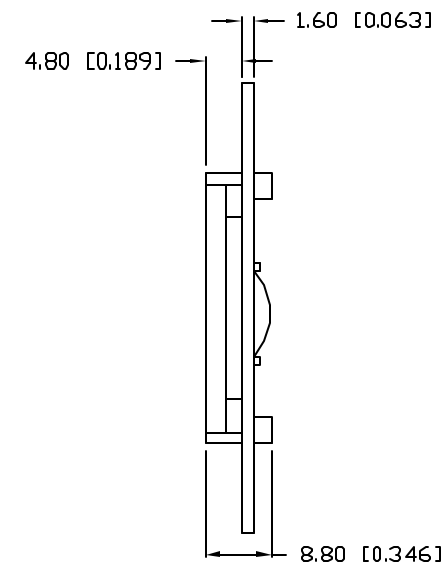
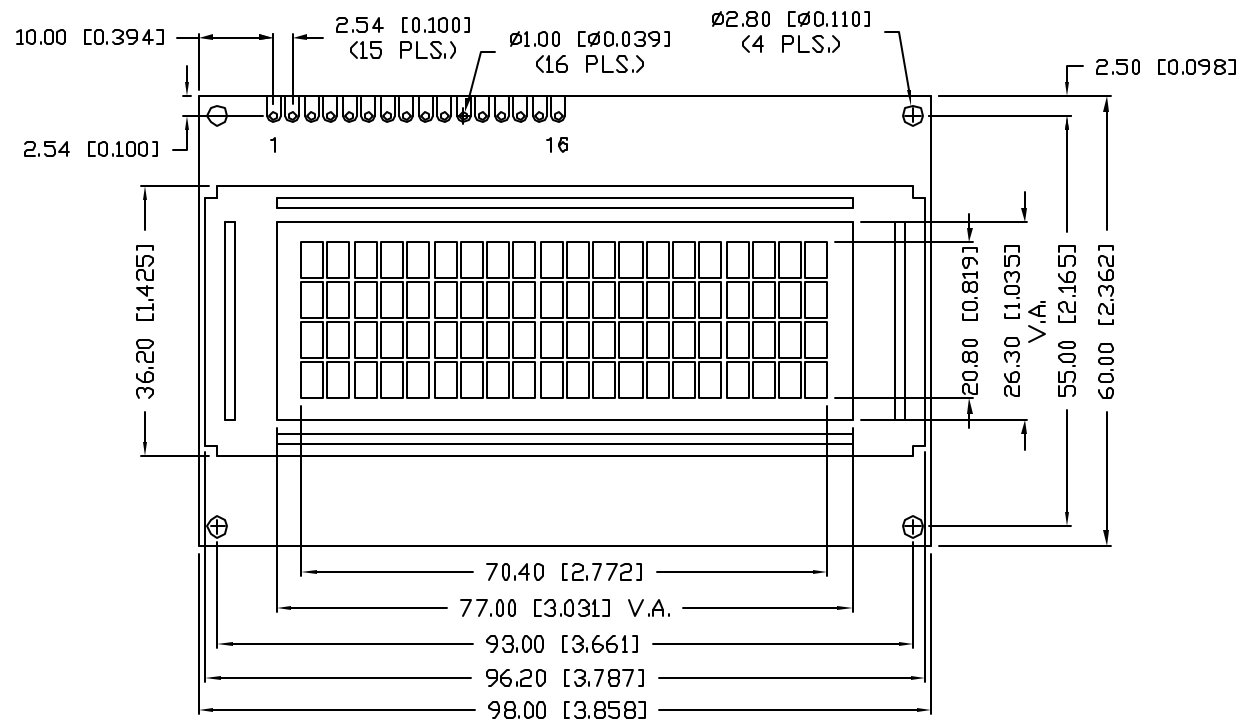


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.



*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

REV.

PART NUMBER

LCM-S02004DSF-N

4.75mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, 20 x 4 LCD
MODULE, 1/16 DUTY, 1/5 BIAS, GREEN EL BACKLIGHT,
STN, TRANSFLECTIVE, 6:00 VIEW.

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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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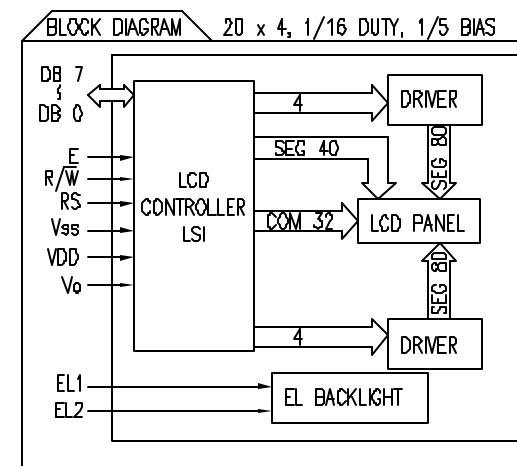
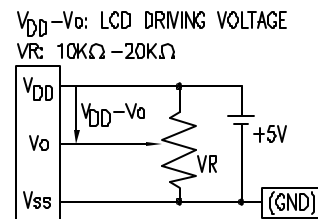
DATE: 8.14.02

PAGE: 1 OF 2

SCALE: N/A

BC

PIN CONFIGURATION				
PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	V _{SS}	-	POWER SUPPLY	GND (OV)
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	EL1	-	EL BACKLIGHT	
16	EL2	-	EL BACKLIGHT	



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	-	5.0	-	mA
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V
	LOW	V _{IL}	-	0	-	V
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-0.205mA	2.4	-	V
	LOW	V _{OL}	I _{OL} =1.6ma	-	-	V
POWER SUPPLY FOR EL BACKLIGHT	VEL	F _{EL} =400Hz	-	-	80	Vrms
	I _{EL}	V _{EL} =80V rms F _{EL} =400Hz	-	-	6	mA

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	-	4.2050°C	4.800°C	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	-	0	50	°C
STORAGE TEMPERATURE	T _{stg}	-	-20	70	°C
POWER SUPPLY FOR EL BACKLIGHT	VEL	-	-	150AC	Vrms
	FEL	-	-	2	KHz

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