

UNCONTROLLED DOCUMENT

PART NUMBER

LCM-H01602DSN/APNY

REV.

A

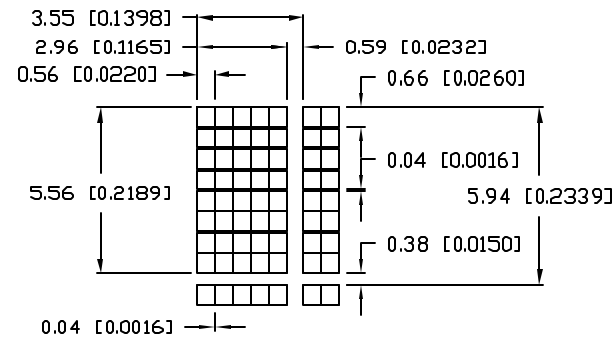
REV. E.C.N. NUMBER AND REVISION COMMENTS

DATE

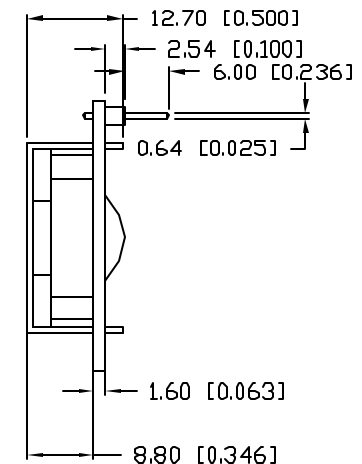
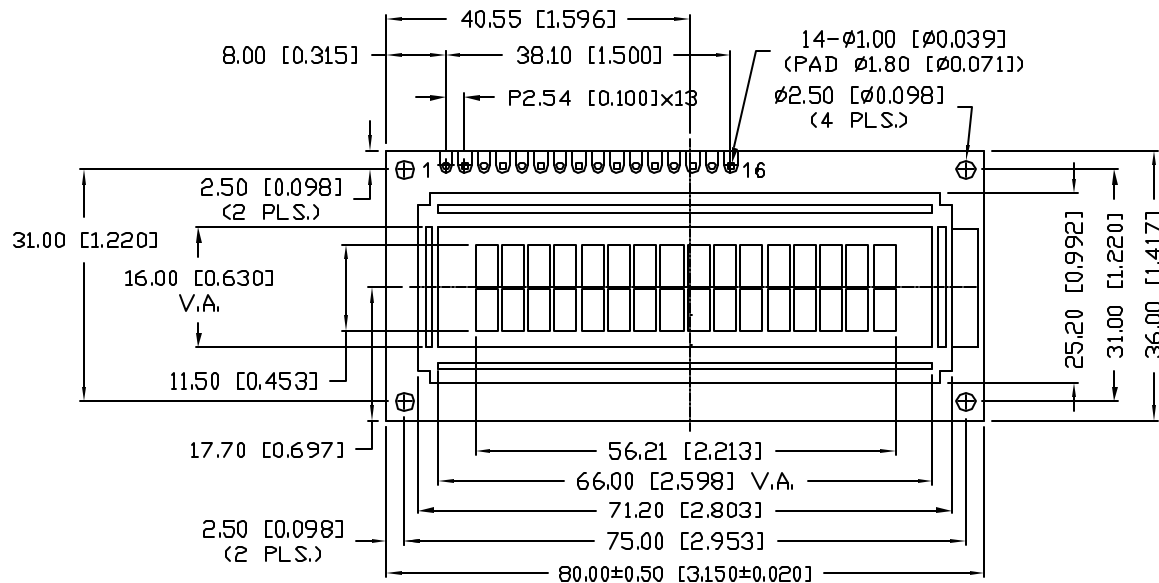
A E.C.N. #11148.

02.13.07

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), 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.

A

PART NUMBER

LCM-H01602DSN/APNY

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 12:00 VIEW,
STN BLUE, TRANSMISSIVE, NEGATIVE, WHITE LED BACKLIGHT,
16 x 2 LCD MODULE, 1/16 DUTY, 1/5 BIAS, WIDE OP. TEMP.

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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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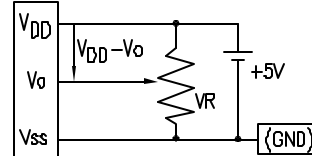
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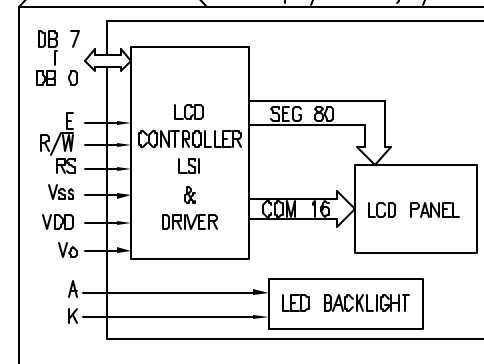
SCALE: N/A

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.
15	A	—	ANODE
16	K	—	CATHODE

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

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



R7=4.7k ohm

R9=110 ohm

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	—	2.0	3.0	mA
INPUT VOLTAGE	HIGH LOW	V _{IH}	2.2	—	4.7	V
		V _{IL}	0	—	0.6	V
OUTPUT VOLTAGE	HIGH LOW	V _{OH}	2.4	—	—	V
		V _{OL}	—	—	0.4	V
*LED BACKLIGHT	VOLTAGE	V _I	If=15mA	3.4	3.5	V
	CURRENT	I _f	—	10	15	mA
	POWER CONSUMPTION	PD	If=15mA	—	53	mW
	COLOR	—	WHITE	—	—	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
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-H	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	80	°C

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PAGE: 2 OF 2

SCALE: N/A

JD