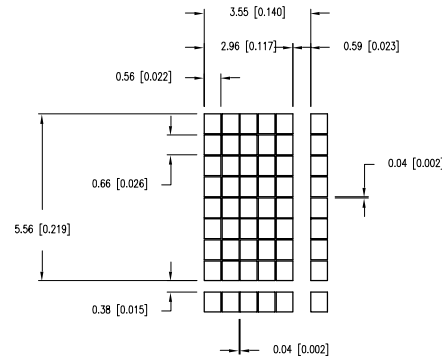
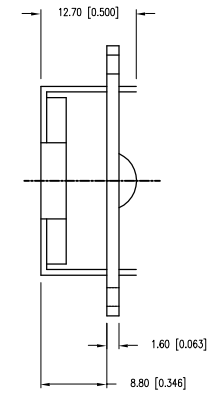
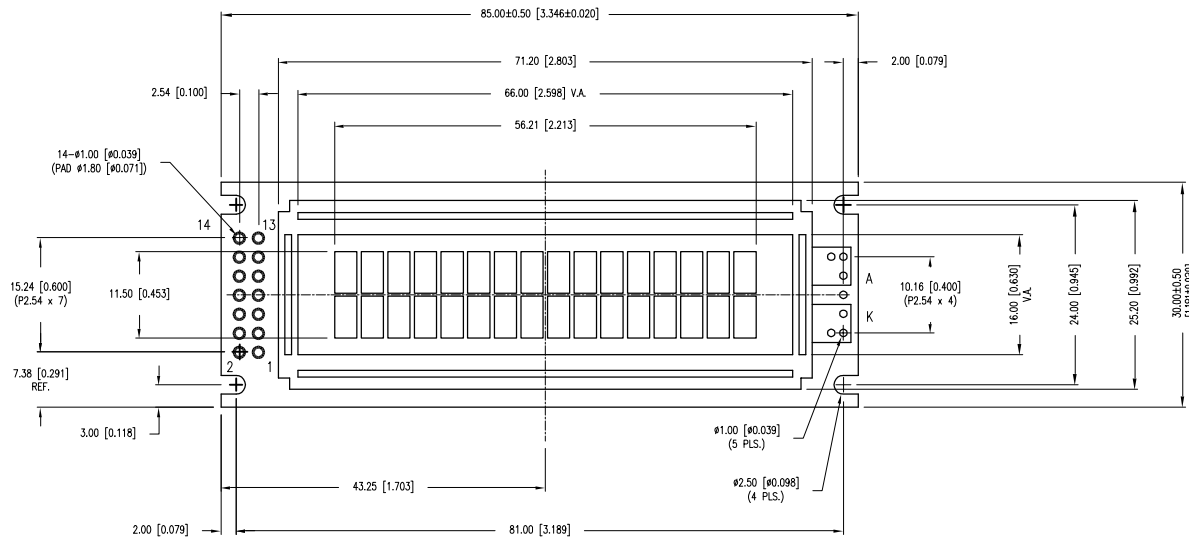


CHARACTER DETAIL



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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16 x 2 LCD, 5 x 8 DOT MATRIX, STN, TRANSFLECTIVE, BACKLIGHT, 1/16 DUTY, 1/5 BIAS.

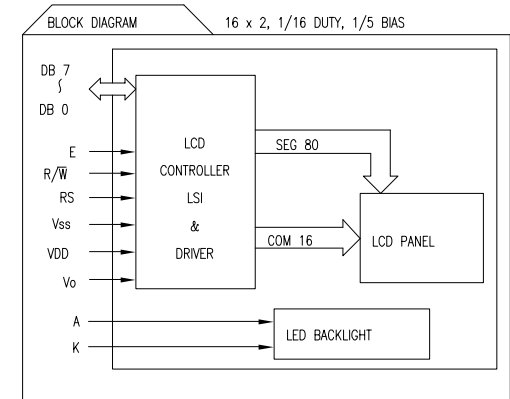
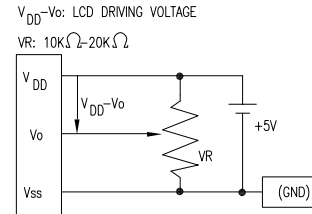
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DATE: 06.01.10	DRAWN BY: JH
PAGE: 1 OF 2	CHKD BY: BC
SCALE: N/A	APRVD BY: KF
UNIT: mm [INCH]	(R)

PIN CONFIGURATION						
PIN NO.	SYMBOL	LEVEL	FUNCTION			
1	V <sub>DD</sub>	-	POWER SUPPLY		5V	
2	V <sub>SS</sub>	-			GND (0V)	
3	V <sub>O</sub>	-			FOR LCD DRIVE	
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.			



ELECTRICAL CHARACTERISTICS V<sub>DD</sub>=4.7V to 5.3V, T<sub>A</sub>=25°C

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT	
			MIN.	TYP.	MAX.		
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	-	-	5.0	-	V	
SUPPLY CURRENT FOR LOGIC	I <sub>DD</sub>	V <sub>DD</sub> =5V	-	2.0	3.0	mA	
INPUT VOLTAGE	HIGH	V <sub>IH</sub>	-	2.2	-	V <sub>DD</sub> V	
	LOW	V <sub>IL</sub>	-	0	-	0.6 V	
OUTPUT VOLTAGE	HIGH	V <sub>OH</sub>	-	2.4	-	V	
	LOW	V <sub>OL</sub>	-	-	0.4	V	
LED BACKLIGHT	VOLTAGE	V <sub>f</sub>	I <sub>f</sub> =160mA	-	4.2	4.6	V
	CURRENT	I <sub>f</sub>	-	-	160	-	mA
	POWER CONSUMPTION	PD	-	-	656	-	mW
	LUMINOUS	L	I <sub>f</sub> =160mA	70	-	-	cd/m <sup>2</sup>
	COLOR	-	-	-	-	-	nm

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V <sub>DD</sub> -V <sub>O</sub>	-	4.2@50°C	4.8@0°C	V
INPUT VOLTAGE	V <sub>I</sub>	T <sub>a</sub> =25°C	V <sub>SS</sub>	V <sub>DD</sub>	V
OPERATING TEMPERATURE	T <sub>opr</sub>	LCM-H	-20	70	°C
STORAGE TEMPERATURE	T <sub>stg</sub>	LCM-H	-30	80	°C

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