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Type I Overall Size (mm): 84x44 16pin through-hole bottom connection

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PRODUCT TREE


WHIP!

Image next to part no. indicates cad file.



Indicates an [Opto Express](#) part.

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Lumex drawings are in PDF format. If you don't have Adobe Acrobat, click on this icon to

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Lumex Part Number	Overall Size with LED Backlight	Overall Size without Backlight	Viewing Area (WxH)	Character Height (WxH)	Dot Size (WxH)	Font	Duty
LCM-S01602DSF/I WHIP!	84x44x12.7		66x19	2.96x5.56	0.56x0.66	5x8	1/16
LCM-S01602DSR/I WHIP!		84x44x8.8	66x19	2.96x5.56	0.56x0.66	5x8	1/16
LCM-S01602DTF/I WHIP!	84x44x12.7		66x19	2.96x5.56	0.56x0.66	5x8	1/16
LCM-S01602DTR/I WHIP!		84x44x8.8	66x19	2.96x5.56	0.56x0.66	5x8	1/16

Part Number Suffix Table

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- DSR = STN, Reflective
- DSF = STN, Transflective (With Backlight)
- DTR = TN, Reflective
- DTF = TN, Transflective (With Backlight)

Absolute Maximum Ratings

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	Test	Standard Value
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Item	Symbol	Condition	Min	Max	Unit
Supply Voltage for Logic	$V_{DD}-V_{SS}$	$T_a=25^{\circ}\text{C}$	4.7	5.3	V
Supply Voltage for LCD Drive	$V_{DD}-V_o$	-	4.2@50° C	4.8@50° C	V
Input Voltage	V_I	$T_a=25^{\circ}\text{C}$	V_{SS}	V_{DD}	V
Operating Temperature	T_{opr}	LCM-S	0	50	$^{\circ}\text{C}$
		LCM-H	-20	70	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	LCM-S	-20	70	$^{\circ}\text{C}$
		LCM-H	-30	85	$^{\circ}\text{C}$

Technical Information

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- You can find comprehensive technical information in the [Lumex Tech Notes](#) section. Click [here](#) to get there!

Electrical Characteristics

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Item		Symbol	Test Condition	Standard Value			Unit
				Min.	Typ.	Max.	
Supply Voltage for Logic		$V_{DD}-V_{SS}$	-	-	5.0	-	V
Supply Current for Logic		I_{DD}	$V_{DD}=5\text{V}$	-	2.0	3.0	mA
Input Voltage	High	V_{IH}	-	2.2	-	4.7	V
	Low	V_{IL}	-	0	-	0.6	V
Output Voltage	High	V_{OH}	-	2.4	-	-	V
	Low	V_{OL}	-	-	-	0.4	V
*LED Backlight	Voltage	V_f	$I_f=160\text{mA}$	-	4.2	4.5	V
	Current	I_f	-	-	160	400	mA
	Power Consumption	PD	-	-	660	-	mW
	Luminous	L	$I_f=160\text{mA}$	70	-	-	cd/m ²
	Color	-	-	-	-	-	nm
*Only Applies to Modules with Backlight $V_{DD}=4.7\text{V}$ to 5.3V , $T_A=25^{\circ}\text{C}$							

Options

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- High Temperature Module Available

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