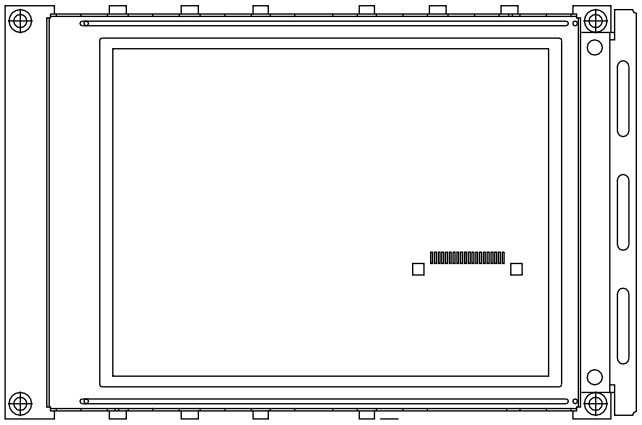
320 x 240 Graphic LCD



FEATURES

- Type: graphic
- Display format: 320 x 240 dots
- Built-in controller: RA8835
- Duty cycle: 1/240
- Built-in N.V.
- Touch screen option (analog type)
- Temperature compensation option
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

MECHANICAL DATA

ITEM	STANDARD VALUE	UNIT
Module dimension	160.0 x 109.0	mm
Viewing area	122.0 x 92.0	
Dot size	0.34 x 0.34	
Dot pitch	0.36 x 0.36	
Mounting hole	152.0 x 101.0	
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	-0.3	-	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}	L level	0.7 V_{DD}	-	V_{DD}	V
	V_{IO}	H level	0	-	0.3 V_{DD}	V
Supply current	I_{DD}	V_{DD} = +5.0 V	-	100	105	mA
Recommended LC driving voltage for normal temperature version module	V_0 to V_{SS}	-20 °C	-	-	26.1	V
		25 °C	-	23.8	-	
		70 °C	20.9	-	-	
CCFL starting voltage	V_{FLS}	25 °C	-	600	-	V_{RMS}
CCFL driving voltage	V_{FLD}	25 °C	-	268	-	V_{RMS}
CCFL driving current	I_{FLD}	V_{FQ} = 450 V_{RMS}, 30 kHz	-	5.0	-	mA_{RMS}

OPTIONS

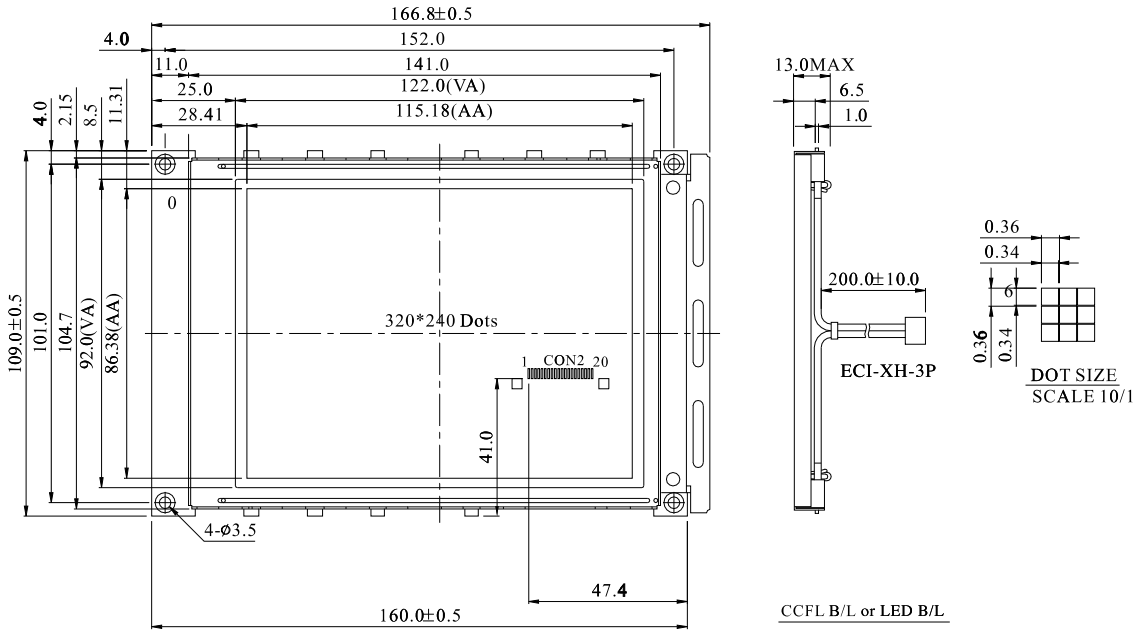
PROCESS COLOR						BACKLIGHT			
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
-	x	x	x	x	-	x	x	x	x

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 for logic
3	V_0	Driving voltage for LCD
4	A_0	Data type select
5	WR	8080 family: write signal / 6800 family: R/W signal
6	RD	8080 family: read signal / 6800 family: enable clock
7	DB0	Date bus line
8	DB1	Date bus line
9	DB2	Date bus line
10	DB3	Date bus line
11	DB4	Date bus line
12	DB5	Date bus line
13	DB6	Date bus line
14	DB7	Date bus line
15	$\overline{CS}$	Chip select, active L
16	$\overline{RES}$	Controller reset signal, active L
17	V_{EE}	Negative voltage output
18	SEL	8088, 6800 interface selection (1:68, 0:80)
19	F_{GND}	Frame ground
20	WAIT	Check busy

DIMENSIONS in millimeters



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