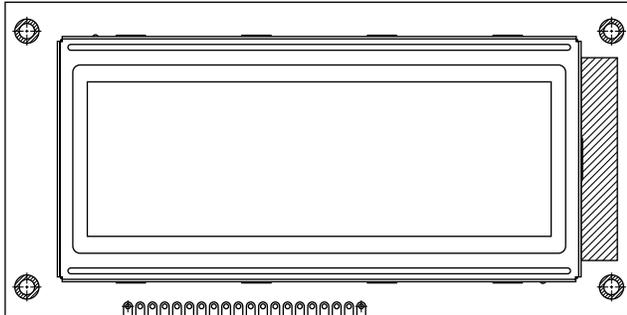


192 x 64 Graphic LCD


FEATURES

- Type: Graphic
- Display format: 192 x 64 dots
- Built-in controller: Samsung KS 0107/KS 0108 (or equivalent)
- Duty cycle: 1/64
- + 5 V power supply
- Optional N.V.
- Compliant to RoHS directive 2002/95/EC


RoHS
COMPLIANT

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	130.0 x 65.0	mm
Viewing Area	102.0 x 39.0	
Dot Size	0.458 x 0.458	
Dot Pitch	0.508 x 0.508	
Mounting Hole	121.0 x 53.0	
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	5.5	V
Input Voltage	V_I	0	-	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}	$V_{DD} = +5$ V	4.5	5.0	5.5	V
Supply Current	I_{DD}	$V_{DD} = +5$ V	3.1	3.6	4.5	mA
Recommended LC Driving Voltage for Normal Temperature Version Module	V_{DD} to V_0	-20 °C	-	-	9.6	V
		0 °C	-	-	-	
		25 °C	-	-	-	
		50 °C	-	8.4	-	
		70 °C	7.6	-	-	
LED Forward Voltage	V_F	25 °C	3.4	4.2	4.6	V
LED Forward Current	I_F	25 °C	70	540	90	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		

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



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