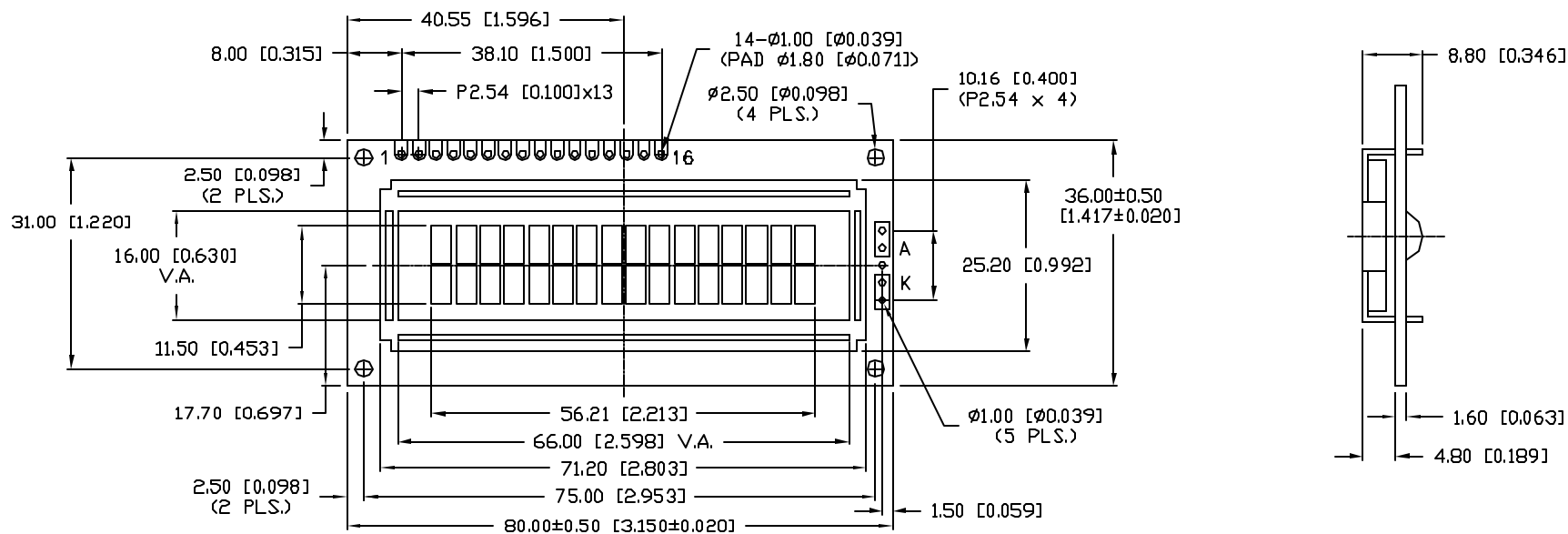
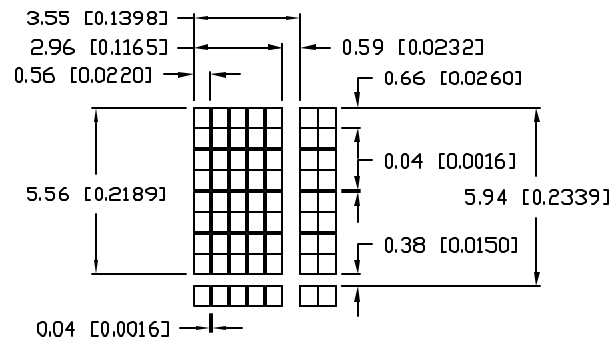


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

CHARACTER DETAIL



UNCONTROLLED DOCUMENT

*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 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN=+DECIMAL PRECISION MAX=+0.00 -DECIMAL PRECISION

REV.

PART NUMBER

LCM-S01602DTF/A-3

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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.



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

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, RELECTIVE,
16x2 LCD MODULE, 1/16 DUTY, 1/5 BIAS,
TN, TRANSFLECTIVE.

DRAWN BY:

JD

CHECKED BY:

APPROVED BY:

DATE: 7.27.04

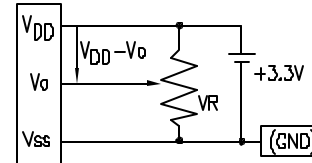
PAGE: 1 OF 2

SCALE: N/A

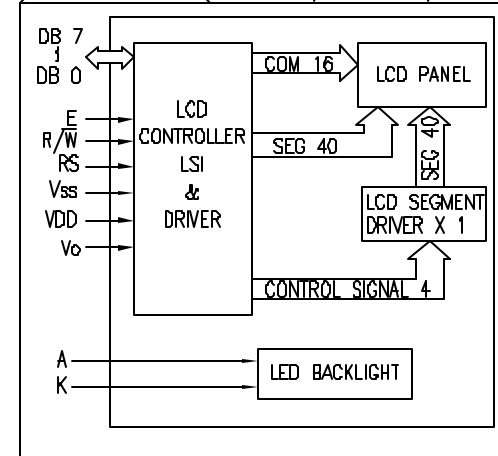
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	V _{SS}	-	POWER SUPPLY	GND (0V)
2	V _{DD}	-		3.3V
3	V _O	-		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)	
6	E	H _H ->L	ENABLE	
7~14	DB0~DB7	H/L	DATA BUS—SOFTWARE SELECTABLE 4 OR 8 BIT MODE.	
15	A		ANODE	LED BACKLIGHT
16	K		CATHODE	LED BACKLIGHT

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



BLOCK DIAGRAM 16 x 2, 1/16 DUTY, 1/5 BIAS



ELECTRICAL CHARACTERISTICS

V_{DD}=2.7V to 4.5V, T_A=25°C

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	-	3.3	-	V
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =3.3V	-	2.0	3.0	mA
INPUT VOLTAGE	HIGH LOW	V _{IH}	-	0.7V _{DD}	-	V _{DD}
		V _{IL}	-	-0.3	-	0.55 V
OUTPUT VOLTAGE	HIGH LOW	V _{OH}	-	0.75V _{DD}	-	V
		V _{OL}	-	-	0.2V _{DD}	V
*LED BACKLIGHT	VOLTAGE	V _f	I _f =160mA	-	4.2	4.5 V
	CURRENT	I _f	-	-	160	mA
	POWER CONSUMPTION	P _D	-	-	656	mW
	LUMINOUS	L	I _f =160mA	70	-	cd/m ²
	COLOR	-	-	-	-	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	2.7	4.5	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-	2.2@50°C	4.3@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

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REV.

PART NUMBER

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5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, RELECTIVE,
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