UNCONTROLLED DOCUMENT PART NUMBER REV. LCM-S02402DSF CHARACTER DETAIL 3.70 [0.146] -3.20 [0.126] -**→** 0.50 [0.020] 0.60 [0.024] --D.65 [0.026] CAUTION: STATIC SENSITIVE DEVICE - 0.05 [0.002] FOLLOW PROPER E.S.D. HANDLING PROCEDURES 5.55 [0.219] 5.95 [0.234] WHEN WORKING WITH THIS PART. **- 0.40 [0.016]** 0.05 [0.002] ---— 113.00 [4.449] -- 2.50 [0.098] (2 PLS.) — 100.80 [3.968] — - 94.80 [3.732] -2.50 [0.098] --**--** 1.50 [0.059] 93.50 [3.681] V.A. -2.50 [0.098] (2 PLS.) 12.70 [0.500] 88.30 [3.476] -8.70 [0.343] 10.16 [0.400] $(P2.54 \times 4)$ Φ ∄ T 15 16 [1.220]00 [1.051] 00 17.78 [0.700] 00 16.00 [0.630] 0.0 $(P2.54 \times 7)$ V.A. 00 00 - | 0 | 0 11.50 [0.453] ① 5-Ø1.00 [Ø0.039] 1,60 [0,063] ---16-ø1.00 [ø0.039] 61.75 [2.431] -(PAD Ø1.80) 4-Ø2.50 [Ø0.098] - 118.00±0.50 [4.646±0.020] -*UNIESS OTHERWISE SPECIFED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±0.127 (±0.005). LEAD 9ZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). NN=+DECIMAL PRECISION MAX.=+0.00

REV. PART NUMBER LCM-S02402DSF

5.55mm CHARACTER HEIGHT, 24 x 2 CHARACTER LCD. 5 x 8 DOT MATRIX, STN, TRANSFLECTIVE, LED BACKLIGHT, 1/16 DUTY.

CONFIDENTIAL INFORMATION
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.

RELIABILITY NOTE 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.



290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 U\$ WEB: www.lumex.com TW WEB: www.lumex.com.tw

DRAWN BY:

SA/CT

CHECKED BY: APPROVED BY: DATE:

8,17,01 PAGE: 1 OF 2

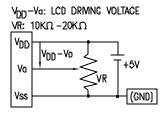
SCALE: N/A

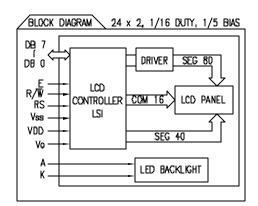
LCM-S02402DSF

REV.

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION				
1	Vss	_		GND (OV)			
2	V _{DD}	-	POWER SUPPLY	5V			
3	Vo	-		FOR LCD DRIVE			
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)< td=""></mpu)<>				
6	Е	H,H->L	ENABLE				
7~14	DBO~DB7	H/L	DATA BUS-SOFTWARE SELECTABLE 4 OR 8 BIT MODE.				
15	Α	_	ANODE	LED BACKLIGHT			
16	K	ı	CATHODE	LED BACKLIGHT			
				•			





ELECTRICAL CHARACTERISTICS

V_{DD}=4.7V to 5.3V, TA=25°C

ПЕМ		SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			CONDITION	MIN.	TYP.	MAX.	UNII	
SUPPLY VOLTAGE FOR LOGIC		V _{DD} -Vss	I	ı	5.0	ı	٧	
SUPPLY CURRENT FOR LOGIC		l _{DD}	V _{DD} =5V	-	2.0	3.0	mA	
INPUT VOLTAGE HIGH LOW		٧H	_	2.2	-	4.7	٧	
		٧ _{IL}	_	Û	-	0.6	٧	
CUTPUT VOLTAGE HIGH LOW		Voн	-	2.4	-	-	٧	
		LOW	V∂L	-	-	-	0.4	٧
*LED BACKLIGHT	VOLTAGE		Vf	lf=160mA	-	4.2	4.5	٧
	CURRENT		lf	I	ı	160	400	mΑ
	POWER CUNSUMPTION		PD	I	ı	660	ı	mW
	LUMINOUS		L	lf=160mA	70	-	ı	cd/m²
	COLOR		-	- 1	-	_	-	ım

*ONLY APPLIES TO MODULES WITH BACKLIGHT

/ ABSOLUTE MAXIMUM RATINGS \

/	\				
ITEM	SYMBOL	TEST	STANDARD VALUE		UNIT
	31 MDQL	CONDITION	MIN	MAX	ONII
SUPPLY VOLTAGE FOR LOGIC	Vpp-Vas	Ta=25°C	4.7	5.3	٧
SUPPLY VOLTAGE FOR LCD DRIVE	VDD-N•	_	4.2 @ 50°C	4.800CC	٧
INPUT VOLTAGE	٧١	Ta=25°C	Vss	۷ _{DD}	٧
OPERATING TEMPERATURE	Tapr	LCM-S	0	50	Ċ.
STORAGE TEMPERATURE	Tstg	LCM-S	-20	70	Ċ.

UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.039), MIN = +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000 | +0.000

REV. PART NUMBER LCM-S02402DSF

5.55mm CHARACTER HEIGHT, 24 x 2 CHARACTER LCD. 5 x 8 DOT MATRIX, STN, TRANSFLECTIVE, LED BACKLIGHT, 1/16 DUTY.

<u>Confidential information</u>
The information contained in this document is the property of LUNEX NC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUNEX NC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HERBIN CONFIDENTIAL AND SHALL PROTECT SAME IN MHOLE DR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

RELIABILITY NOTE OUR MANY YEARS OF EXPERENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS



290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 US WEB: www.lumex.com

TW WEB: www.lumex.com.tw

DRAWN BY:

CHECKED BY: APPROVED BY:

DATE: 8.17.01 PAGE: 2 OF 2

SA/CT

SCALE: N/A