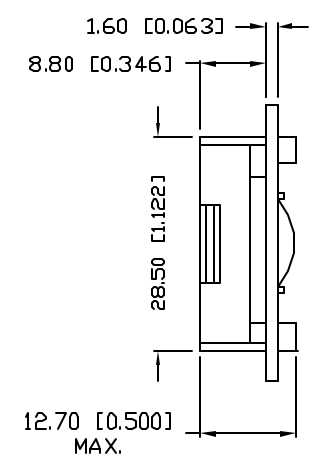
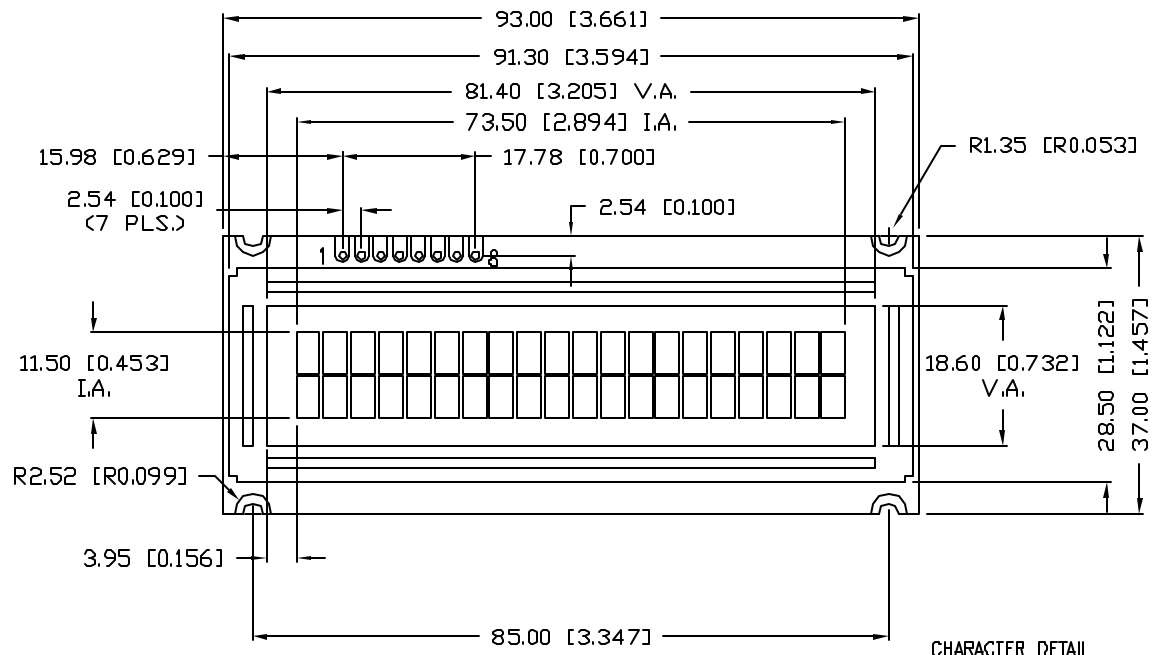
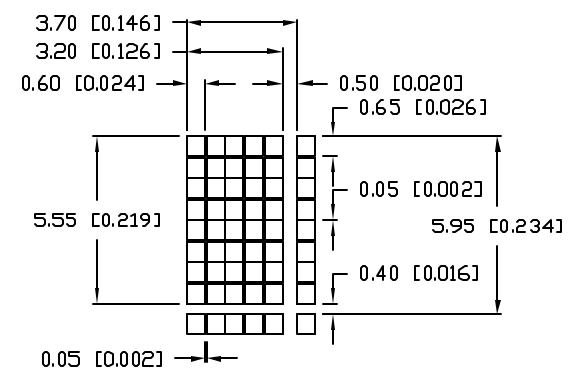


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A	E.C.N. #11148.	02.13.07



CHARACTER DETAIL



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



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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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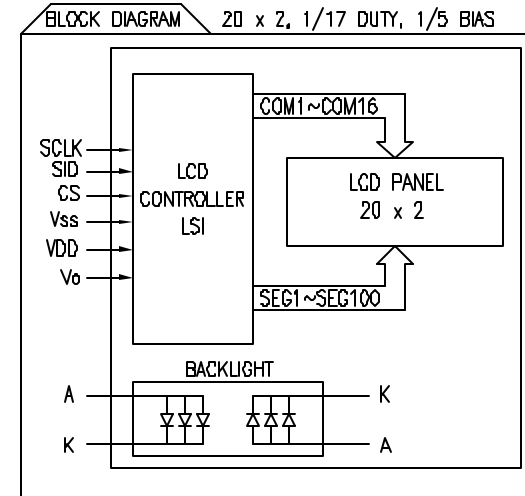
20 x 2 CHARACTER LCD MODULE, TN, TRANSFLECTIVE,
SERIAL INPUT, EDGE LIT BLUE LED BACKLIGHT,
1/17 DUTY, 1/5 BIAS, VLCD = 4.5V.

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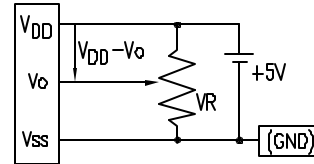
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	SEE PAGE #1	

ELECTRICAL CHARACTERISTICS $V_{DD}=2.7V \sim 5.5V, T_A=-30^{\circ}C \sim +85^{\circ}C$

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}	$V_{DD}=3V$	-	2.0	3.0	mA	
INPUT VOLTAGE	HIGH	V_{IH}	-	$0.7V_{DD}$	-	V	
	LOW	V_{IL}	-	-0.3	0.6	V	
OUTPUT VOLTAGE	HIGH	V_{OH}	$I_{OH}=-0.205mA$	$0.75V_{DD}$	-	V	
	LOW	V_{OL}	$I_{OL}=1.6mA$	-	$0.2V_{DD}$	V	
LED BACKLIGHT	VOLTAGE	V_f	$I_f=120mA$	3.0	-	3.6	V
	CURRENT	I_f	-	-	120	-	mA
	POWER CONSUMPTION	PD	-	-	-	648	mW
	LUMINOUS INTENSITY	L	$I_f=120mA$	TBA	-	-	cd/m ²
	COLOR	-	-	-	470	-	nm



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



PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V_{DD}	-	POWER SUPPLY
2	V_{SS}	-	
3	V_o	-	
4	\overline{CS}	H/L	CHIP SELECT SIGNAL H: CHIP DISABLED L: CHIP ENABLED
5	SID	H/L	SERIAL INPUT DATA LINE
6	SCLK	-	SERIAL CLOCK INPUT
7	K	-	CATHODE
8	A	-	ANODE

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	STANDARD VALUE		UNIT
		MIN	MAX	
POWER SUPPLY VOLTAGE	VDD	-0.3	7.0	V
POWER SUPPLY VOLTAGE	V_o	-15.0	+0.3	V
INPUT VOLTAGE	V_{in}	-0.3	3.0	V
OPERATING TEMPERATURE	T_{opr}	0	50	$^{\circ}C$
STORAGE TEMPERATURE	T_{stg}	-20	70	$^{\circ}C$

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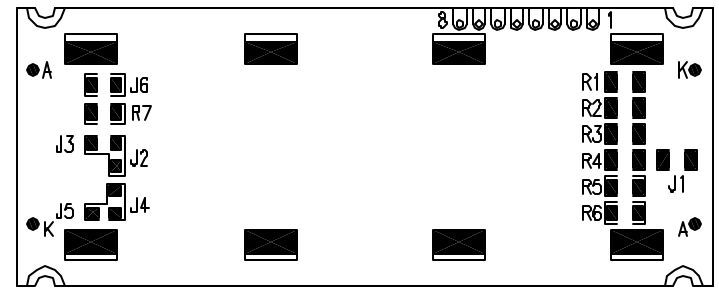
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BACK VIEW FROM RIGHT SIDE PROJECTION

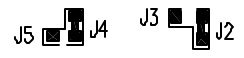


COMBINATIONS:

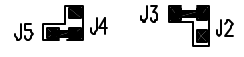
THE LED RESISTOR SHOULD BE BRIDGED AS FOLLOWING



THE 7TH PIN IS THE ANODE AND THE 8TH PIN IS THE CATHODE AS FOLLOWING



THE 7TH PIN IS THE CATHODE AND THE 8TH PIN IS THE ANODE AS FOLLOWING



THE METAL BEZEL IS ON GROUND AS FOLLOWING



LED POLARITY					
SYMBOL	STATE	J3, J5	J2, J4	LED POLARITY	
				7 PIN	8 PIN
J2, J4	SOLDER BRIDGE	OPEN	-	ANODE	CATHODE
J3, J5	SOLDER BRIDGE	-	OPEN	CATHODE	ANODE

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