

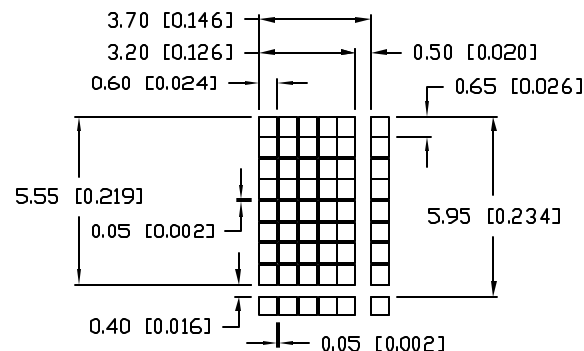
PART NUMBER
LCM-H02002DSF-Y

REV.

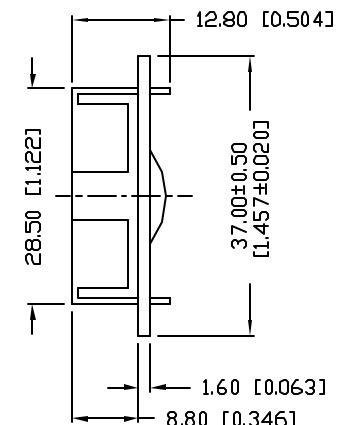
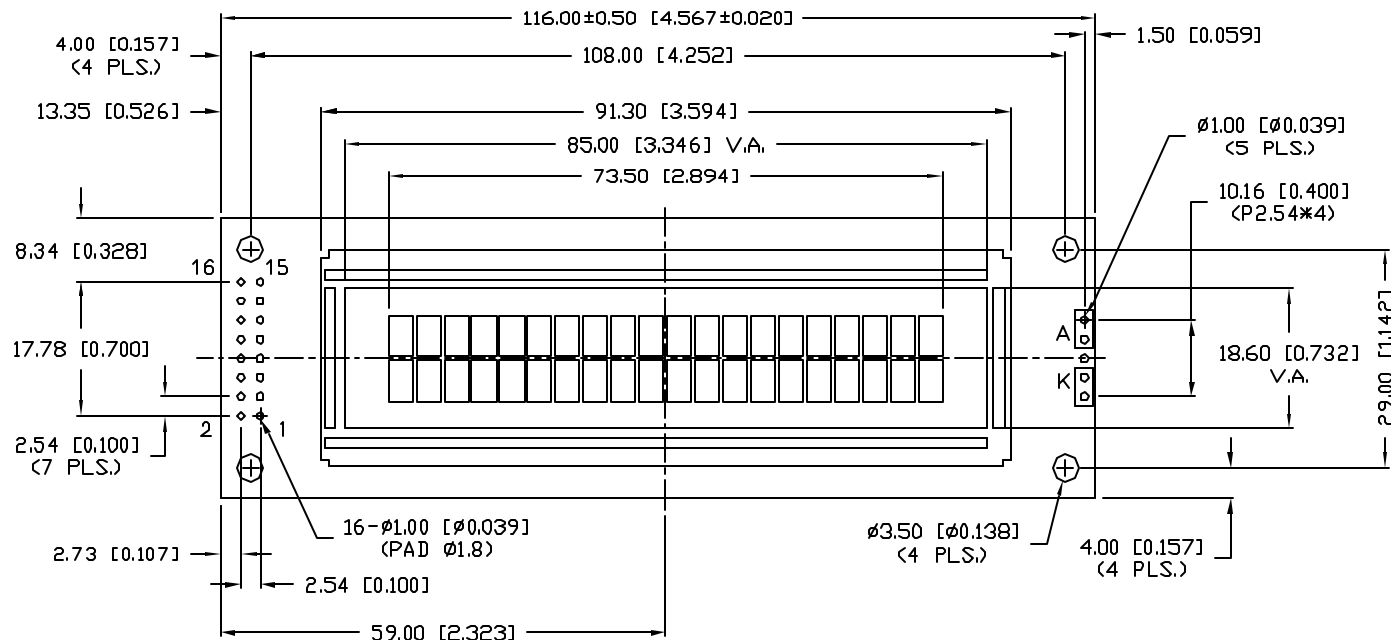
REV. E.C.N. NUMBER AND REVISION COMMENTS

DATE

CHARACTER DETAIL



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



*UNLESS OTHERWISE SPECIFIED TOLERANCE IS $\pm 0.25\text{mm}$ ($\pm 0.010"$)

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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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CHECKED BY:

APPROVED BY:

DATE: 8-17-98

PAGE: 1 OF 2

SCALE: N/A

SA/DU

5.55mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX,
20 x 2 CHARACTER LCD MODULE, STN, YELLOW,
TRANSFLECTIVE, 1/16 DUTY, 1/5 BIAS, EXTENDED TEMP.

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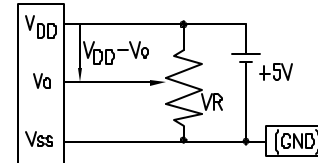
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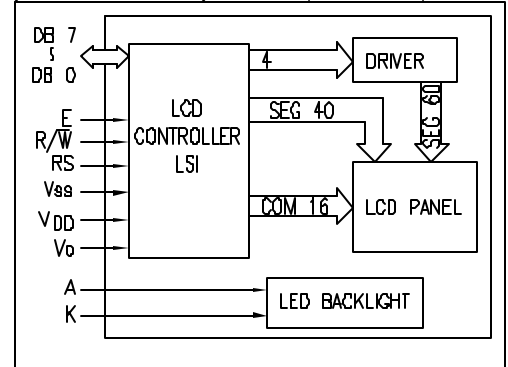
PIN CONFIGURATION

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.
15	A	-	ANODE LED BACKLIGHT
16	K	-	CATHODE LED BACKLIGHT

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



BLOCK DIAGRAM 20 x 2, 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	APPLICABLE TERMINAL
			MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	-	5.0	-	V	V _{DD}
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0	mA	V _{DD}
INPUT VOLTAGE	HIGH	V _{IH}	2.2	-	V _{DD}	V	RS,R/W,E
		V _{IL}	0	-	0.8	V	DB0~DB7
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-0.205mA	2.4	-	V	DB0~DB7
		V _{OL}	I _{OL} =1.6mA	-	0.4	V	RS,R/W,E
*LED BACKLIGHT	VOLTAGE	V _f	I _f =210mA	4.2	4.6	V	-
	CURRENT	I _f	-	210	275	mA	-
	POWER CONSUMPTION	PD	-	1279	-	mW	-
	LUMINOUS	L	I _f =210mA	70	-	cd/m ²	-
	COLOR	-	-	-	-	nm	-

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	-	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-H	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	85	°C

*ONLY APPLIES TO MODULES WITH BACKLIGHT

*UNLESS OTHERWISE SPECIFIED TOLERANCE IS $\pm 0.25\text{mm}$ ($\pm 0.010''$)

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Mouser Electronics

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