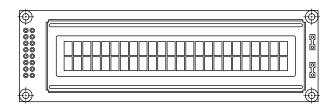




24 x 2 Character LCD



FEATURES

• Type: Character

• Display format: 24 x 2 characters

• Built-in controller: KS 0066 (or equivalent)

RoHS

• Duty cycle: 1/16

• 5 x 8 dots includes cursor

- + 5 V power supply (also available for + 3 V)
- LED can be driven by pin 1, pin 2, pin 15, pin 16 or A and K
- N.V. optional for + 3 V power supply
- Compliant to RoHS directive 2002/95/EC

MECHANICAL DATA										
ITEM	STANDARD VALUE	UNIT								
Module Dimension	118.0 x 36.0									
Viewing Area	94.5 x 16.0									
Dot Size	0.60 x 0.65	mm								
Dot Pitch	0.70 x 0.65	mm								
Mounting Hole	113.0 x 31.0									
Character Size	3.2 x 5.55									

ABSOLUTE MAXIMUM RATINGS										
ITEM	SYMBOL	STAN	UNIT							
IIEW	STWIDOL	MIN.	TYP.	MAX.	UNIT					
Power Supply	V_{DD} to V_{SS}	- 0.3	-	7.0	V					
Input Voltage	VI	- 0.3	-	V_{DD}	\ \					

Note

• $V_{SS} = 0 \text{ V}, V_{DD} = 5.0 \text{ V}$

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	ST	UNIT			
ITEM	STWBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Input Voltage	V _{DD}	V _{DD} = + 5 V	4.7	5.0	5.3	V	
input voitage	V DD	V _{DD} = + 3 V	2.7	3.0	5.3	7 °	
Supply Current	I _{DD}	V _{DD} = + 5 V	-	0.8	1.1	mA	
		- 20 °C	5.1	5.3	5.7		
Recommended LC Driving		0 °C	4.6	4.9	5.2		
Voltage for Normal Temperature	V_{DD} to V_{0}	25 °C	4.1	4.5	4.7	V	
Version Module		50 °C	3.9	4.2	4.5		
		70 °C	3.7	3.9	4.3	1	
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V	
LED Forward Current	I _F	25 °C	-	190	380	mA	
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA	

OPTION	OPTIONS								
		PROCES		BACK	LIGHT				
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
х	х	Х	х			Х	х	х	

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

24 x 2 Character LCD



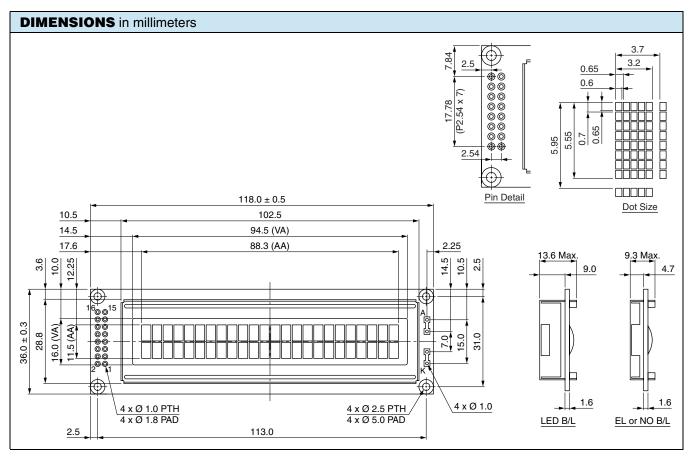
DISPLAY CHARACTER ADDRESS CODE

Display Position

DD RAM Address DD RAM Address

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17
40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57

INTERFACE PIN FUNCTION								
PIN NO.	SYMBOL	FUNCTION						
1	V _{SS}	Ground						
2	V _{DD}	+ 3 V or + 5 V						
3	V ₀	Contrast adjustment						
4	RS	H/L register select signal						
5	R/W	H/L read/write signal						
6	E	$H \rightarrow L$ enable signal						
7	DB0	H/L data bus line						
8	DB1	H/L data bus line						
9	DB2	H/L data bus line						
10	DB3	H/L data bus line						
11	DB4	H/L data bus line						
12	DB5	H/L data bus line						
13	DB6	H/L data bus line						
14	DB7	H/L data bus line						
15	A/V _{EE}	+ 4.2 V for LED ($R_A = 0 \Omega$)/negative voltage output						
16	К	Power supply for B/L (0 V)						







Vishay

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