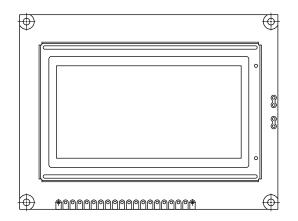


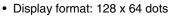


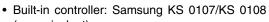
128 x 64 Graphic LCD



FEATURES

• Type: Graphic





(or equivalent)Duty cycle: 1/64+ 5 V power supply

• N.V. built-in

• Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT

MECHANICAL DATA						
ITEM	STANDARD VALUE	UNIT				
Module Dimension	93.0 x 70.0					
Viewing Area	72.0 x 40.0					
Dot Size	0.48 x 0.48	mm				
Dot Pitch	0.52 x 0.52	mm				
Mounting Hole	88.0 x 65.0					
Character Size	N/a					

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	STANDARD VALUE			UNIT
IIEW	STWIDOL	MIN.	TYP.	MAX.	UNIT
Power Supply	V_{DD} to V_{SS}	4.75	5.0	5.25	V
Input Voltage	VI	- 0.3	ı	V_{DD}	V

Note

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

ELECTRICAL CHARACTERISTICS							
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
	STINIBUL	CONDITION	MIN.	TYP.	MAX.	UNII	
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	-	2.5	7.5	mA	
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	- 20 °C	9.9	10.4	10.9		
		0 °C	9.7	10.2	10.7		
		25 °C	8.9	9.4	9.9	V	
		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 - Array	ny ,	25 °C	-	330	660	A	
LED Forward Current - Edge	- I _F	20 0	-	120	240	mA	
EL Power Supply Current	I _{EL}	V _{EL} = 110 V _{AC} , 400 Hz	-	=	5.0	mA	

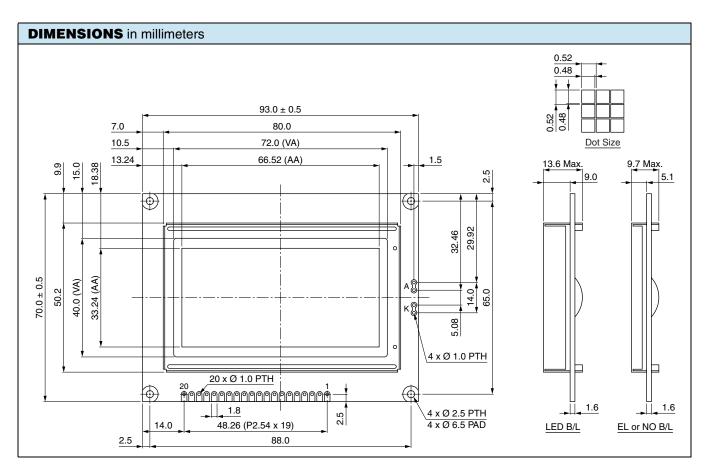
OPTION	OPTIONS								
PROCESS COLOR					BACKLIGHT				
TN	STN Gray	STN Yellow	STN Blue	FSTN B&W	STN Color	None	LED	EL	CCFL
	х	Х	Х	Х		Х	х	х	

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

128 x 64 Graphic LCD



INTERFACE PIN FUNCTION					
PIN NO.	SYMBOL	FUNCTION			
1	V _{SS}	Ground			
2	V _{DD}	Power supply (+ 5 V)			
3	V ₀	Contrast adjustment			
4	D/I	Data/instruction			
5	R/W	Data read/write			
6	E	$H \rightarrow L$ 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			
15	CS1	Chip select for IC1			
16	CS2	Chip select for IC1			
17	RST	Reset			
18	V _{EE}	Negative voltage output			
19	A	Power supply for LED (+ 4.2 V), $R_A = 0 \Omega$			
20	K	Power supply for LED (0 V)			





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Vishay

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