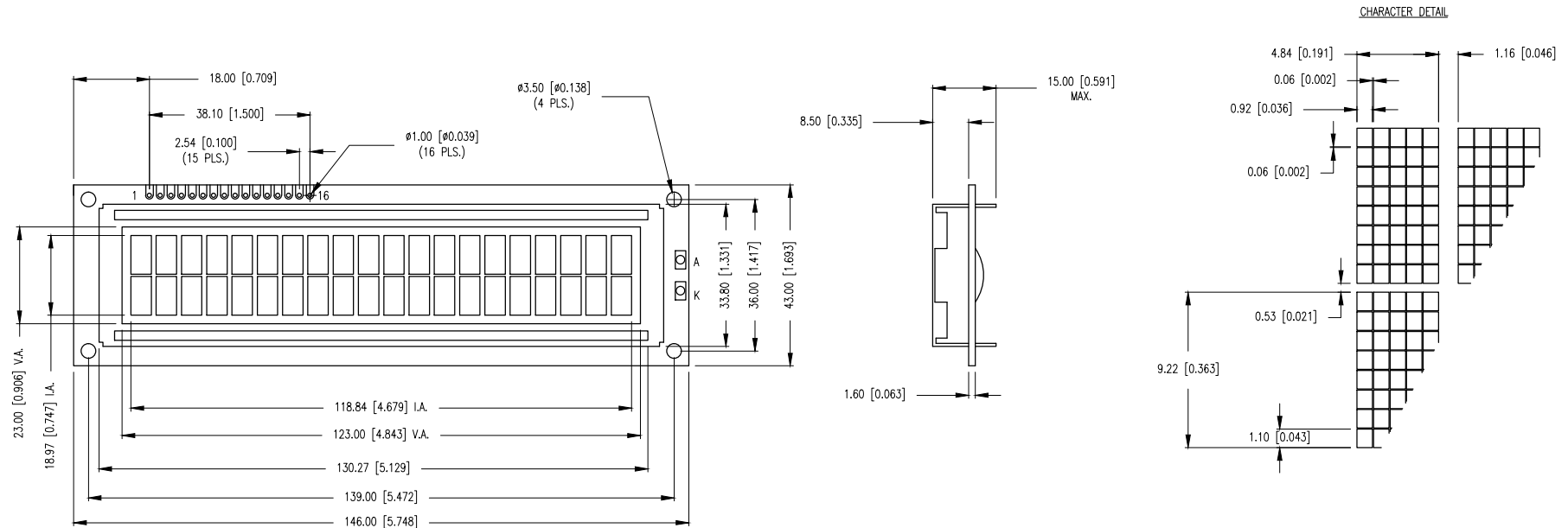


PART NUMBER	LCM-H02002DSF/D-Y	REV.	A
DATE	E.C.N. NUMBER AND REVISION COMMENTS		
04.19.07	E.C.N. #11148		
		REV.	A

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

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9.22mm CHARACTER HGHT, 20x2 CHARACTERS, 5x8 DM, LCD MODULE, STN YELLOW, 1/16 DUTY, 1/5 BIAS

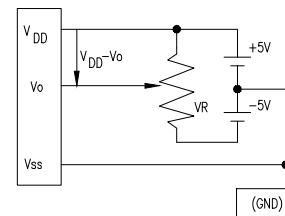
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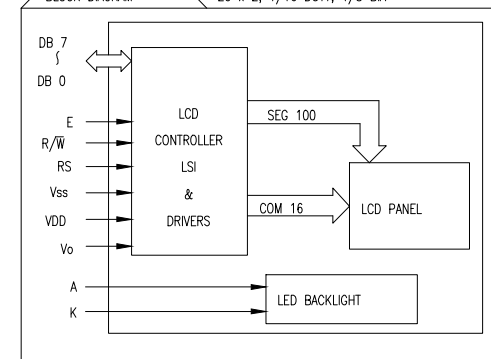
DATE:	03.17.06	DRAWN BY:	JD
PAGE:	1 OF 1	CHKD BY:	--
SCALE:		APRVD BY:	--
UNIT:	mm [INCH]		

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PIN CONFIGURATION				
PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	V _{SS}	—	POWER SUPPLY	GND (0V)
2	V _{DD}	—		5V
3	V _O	—		FOR LCD DRIVE
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 VOLTAGEVR: 10K $\rightarrow$ 20K Ω 

BLOCK DIAGRAM 20 x 2, 1/16 DUTY, 1/5 BIA



ELECTRICAL CHARACTERISTICS			V _{DD} =4.7V to 5.3V, T =25°C A				
ITEM		SYMBOL	CONDITION	STANDARD VALUE			UNIT
				MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC		V _{DD} -V _{SS}	—	—	5.0	—	V
SUPPLY CURRENT FOR LOGIC		I _{DD}	V _{DD} =5V	—	2.0	3.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	—	2.2	—	4.7	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	V _f	I _f =220mA	—	4.2	4.6	V
	CURRENT	I _f	—	—	220	480	mA
	POWER CONSUMPTION	P _D	—	—	924	—	mW
	LUMINOUS	L	I _f =220mA	70	—	—	cd/m ²
	COLOR	—	—	—	—	—	nm

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	Ta=25°C	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	—	0.5	10	V
INPUT VOLTAGE	V _r	Ta=25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-H	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	80	°C

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