

UNCONTROLLED DOCUMENT

PART NUMBER

REV.

LCM-S01602DTR/B-PA

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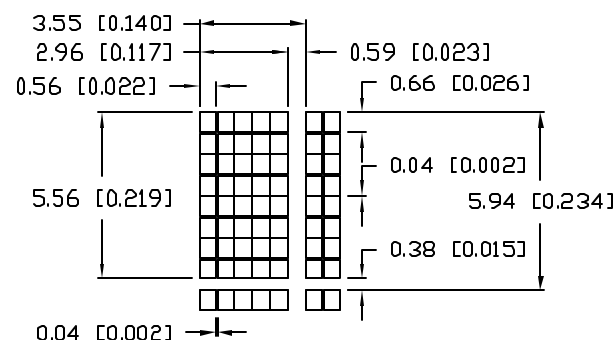
REV.	E.C.N. NUMBER AND REVISION COMMENTS
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DATE _____

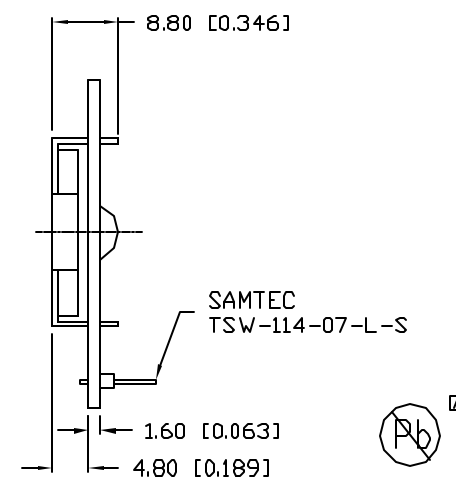
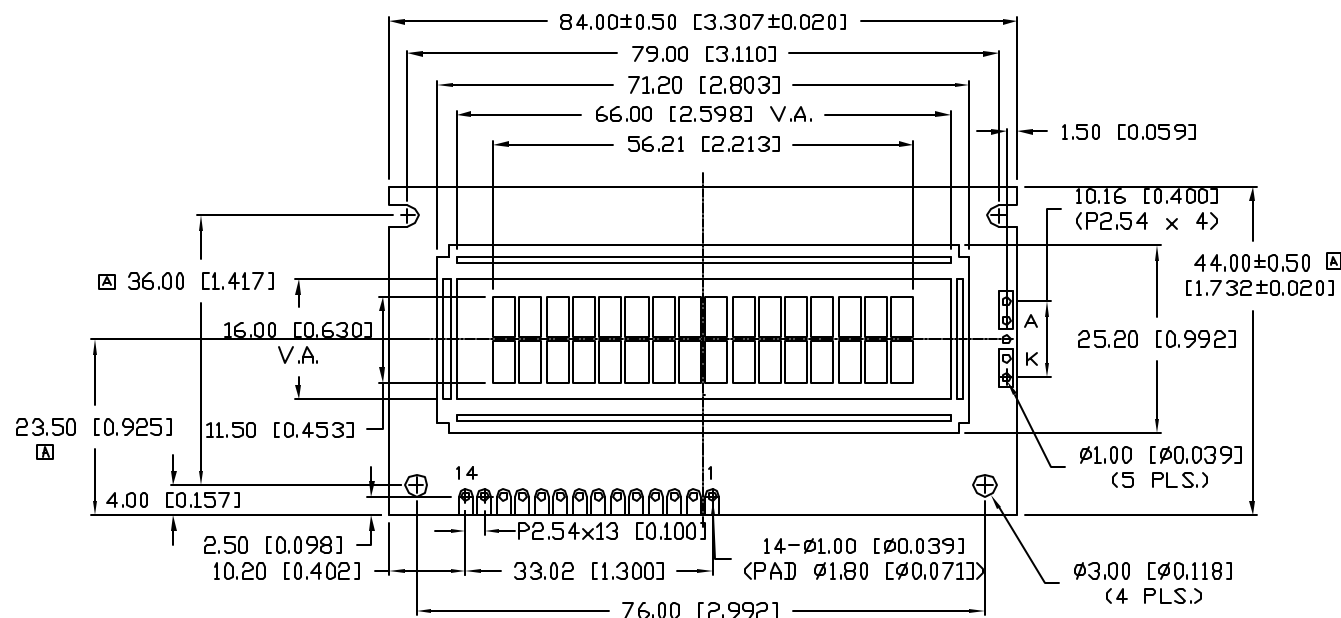
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12.21.06

CHARACTER DETAIL



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 (±0.039), 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 (±0.030). MIN.=+DECIMAL PRECISION MAX.=+0.00
-DECIMAL PRECISION

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LCM-S01602DTR/B-PA

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS,
TN, REFLECTIVE, 14 PIN HEADER, BLACK BEZEL.

CONFIDENTIAL INFORMATION

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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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DATE: 4.25.01

JC

PAGE: 1 OF 2

SCALE: N/A

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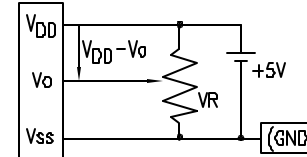
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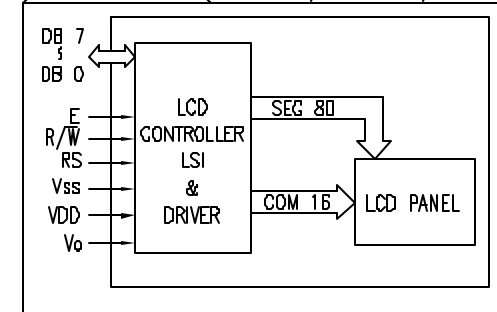
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{SS}	-	POWER SUPPLY
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.

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



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



ELECTRICAL CHARACTERISTICS

 $V_{DD}=4.7V$ to $5.3V$, $T_A=25^\circ C$

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}	$V_{DD}=5V$	-	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

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	$T_a=25^\circ C$	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	$T_a=25^\circ C$	V_{SS}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	-	0	50	°C
STORAGE TEMPERATURE	T_{stg}	-	-20	70	°C

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