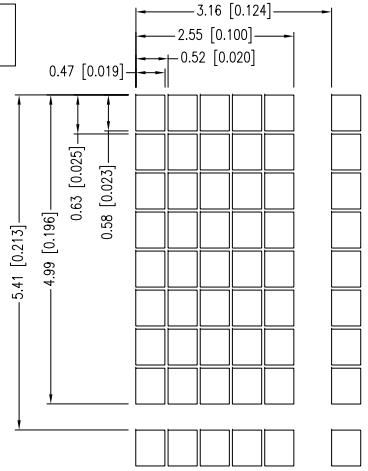
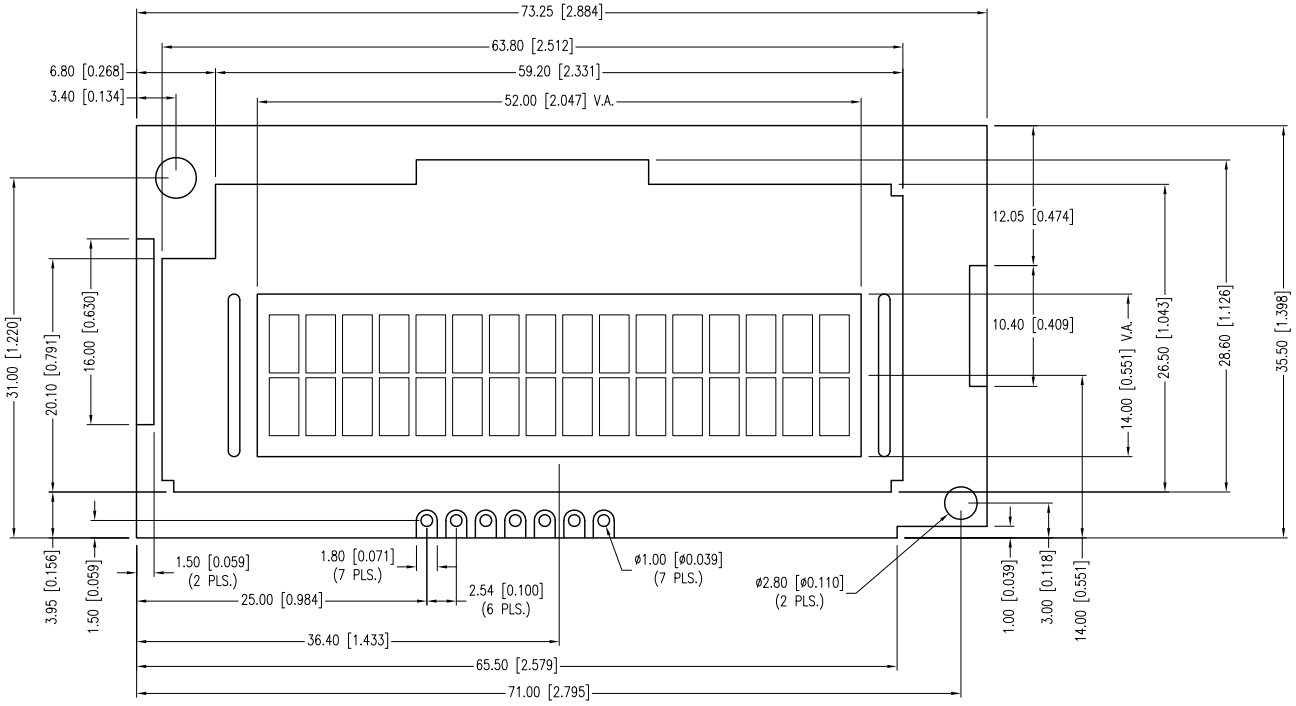
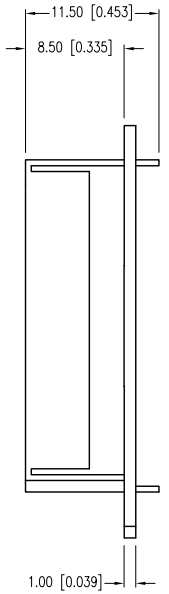
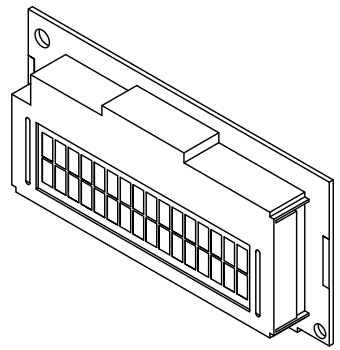
CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.









*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= $^{+\text{DECIMAL PRECISION}}_{-0.00}$ MAX.= $^{+0.00}_{-\text{DECIMAL PRECISION}}$

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16x2 LCD MODULE, 5mm CHAR HT, 3.3V, 5x7 DOT MATRIX, STN BLUE, WHITE BKLT, IIC ADDRESS, NEG. IMAGE.

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

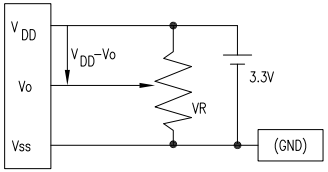
DATE:	05.24.12	DRAWN BY:	AB
PAGE:	1 OF 2	CHKD BY:	DT
SCALE:	NTS	APRVD BY:	DT
UNIT:	mm [INCH]	Pb	

PIN CONFIGURATION

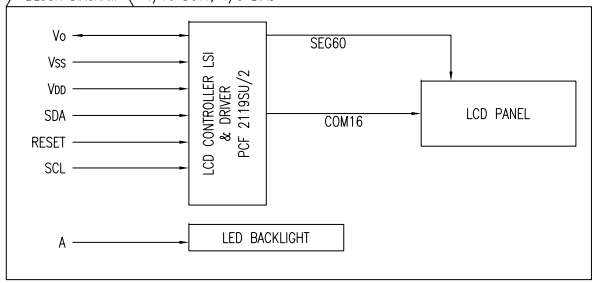
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	Vss	0V	POWER SUPPLY GROUND
2	VDD	3.0V	POWER SUPPLY VOLTAGE
3	Vo	–	CONTRAST ADJUST
4	SDA	H/L	IIC BUS SERIAL DATA I/O
5	SCL	H/L	IIC BUS SERIAL CLOCK INPUT
6	A	3.4V	LED POWER SUPPLY (+)
7	RES	H	RESET INPUT

V_{DD}–Vo: LCD DRIVING VOLTAGE

VR: 10KΩ–20KΩ



BLOCK DIAGRAM 1/16 DUTY, 1/5 BIAS



ELECTRICAL CHARACTERISTICS VDD=2.7V to 4.5V, Ta=25°C

ITEM		SYMBOL	CONDITION	STANDARD VALUE			UNIT
				MIN	TYP	MAX	
SUPPLY VOLTAGE FOR LOGIC		VDD–Vss	–	2.2	3.0	3.5	V
SUPPLY CURRENT FOR LOGIC		IDD	VDD=3V	–	0.20	1.0	mA
INPUT VOLTAGE	HIGH	VIH	H LEVEL	2.2	–	VDD	V
	LOW	VIL	L LEVEL	0	–	0.6	V
LED BACKLIGHT	FORWARD VOLTAGE	Vf	If=40mA	–	3.4	4.0	V
	FORWARD CURRENT	If	–	–	40	–	mA
	REVERSE CURRENT	Ir	Vr=5V	–	–	0.2	mA
	COLOR	–	WHITE	–	–	–	nm

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	VDD–Vss	Ta=25°C	–0.5	6.5	V
SUPPLY VOLTAGE FOR LCD DRIVE	VDD–Vo	Ta=25°C	–0.5	7.5	V
INPUT VOLTAGE	VI	Ta=25°C	–0.5	VDD	V
OPERATING TEMPERATURE	Topr	LCM-H	0	50	°C
STORAGE TEMPERATURE	Tstg	LCM-H	–20	70	°C

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