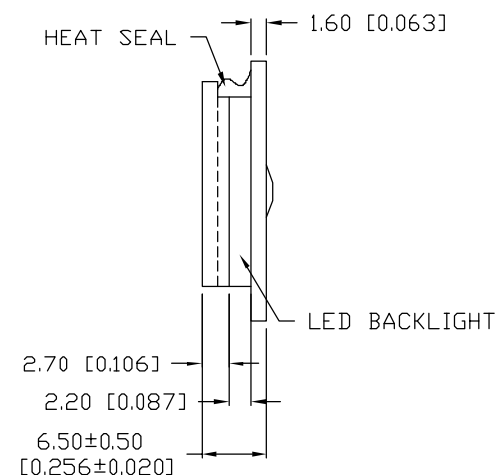
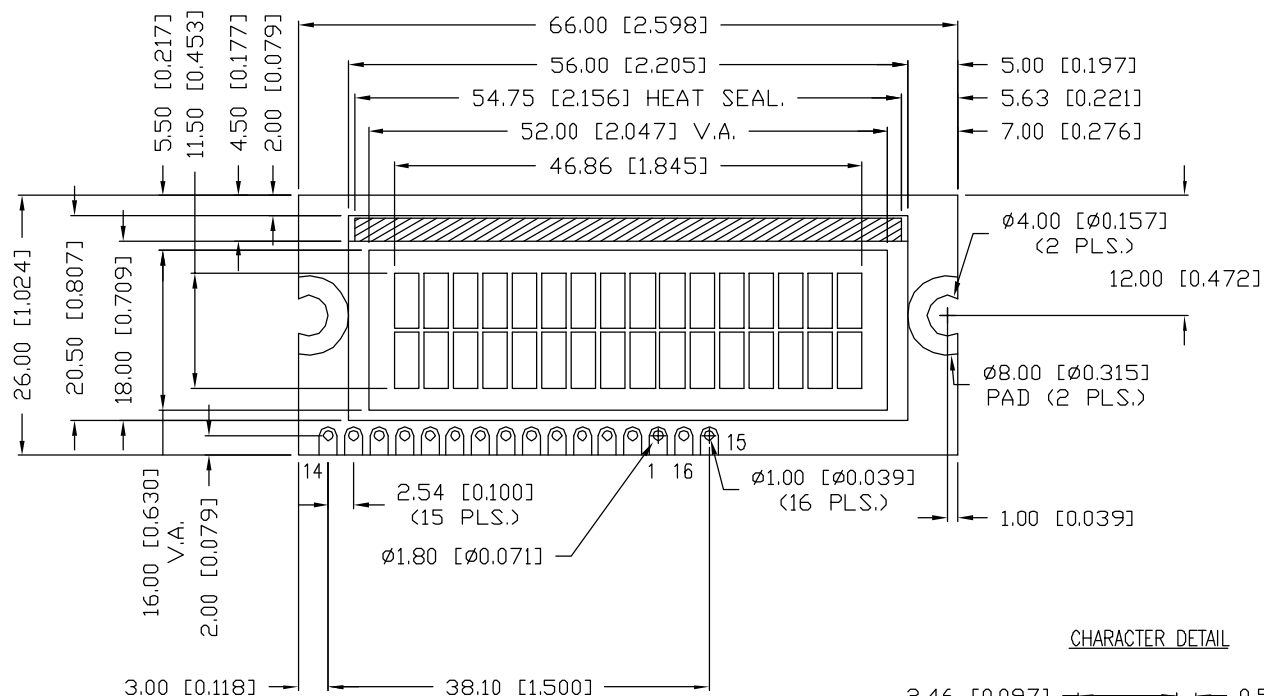
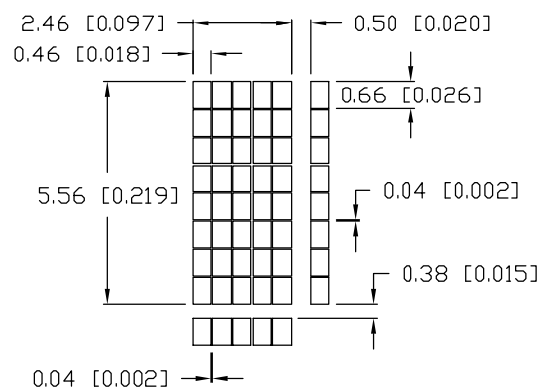




CHARACTER DETAIL



*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 MAX.= +0.00 -DECIMAL PRECISION

REV.

PART NUMBER

LCM-S01602DTF/M

16 x 2 CHARACTER LCD MODULE, TN, REFLECTIVE.
1/16 DUTY, 1/5 BIAS, WITH LED BACKLIGHT.

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RELIABILITY NOTE

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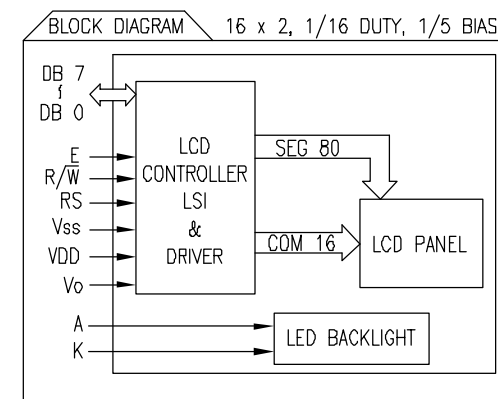
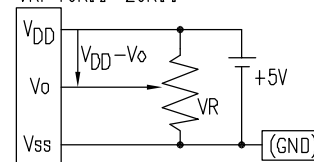
DATE: 9.11.02

PAGE: 1 OF 2

SCALE: N/A

PIN CONFIGURATION				
PIN NO.	SYMBOL	LEVEL	FUNCTION	
1	V _{SS}	—	POWER SUPPLY	GND (0V)
2	V _{DD}	—		5V
3	V ₀	—		FOR LCD DRIVE
4	RS	H/L	REGISTER SELECT SIGNAL H: DATA INPUT L: INSTRUCTION INPUT	
5	R/ $\overline{W}$	H/L	H: DATA READ (MODULE $\rightarrow$ MPU) L: DATA WRITE (MODULE $\leftarrow$ MPU)	
6	E	H,H $\rightarrow$ 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 VOLTAGE
VR: 10KΩ-20KΩ



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.	
SUPPLY CURRENT FOR LOGIC	I _{DD}	V _{DD} =5V	-	2.0	3.0	mA
INPUT VOLTAGE	HIGH	V _{IH}	-	2.2	-	V _{DD} 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	If=40mA	4.0	4.2	- V
	CURRENT	If	-	40	80	- mA
	POWER CONSUMPTION	PD	-	-	336	- mW
	LUMINOUS	L	If=40mA	50	-	- cd/m ²
	COLOR	-	-	-	-	- nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

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}	LCM-S	0	50	°C
STORAGE TEMPERATURE	T _{stg}	LCM-S	-20	70	°C

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