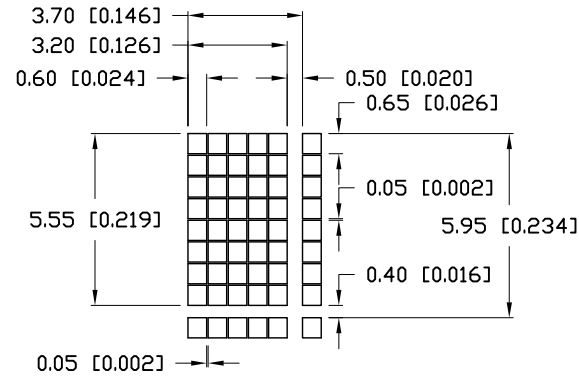
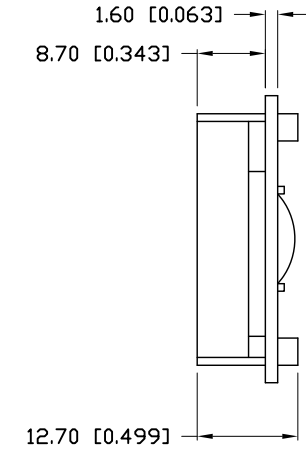
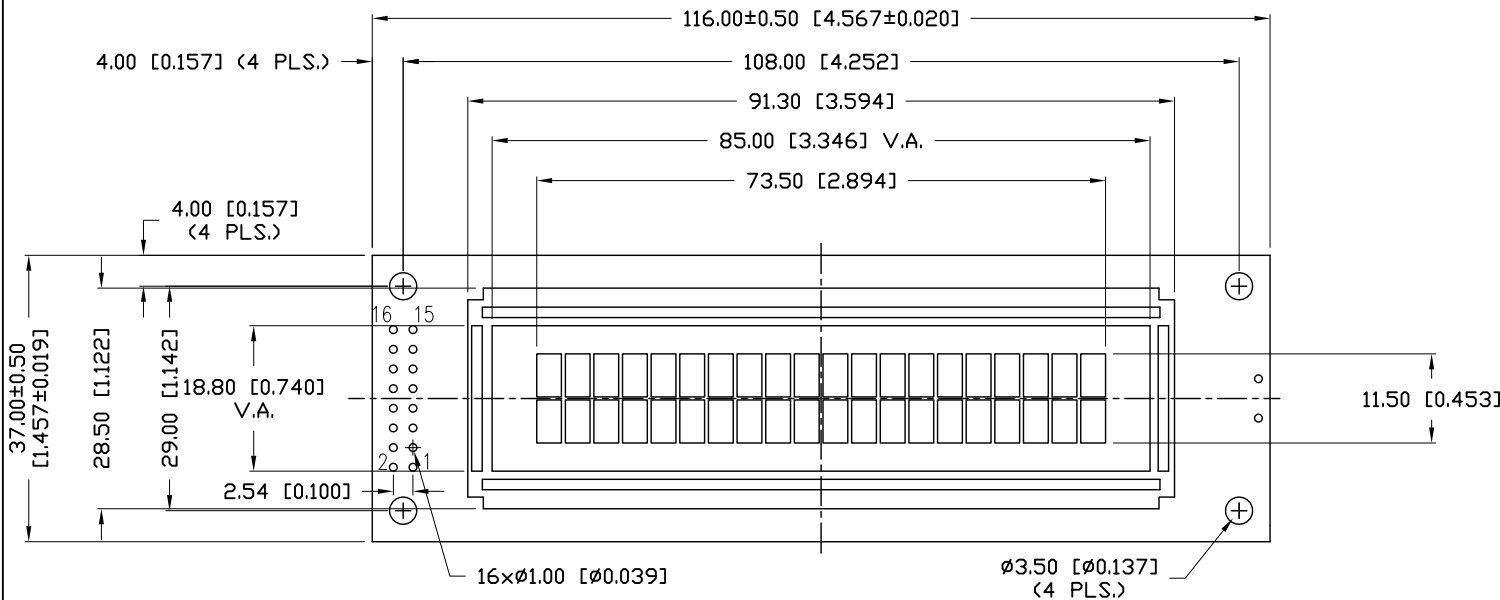


PART NUMBER	LCM-S02002DSM-Y	REV.	D
DATE	E.C.N. NUMBER AND REVISION COMMENTS		REV.
08.03.98	E.C.N. #10447.		A
09.04.98	E.C.N. #10BRDR. & REDRAWN.		B
02.14.13	E.C.N. #10BRDR. & REDRAWN.		C
11.26.13	E.C.N. #11888.		D

CHARACTER DETAIL



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



*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}-0.00 MAX.=^{+0.00}-DECIMAL PRECISION UNCONTROLLED DOCUMENT

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Creating LED and LCD Solutions Together™

425 N. GARY AVE.
CAROL STREAM, IL 60188-4900
PHONE: +1.800.278.5666
FAX: +1.630.315.2152
WEB: WWW.LUMEX.COM
MEMBER OF ITW PHOTONICS GROUP

5.55mm CHARACTER HEIGHT, 5x8 DOT MATRIX, 20x2 LCD MODULE 1/16 DUTY, 1/5 BIAS, STN TRANS YELLOW BACKLIGHT.

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

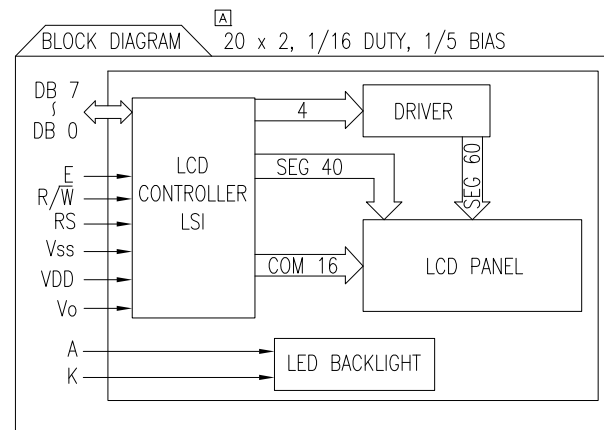
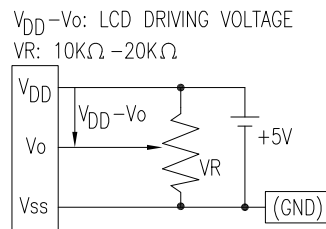
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DATE:	02.14.13	DRAWN BY:	MA
PAGE:	1 OF 2	CHKD BY:	KF
SCALE:	NTS	APRVD BY:	KF
UNIT:	mm [INCH]		(Pb)

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PIN CONFIGURATION			
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	-	POWER SUPPLY GND (0V) 5V FOR LCD DRIVE
2	V _{DD}	-	
3	V _O	-	
4	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT
5	R/ \bar{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



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}	-	4.5	5.0	5.5	V	
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0	mA	
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD}	
	LOW	V _{IL}	-	0	-	0.6	
OUTPUT VOLTAGE	HIGH	V _{OH}	-	2.4	-	-	
	LOW	V _{OL}	-	-	-	0.4	
*LED BACKLIGHT	VOLTAGE	V _f	I _f =210mA	-	4.2	4.6	V
	CURRENT	I _f	-	-	210	-	mA
	POWER CONSUMPTION	PD	-	-	882	-	mW
	LUMINOUS	L	I _f =210mA	110	170	-	cd/m ²
	COLOR	-	-	-	570	-	nm

ABSOLUTE MAXIMUM RATINGS		^A				
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}	-	0	50	°C	
STORAGE TEMPERATURE	T _{stg}	-	-20	70	°C	

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