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 <del>- | 0</del> | 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.

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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.



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8,17,01 PAGE: 1 OF 2

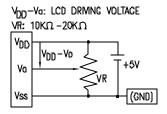
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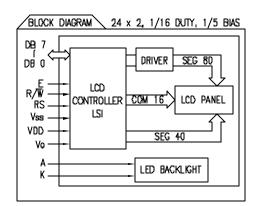
LCM-S02402DSF

REV.

## PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION				
1	Vss	_		GND (OV)			
2	V <sub>DD</sub>	-	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<sub>DD</sub>=4.7V to 5.3V, TA=25°C

ПЕМ		SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			CONDITION	MIN.	TYP.	MAX.	UNII	
SUPPLY VOLTAGE FOR LOGIC		V <sub>DD</sub> -Vss	I	ı	5.0	ı	٧	
SUPPLY CURRENT FOR LOGIC		l <sub>DD</sub>	V <sub>DD</sub> =5V	-	2.0	3.0	mA	
INPUT VOLTAGE HIGH LOW		٧H	_	2.2	-	4.7	٧	
		٧ <sub>IL</sub>	_	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 <b>@</b> 50°C	4.800CC	٧
INPUT VOLTAGE	٧١	Ta=25°C	Vss	۷ <sub>DD</sub>	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

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