

UNCONTROLLED DOCUMENT

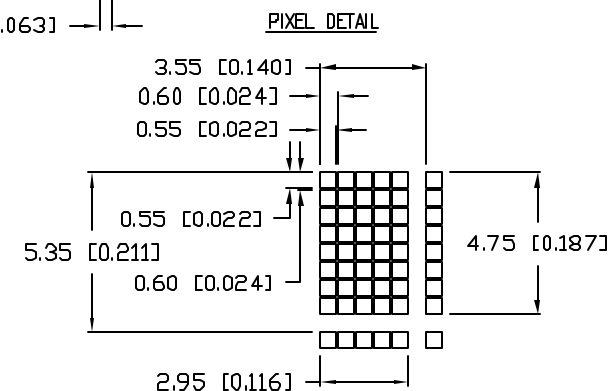
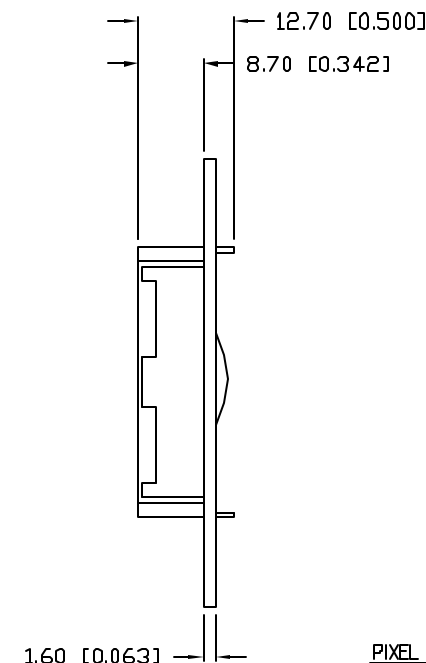
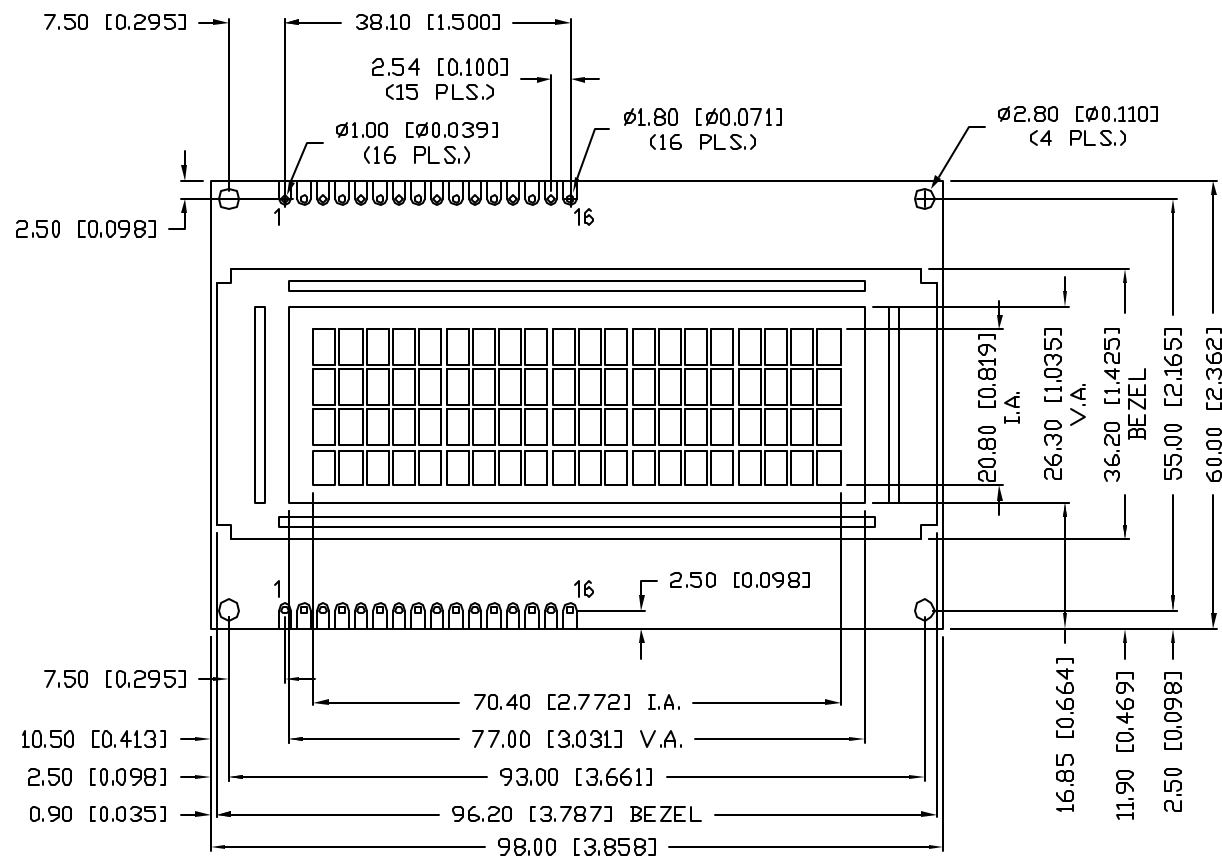
SC:1

PART NUMBER

REV.

LCM-UH2004DSFQ1YSH

PRELIMINARY IN P/N DIR



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), XX=±0.5 (±0.020), XXX=±0.25 (±0.010), XXXX=±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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CONFIDENTIAL INFORMATION

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



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20 x 4 CHARACTER LCD MODULE, 5 x 8 DOT MATRIX,
4.75mm CHARACTER HEIGHT, 1/16 DUTY,
12:00, YELLOW STN, WITH RUSSIAN FONT.

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE: 8.22.06

PAGE: 1 OF 2

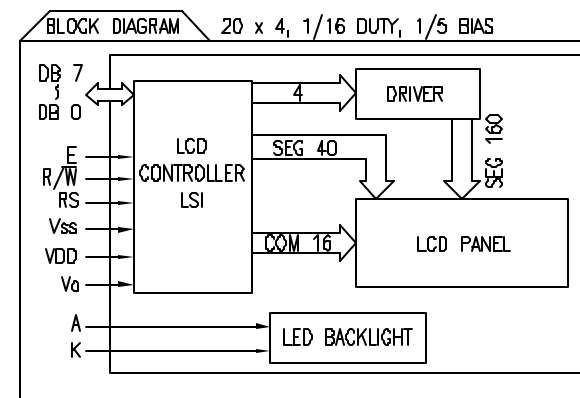
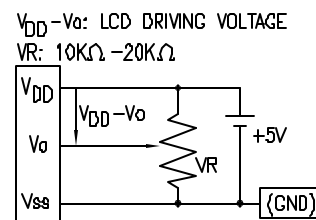
SCALE: N/A

JD

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PRELIMINARY IN P/N DIR

PIN CONFIGURATION			
PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	—	POWER SUPPLY
2	V _{DD}	—	
3	V _O	—	
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
16	K	—	CATHODE



ELECTRICAL CHARACTERISTICS		V _{DD} =4.7V to 5.3V, T _A =25°C				
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	—	MIN.	TYP.	MAX.	V
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	—	3.2	6.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	—	2.0	—	V
	LOW	V _{IL}	—	0	—	V
OUTPUT VOLTAGE	HIGH	V _{OH}	—	2.4	—	V
	LOW	V _{OL}	—	—	0.4	V
*LED BACKLIGHT	VOLTAGE	V _f	I _f =160mA	—	4.2	V
	CURRENT	I _f	—	—	160	mA
	POWER CONSUMPTION	P _D	—	—	660	mW
	LUMINOUS	L	I _f =160mA	70	—	cd/m ²
	COLOR	—	YELLOW/GREEN	—	656	nm

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
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}	—	-30	80	°C
STORAGE TEMPERATURE	T _{stg}	—	-40	85	°C

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