward Current - Array	I_F	25 °C	-	130	260	mA
LED Forward Current - Edge	I_{EF}	V_{EL} = 110 V_{AC}, 400 Hz	-	-	5.0	

OPTIONS

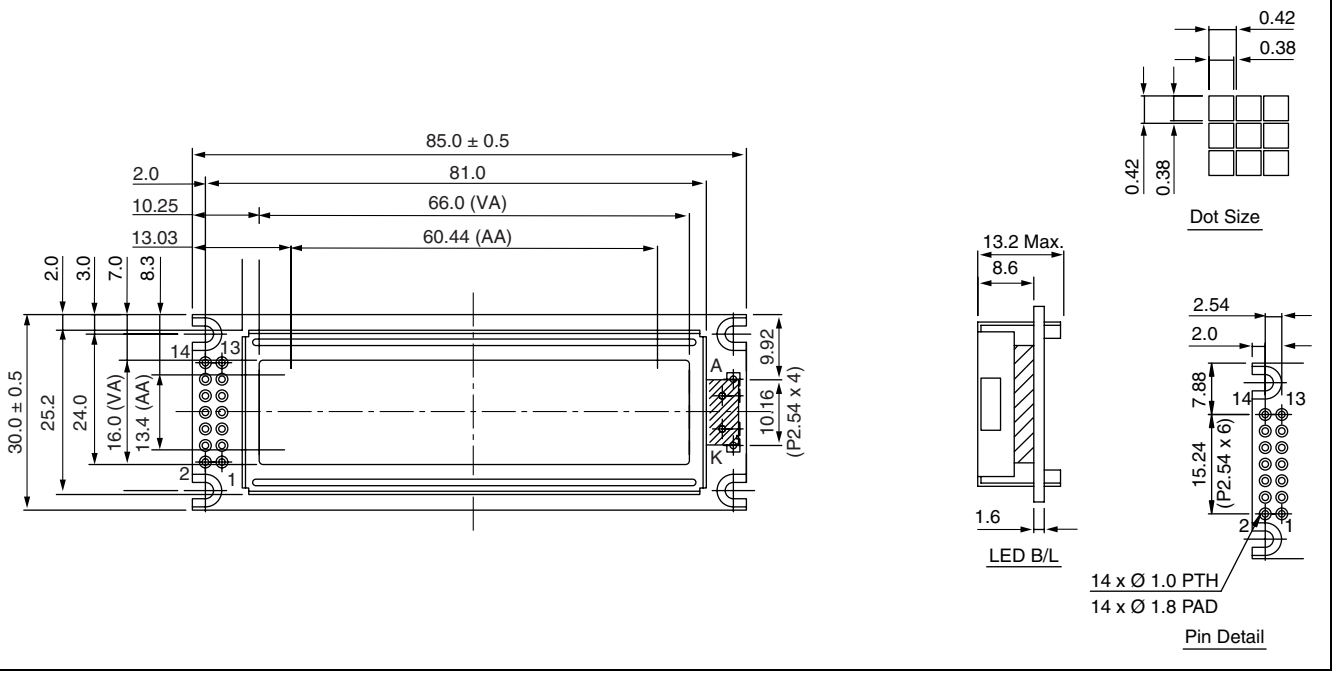
PROCESS COLOR						BACKLIGHT			
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	x	x	x	x		x	x	x	

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

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	V_{DD}	Supply voltage for logic
2	V_{SS}	Ground
3	V_0	NC
4	RS	Register select signal
5	R/W	H/L read/write signal
6	E	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

DIMENSIONS in millimeters



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