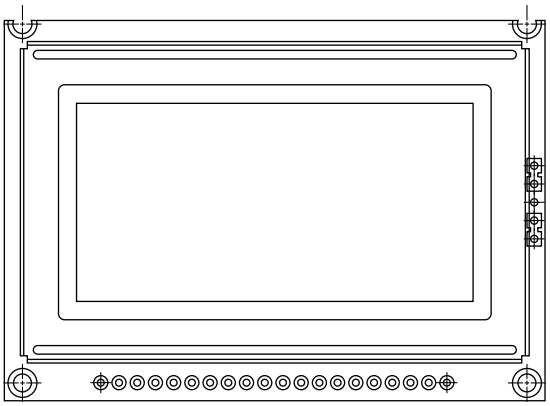
128 x 64 Graphic LCD



FEATURES

- Type: graphic
- Display format: 128 x 64 dots
- Built-in controller: NT 7107, NT 7108
- Duty cycle: 1/64
- +5 V power supply
- N.V. built-in
- LCD-128H064S: Chinese character version
- LCD-128H064BP1: +3.3 V 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	75.0 x 52.7	mm
Viewing area	60.0 x 32.6	
Dot size	0.39 x 0.39	
Dot pitch	0.43 x 0.43	
Mounting hole	70.0 x 49.7	
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}	
Supply current	I_{DD}	V_{DD} = +5 V	-	4.0	5.2	mA
Recommended LC driving voltage for normal temperature version module	V_{DD} to V_0	-20 °C	9.9	10.4	10.9	V
		0 °C	9.7	10.2	10.7	
		25 °C	7.5	8.0	8.5	
		50 °C	8.6	9.1	9.6	
		70 °C	8.4	8.9	9.4	
LED forward voltage	V_F	25 °C	-	4.2	4.6	V
LED forward current - edge	I_F	25 °C	-	100	150	mA
EL power supply current	I_{EL}	V_{EL} = 110 V_{AC}, 400 Hz	-	-	5.0	mA

OPTIONS

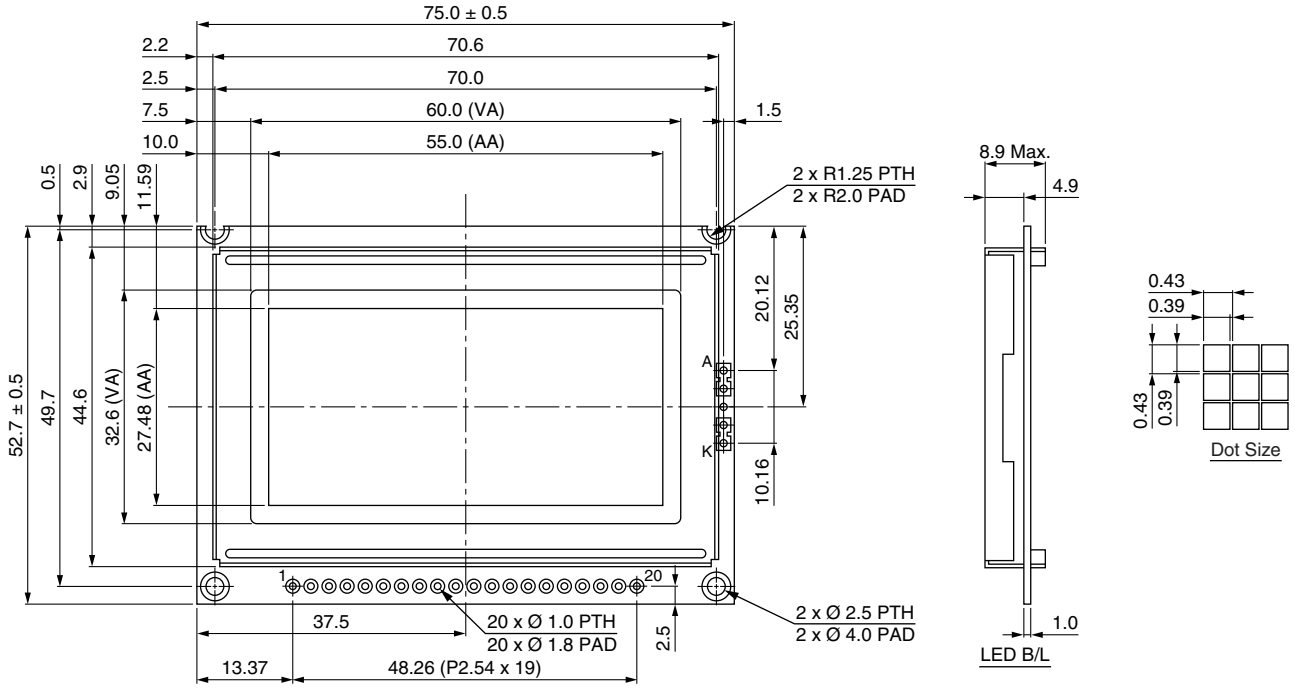
PROCESS COLOR						BACKLIGHT			
TN	STN GRAY	STN YELLOW	STN BLUE	FSTN B&W	STN COLOR	NONE	LED	EL	CCFL
-	x	x	x	x	-	x	x	x	-

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

INTERFACE PIN FUNCTION

PIN NO.	SYMBOL	FUNCTION
1	V_{DD}	Power supply (+5 V)
2	GND	Power supply (ground)
3	V_0	Contrast adjustment
4	DB0	Data bus line
5	DB1	Data bus line
6	DB2	Data bus line
7	DB3	Data bus line
8	DB4	Data bus line
9	DB5	Data bus line
10	DB6	Data bus line
11	DB7	Data bus line
12	CS1	Chip select for IC1
13	CS2	Chip select for IC2
14	$\overline{RST}$	Reset signal
15	R / $\overline{W}$	Data read / write
16	D / I	Data / instruction
17	E	Enable signal
18	V_{EE}	Negative voltage output
19	A	Power supply for LED (+4.2 V)
20	K	Power supply for LED (0 V)

DIMENSIONS in millimeters



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