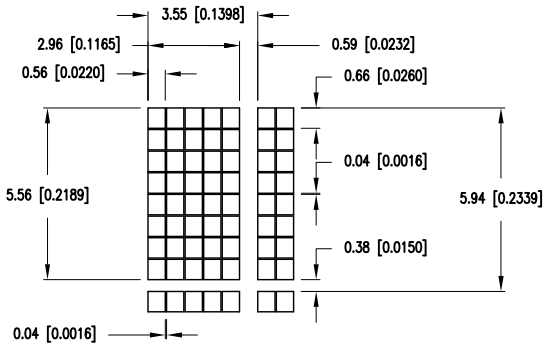
UNCONTROLLED DOCUMENT

PART NUMBER	LCM-S01602DSF/B-Y	REV.	B
DATE	E.C.N. NUMBER AND REVISION COMMENTS		REV.
09.03.98	E.C.N. #10BRDR. & REDRAWN.		A
01.23.13	E.C.N. #10BRDR. & REDRAWN.		B

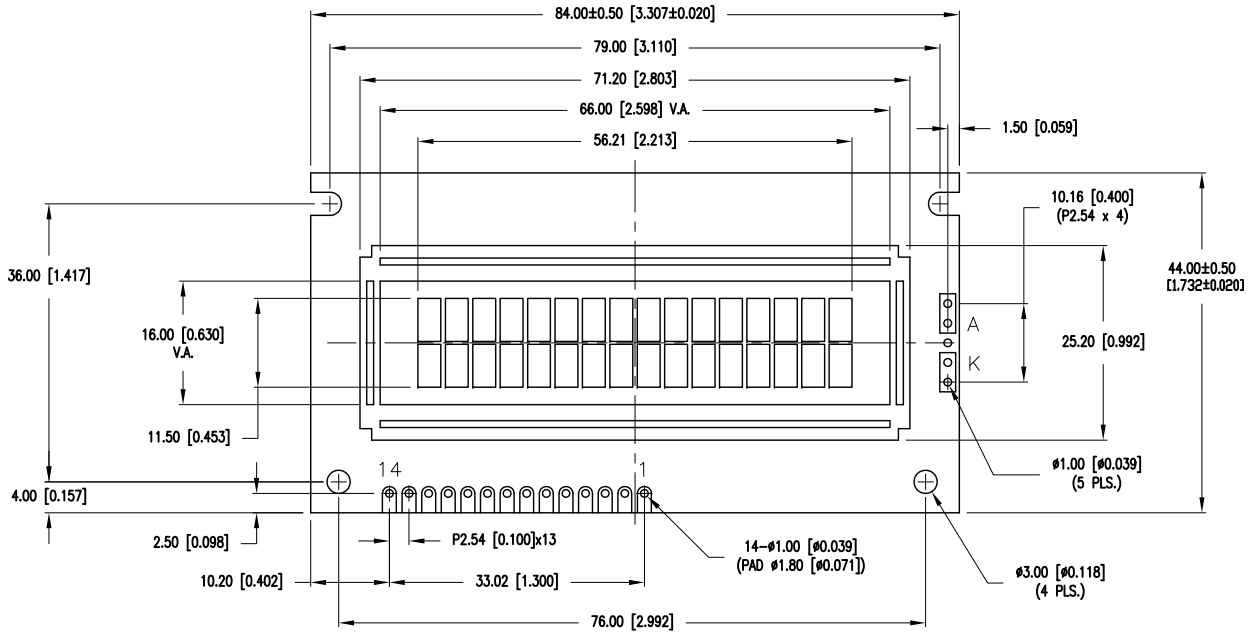
P/N PREFIX/SUFFIX TABLE			
LCM-X		DXX	DESCRIPTION
STANDARD	S	SR	STN, REFLECTIVE
		SF	STN, TRANSFLECTIVE(W/ BACKLIGHT)
HIGH TEMP.	H	TR	TN, REFLECTIVE
		TF	TN, TRANSFLECTIVE(W/ BACKLIGHT)

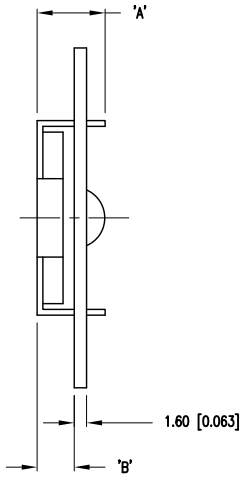
CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

CHARACTER DETAIL



TYPE DIM.	A	B
WITH BACKLIGHT	12.7	8.7
NO BACKLIGHT	8.8	4.8





*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

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LUMEX®
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FAX: +1.847.359.6538
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5.56mm CHARACTER HEIGHT, 5x8 DOT MATRIX,16 x 2 LCD MODULE,1/16 DUTY, 1/5 BIAS, YELLOW BACKGROUND.

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

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DATE:	01.18.13	DRAWN BY:	MA
PAGE:	1 OF 2	CHKD BY:	JD
SCALE:	N/A	APRVD BY:	JD
UNIT:	mm [INCH]		Pb

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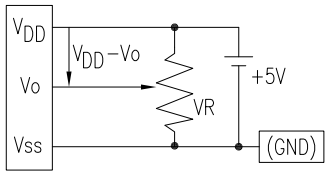
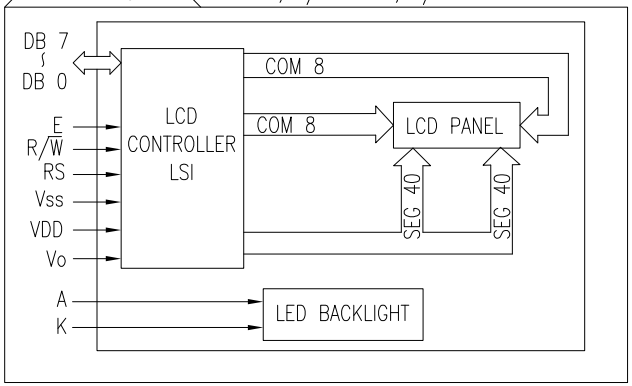
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	Vss	–	POWER SUPPLY	GND (0V)
2	V_{DD}	–		5V
3	Vo	–		FOR LCD DRIVE
4	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT	
5	R/$\overline{W}$	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.	
A	–	–	ANODE	LED BACKLIGHT
K	–	–	CATHODE	LED BACKLIGHT

V_{DD}–Vo: LCD DRIVING VOLTAGE
VR: 10KΩ –20KΩ



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



ELECTRICAL CHARACTERISTICS

V_{DD}=4.7V to 5.3V, T_A=25°C

ITEM			SYMBOL	CONDITION	STANDARD VALUE MIN.	TYP.	MAX.	UNIT
SUPPLY VOLTAGE FOR LOGIC			V_{DD}–Vss	–	–	5.0	–	V
SUPPLY CURRENT FOR LOGIC			I_{DD}	V_{DD}=5V	–	1.6	2.5	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
*LED BACKLIGHT	VOLTAGE		Vf	If=150mA	–	4.2	4.6	V
	CURRENT		If	–	–	150	200	mA
	POWER CUNSUMPTION		PD	–	–	630	–	mW
	LUMINOUS		L	If=150mA	70	–	–	cd/m²
	COLOR		–	–	–	–	–	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE MIN	MAX	UNIT
SUPPLY VOLTAGE FOR LOGIC	V_{DD}–Vss	Ta=25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V_{DD}–Vo	–	4.2@50°C	4.8@0°C	V
INPUT VOLTAGE	V_I	Ta=25°C	Vss	V_{DD}	V
OPERATING TEMPERATURE	Topr	LCM–S	0	50	°C
		LCM–H	–20	70	°C
STORAGE TEMPERATURE	Tstg	LCM–S	–20	70	°C
		LCM–H	–30	85	°C

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