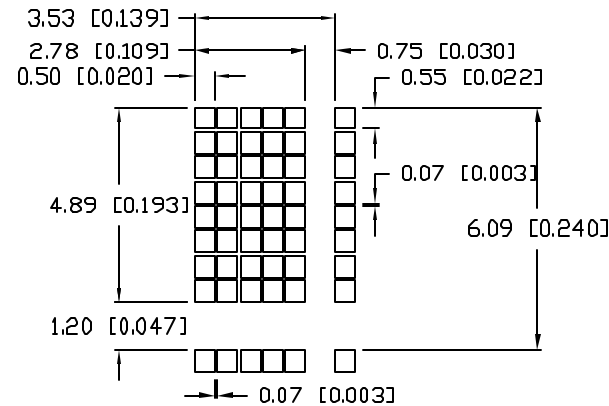
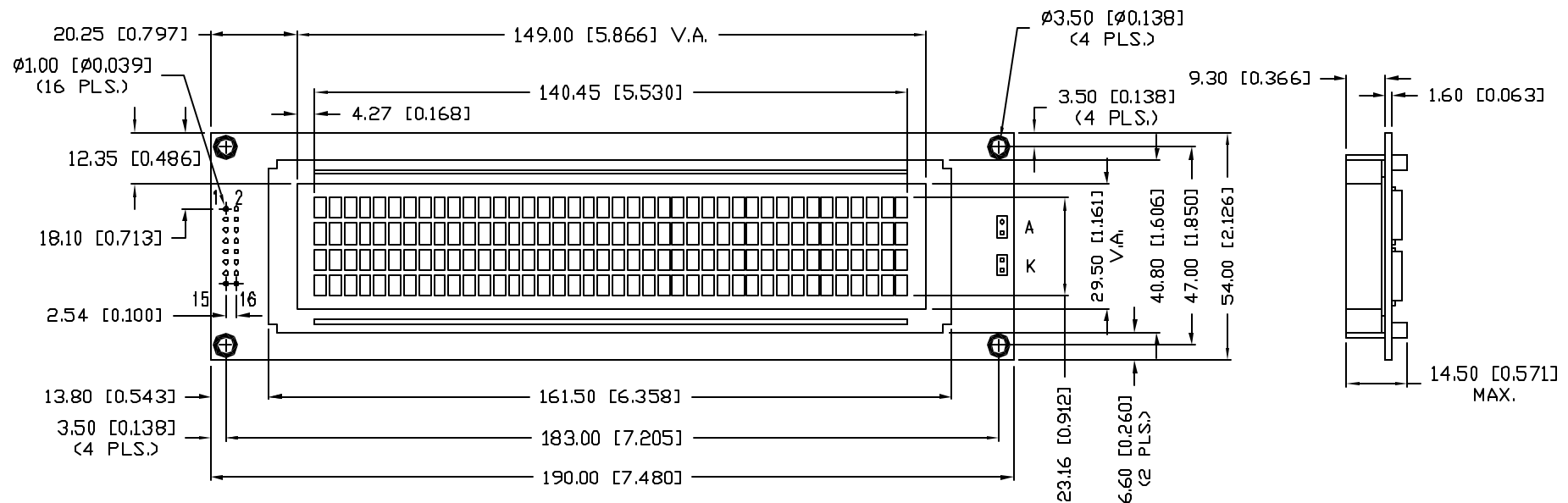


PRELIMINARY IN P/N DIR

CHARACTER DETAIL



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



UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED 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 SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), MIN.=^{+DECIMAL PRECISION}_{-0.00} MAX.=^{+0.00}_{-DECIMAL PRECISION}

REV.

PART NUMBER

LCM-S04004DSF

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
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

GT

CHECKED BY:

APPROVED BY:

DATE: 4.29.02

PAGE: 1 OF 2

SCALE: N/A

4.89mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
40 x 4 LCD CHARACTER MODULE, 1/16 DUTY, 1/5 BIAS,
STN, TRANSFLECTIVE, WITH LED BACKLIGHT.

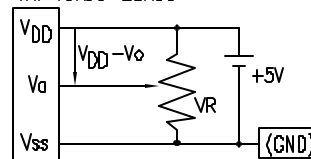
LCM-S04004DSF

PRELIMINARY IN P/N DIR

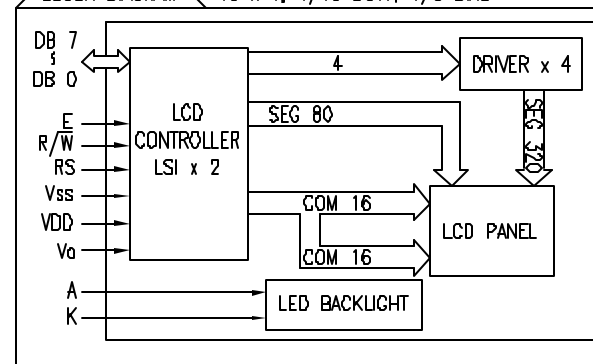
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION	
1~8	DB0~DB7	H/L	DATA BUS--SOFTWARE SELECTABLE 4 OR 8 BIT MODE.	
9	E1	H,H->L	ENABLE 1	
10	R/W	H/L	H: DATA READ (MODULE-->MPU) L: DATA WRITE (MODULE<--MPU)	
11	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT	
12	V _o	-	POWER SUPPLY	FOR LCD DRIVE
13	V _{ss}	-		GND (0V)
14	V _{DD}	-		5V
15	E2	H,H->L	ENABLE 2	
16	-	-	NO CONNECTION	
	A	-	ANODE FOR BACKLIGHT	
	K	-	CATHODE FOR BACKLIGHT	

V_{DD}-V_o: LCD DRIVING VOLTAGE
VR: 10K Ω -20K Ω



BLOCK DIAGRAM 40 x 4, 1/16 DUTY, 1/5 BIAS



ELECTRICAL CHARACTERISTICS

V_{DD}=4.7V to 5.3V, T_A=25°C

ITEM	SYMBOL	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} =5V	-	4.0	10.0	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	-	4.2	4.6	V
	CURRENT	I _f	-	500	-	mA
	POWER CONSUMPTION	PD	-	2100	-	mW
	LUMINOUS	L	I _f =500mA	70	-	cd/m ²
	COLOR	-	-	-	-	nm

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			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
		LCM-H	-20	70	°C
		LCM-S	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	85	°C

UNCONTROLLED DOCUMENT

*UNLESS OTHERWISE SPECIFIED 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 SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION -0.00 MAX.= +0.00 -DECIMAL PRECISION

REV.

PART NUMBER

LCM-S04004DSF

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
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE: 4.29.02

PAGE: 2 OF 2

SCALE: N/A

CT

4.89mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
40 x 4 LCD CHARACTER MODULE, 1/16 DUTY, 1/5 BIAS,
STN, TRANSFLECTIVE, WITH LED BACKLIGHT.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Lumex:

[LCM-H04004DTF](#)