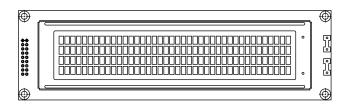


40 x 4 Character LCD



MECHANICAL DATA								
ITEM	STANDARD VALUE	UNIT						
Module Dimension	190.0 x 54.0							
Viewing Area	147.0 x 29.5							
Dot Size	0.50 x 0.55							
Dot Pitch	0.57 x 0.62	mm						
Mounting Hole	183.0 x 47.0							
Character Size	2.78 x 4.89							

FEATURES

- Type: Character
- Display format: 40 x 4 characters
- Built-in controller: KS 0066 (or equivalent)
- 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 17, pin 18 or A and K
- N.V. optional for + 3 V power supply
- Compliant to RoHS directive 2002/95/EC

ABSOLUTE MAXIMUM RATINGS											
ITEM	SYMBOL	STAN	ALUE	UNIT							
	STINDUL	MIN.	TYP.	MAX.	UNIT						
Power Supply	V_{DD} to V_{SS}	- 0.3	-	7.0	V						
Input Voltage	VI	- 0.3	-	V _{DD}	v						

Note

• $V_{SS} = 0 V, V_{DD} = 5.0 V$

ELECTRICAL CHARACTERISTICS										
ITEM	SYMBOL	CONDITION	ST	ANDARD VAL	.UE	UNIT				
	STMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT				
Input Voltage	V _{DD}	$V_{DD} = +5 V$	4.7	5.0	5.3	v				
Input voltage	V DD	$V_{DD} = + 3 V$	2.7	3.0	5.3					
Supply Current	I _{DD}	V _{DD} = + 5 V	-	2.4	3.0	mA				
		- 20 °C	4.9	5.1	5.5					
Recommended LC Driving		0°C	4.5	4.8	5.1					
Voltage for Normal Temperature	V_{DD} to V_0	25 °C	4.1	4.5	4.7	V				
Version Module		50 °C	3.8	4.2	4.4	1				
		70 °C	3.5	3.9	4.1	1				
LED Forward Voltage	V _F	25 °C	-	4.2	4.6	V				
LED Forward Current	l _F	25 °C	-	600	1200	mA				
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	-	5.0	mA				

OPTIONS									
		PROCES	S COLOR			BACK	LIGHT		
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
х	х	х	х			х	x	х	

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

DISPLAY CHARACTER ADDRESS CODE

Display Position																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	 36	37	38	39	40	
DD RAM Address	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	 23	24	25	26	27	Line 1
DD RAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	 63	64	65	66	67	Line 2
DD RAM Address	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	 23	24	25	26	27	Line 3
DD RAM Address	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	 63	64	65	66	67	Line 4



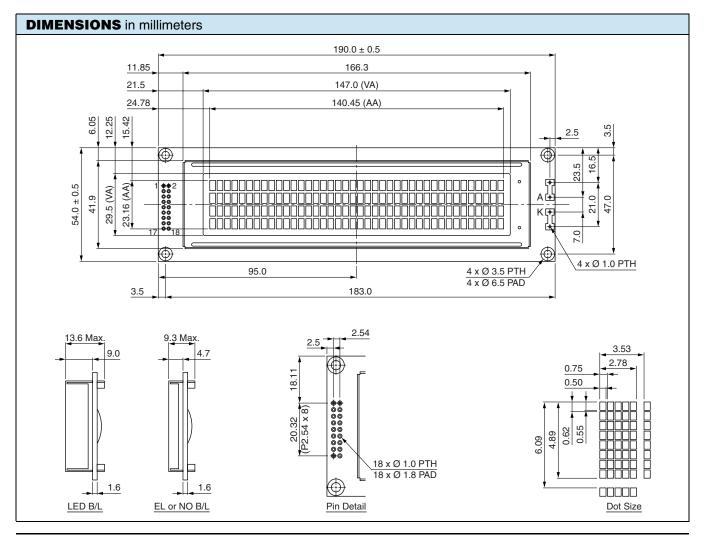
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COMPLIANT

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INTERFACE	INTERFACE PIN FUNCTION								
PIN NO.	SYMBOL	FUNCTION							
1	DB7	Data bus line							
2	DB6	Data bus line							
3	DB5	Data bus line							
4	DB4	Data bus line							
5	DB3	Data bus line							
6	DB2	Data bus line							
7	DB1	Data bus line							
8	DB0	Data bus line							
9	E1	$H \rightarrow L$ enable signal IC1							
10	R/W	H/L read/write							
11	RS	Register select							
12	Vo	Contrast adjustment							
13	V _{SS}	Ground							
14	V _{DD}	+ 5 V							
15	E2	$H \rightarrow L$ enable signal IC2							
16	NC/V _{EE}	NC/negative voltage output							
17	A								
18	К	Ground							





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