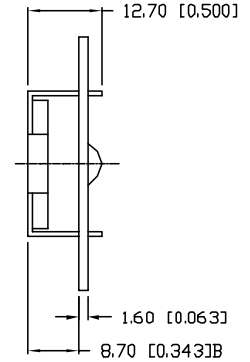
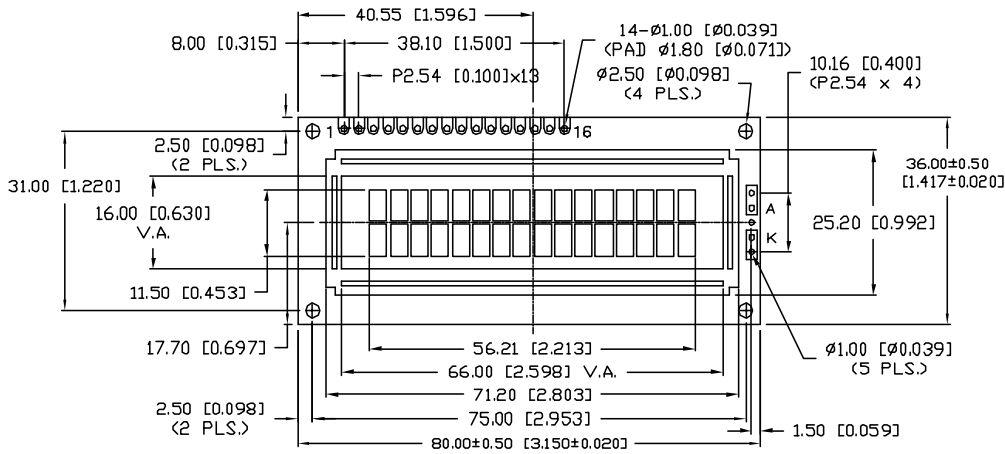
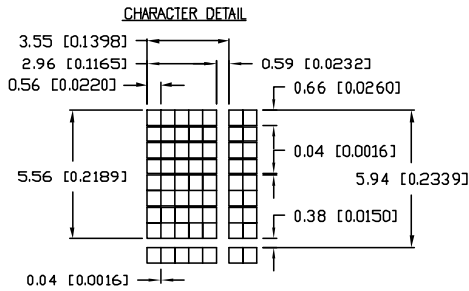


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PART NUMBER
LCM-S01602DSF/A


REV.

CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.



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*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 [±0.038], XX=±0.5 [±0.020], XXX=±0.25 [±0.010], XXXX=±0.127 [±0.006]. LEAD SIZE=±0.05 [±0.002], LEAD LENGTH=±0.75 [±0.030], NN=DECIMAL PRECISION MAX.=+0.00 DECIMAL PRECISION -0.00

REV.	PART NUMBER LCM-S01602DSF/A	<p>CONFIDENTIAL INFORMATION</p> <p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.</p> <p>RELIABILITY NOTE</p> <p>OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.</p>	 <p>290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw</p>	DRAWN BY: CT	CHECKED BY:	APPROVED BY:	DATE: 1.22.02 PAGE: 1 OF 2 SCALE: N/A
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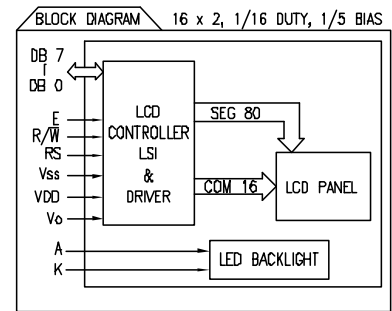
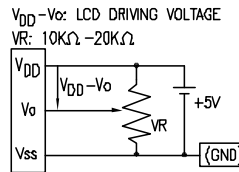
5.58mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
STN, TRANSFLECTIVE WITH LED BACKLIGHT,
16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS.

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PART NUMBER
LCM-S01602DSF/A

REV.

PIN CONFIGURATION			
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	-	POWER SUPPLY GND (DV) 5V FOR LCD DRIVE
2	V _{DD}	-	
3	V _O	-	
4	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT
5	R/W	H/L	H: DATA READ (MODULE-->MPU) L: DATA WRITE (MODULE<--MPU)
6	E	H,H->L	ENABLE
7~14	DB0~DB7	H/L	DATA BUS--SOFTWARE SELECTABLE 4 OR 8 BIT MODE.
15	A	-	LED BACKLIGHT
16	K	-	LED BACKLIGHT



ELECTRICAL CHARACTERISTICS		V _{DD} =4.7V to 5.3V, T _A =25°C		STANDARD VALUE			UNIT
ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	-	5.0	-		V
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0		mA
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD}	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 =160mA	-	4.2	4.6	V
	CURRENT	I _f	-	-	160	-	mA
	POWER CONSUMPTION	PD	-	-	656	-	mW
	LUMINOUS	L	I _f =160mA	70	-	-	cd/m ²
COLOR	-	-	-	-	-	-	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS		TEST CONDITION		STANDARD VALUE		UNIT
ITEM	SYMBOL			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C		4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-		4.2@50°C	4.8@0°C	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}		V
OPERATING TEMPERATURE	T _{opr}	LCM-S		0	50	°C
STORAGE TEMPERATURE	T _{stg}	LCM-S		-20	70	°C

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.038), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.006). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), NN= ±DECIMAL PRECISION MAX.= ±0.00 DECIMAL PRECISION

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REV.	PART NUMBER LCM-S01602DSF/A	<p>CONFIDENTIAL INFORMATION</p> <p>THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.</p> <p>RELIABILITY NOTE</p> <p>OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.</p>	<p>290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com TW WEB: www.lumex.com.tw</p>
5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, STN, TRANSFLECTIVE WITH LED BACKLIGHT, 16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS.		<p>DRAWN BY: CT</p> <p>CHECKED BY:</p> <p>APPROVED BY:</p>	<p>DATE: 1.22.02</p> <p>PAGE: 2 OF 2</p> <p>SCALE: N/A</p>