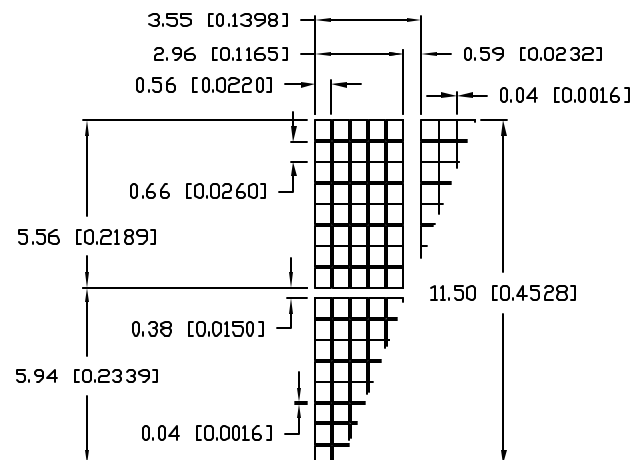


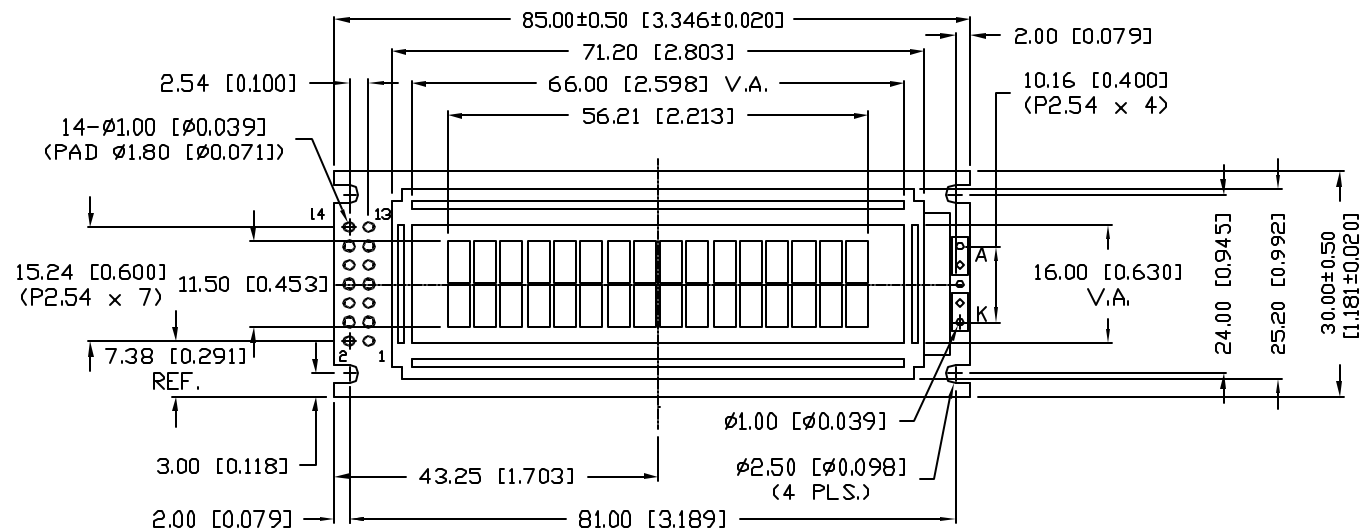
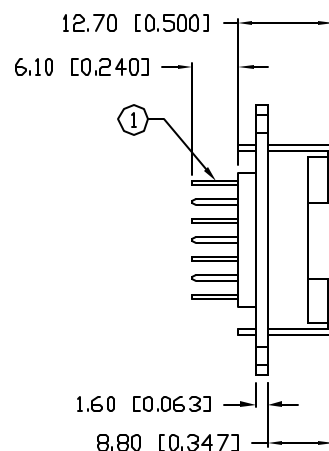
CHARACTER DETAIL



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

NOTES:

1. MOLEX 10-89-1141 OR EQUIVALENT.



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-S01602DWF/C1BP

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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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PAGE: 1 OF 2

SCALE: N/A

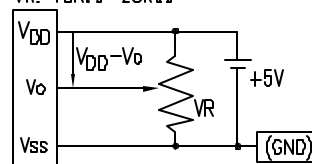
CT

16 x 2 CHARACTERS LCD MODULE,
FSTN, TRANFLECTIVE, ONE CHIP BLUE LED BACKLIGHT,
1/16 DUTY, 1/5 BIAS, 12:00 VIEW, MOLEX HEADER.

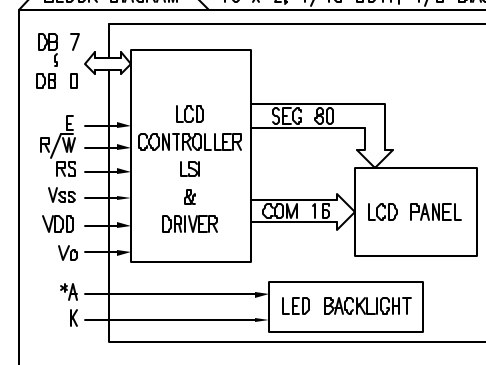
PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{DD}	—	POWER SUPPLY
2	V_{SS}	—	
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.
1	A	—	ANODE
2	K	—	CATHODE

$V_{DD}-V_o$: LCD DRIVING VOLTAGE
VR: 10K Ω —20K Ω



BLOCK DIAGRAM 16 x 2, 1/16 DUTY, 1/5 BIAS



*BACKLIGHT RESISTOR R9=68 OHM, J3=SHORT

ELECTRICAL CHARACTERISTICS

$V_{DD}=4.7V$ to $5.3V$, $T_A=25^\circ C$

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	$I_f=20mA$	3.3	3.4	3.5	V
	CURRENT		I_f	—	10	20	25	mA
	POWER CONSUMPTION		PD	$I_f=20mA$	—	53	—	mW
	COLOR		—	BLUE	—	—	—	nm

*WHEN POWERED DIRECTLY USING THROUGH HOLES, A & K ON RIGHT SIDE OF BOARD. SEE PAGE 1.

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	$T_a=25^\circ C$	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	$V_{DD}-V_o$	—	$4.2@50^\circ C$	$4.8@0^\circ C$	V
INPUT VOLTAGE	V_I	$T_a=25^\circ C$	V_{SS}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	LCM-S	0	50	$^\circ C$
STORAGE TEMPERATURE	T_{stg}	LCM-S	-20	70	$^\circ C$

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REV.

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