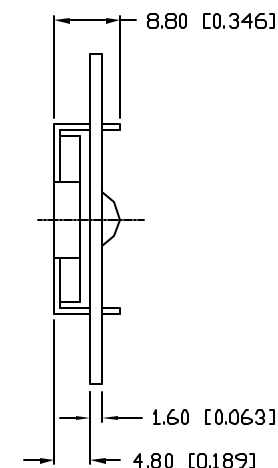
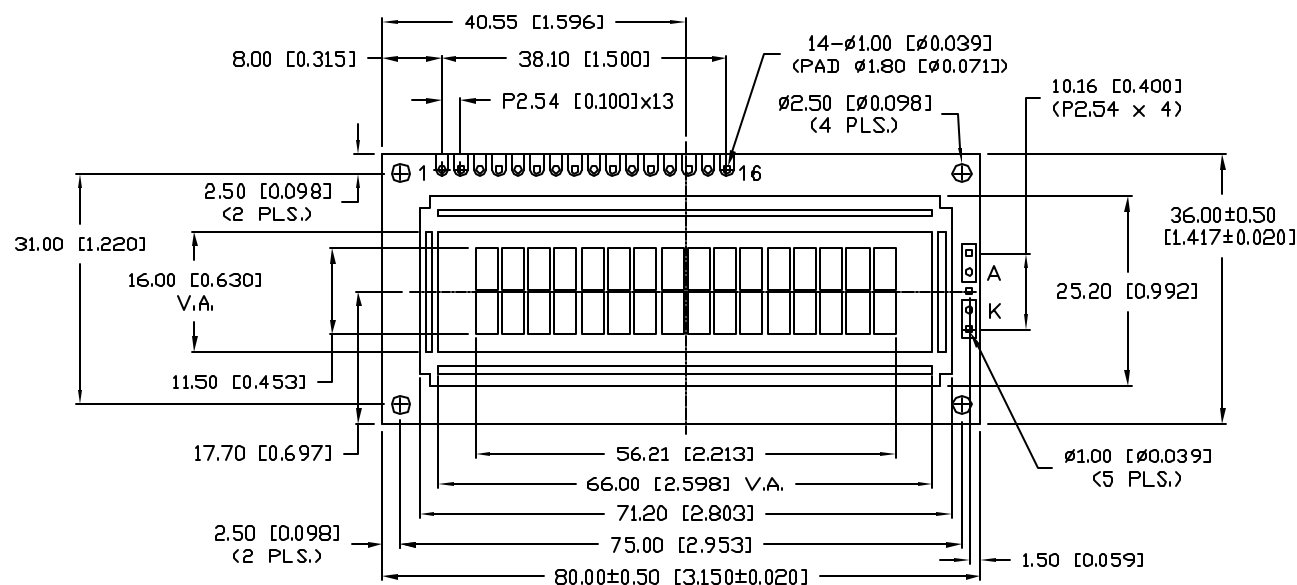
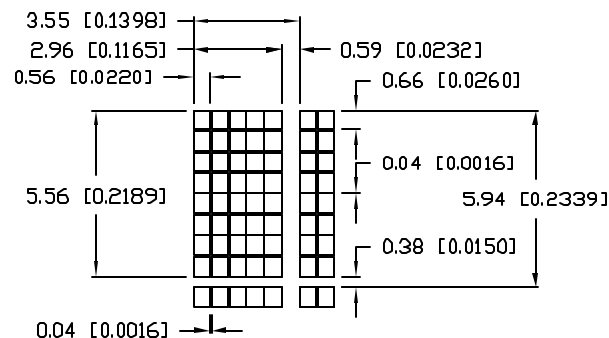


CAUTION: STATIC SENSITIVE DEVICE
FOLLOW PROPER E.S.D. HANDLING PROCEDURES
WHEN WORKING WITH THIS PART.

CHARACTER DETAIL



UNCONTROLLED DOCUMENT

*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-S01602DTF/A-3W

5.56mm CHARACTER HEIGHT, 5 x 8 DOT MATRIX, RELECTIVE,
16x2 LCD MODULE, 1/16 DUTY, 1/5 BIAS,
TN, TRANSFLECTIVE.

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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: 7.27.04

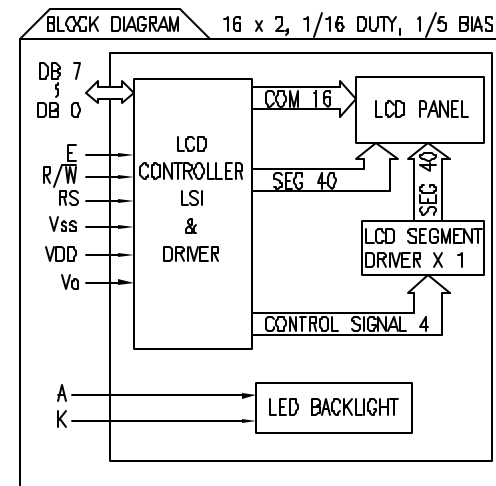
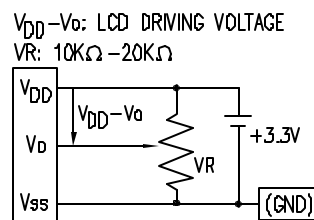
PAGE: 1 OF 2

SCALE: N/A

JD

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 LED BACKLIGHT
16	K		CATHODE LED BACKLIGHT



ELECTRICAL CHARACTERISTICS

V_{DD}=2.7V to 4.5V, T_A=25°C

ITEM			SYMBOL	CONDITION	STANDARD VALUE			UNIT
					MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC			$V_{DD}-V_{SS}$	—	—	3.3	—	V
SUPPLY CURRENT FOR LOGIC			I_{DD}	$V_{DD}=3.3V$	—	2.0	3.0	mA
INPUT VOLTAGE		HIGH	V_{IH}	—	$0.7V_{DD}$	—	V_{DD}	V
		LOW	V_{IL}	—	−0.3	—	0.55	V
OUTPUT VOLTAGE		HIGH	V_{OH}	—	$0.75V_{DD}$	—	—	V
		LOW	V_{OL}	—	—	—	$0.2V_{DD}$	V
*LED BACKLIGHT	VOLTAGE		V_f	$I_f=15mA$	3.4	3.5	3.6	V
	CURRENT		I_f	—	10	15	20	mA
	POWER CONSUMPTION		P_D	$I_f=15mA$	—	53	—	mW
	COLOR		—	WHITE	—	—	—	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	2.7	4.5	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-	2.2@50°C	4.3@0°C	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-S	0	50	°C
STORAGE TEMPERATURE	T _{stg}	LCM-S	-20	70	°C

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