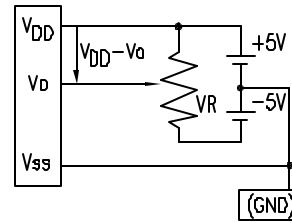


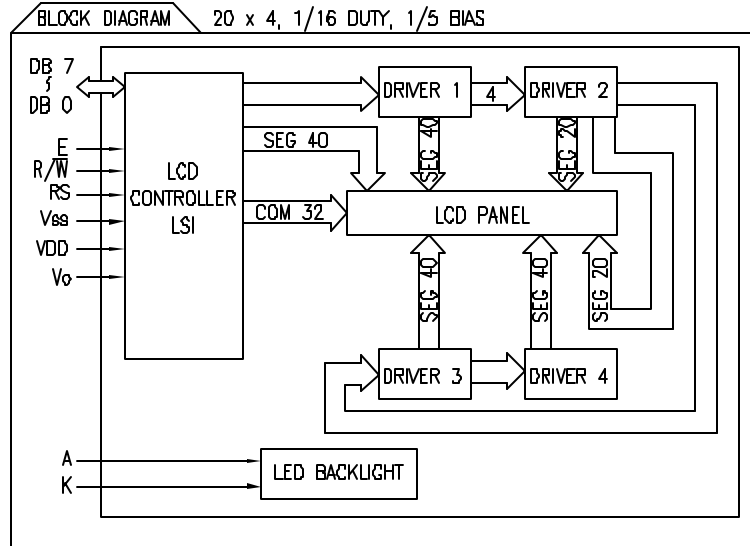
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
	SEE PAGE 1.	

PIN CONFIGURATION					
PIN NO.	SYMBOL	LEVEL	FUNCTION		
1	V _{SS}	-	POWER SUPPLY	GND (0V)	
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	A	-	ANODE	LED BACKLIGHT	
16	K	-	CATHODE	LED BACKLIGHT	

V_{DD}-V_O: LCD DRIVING VOLTAGE
VR: 10KΩ-20KΩ



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ELECTRICAL CHARACTERISTICS		V _{DD} =4.7V to 5.3V, T _A =25°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	-	V _{DD}
	LOW	V _{IL}	-	0	-	0.6
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-0.205mA	2.4	-	V
	LOW	V _{OL}	I _{OL} =1.6mA	-	-	0.4
*LED BACKLIGHT	VOLTAGE	V _f	I _f =550mA	-	4.2	4.5
	CURRENT	I _f	-	-	550	600
	POWER CONSUMPTION	PD	-	-	2310	-
	LUMINOUS	L	I _f =550mA	70	-	-
	COLOR	-	-	-	-	-

*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	4.7	5.3	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _O	-	0.5	10.0	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-H	-20	80	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	85	°C

*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. B	PART NUMBER LCM-X02004DXX/D-Y
9.22mm CHARACTER HEIGHT, 20 x 4 CHARACTERS, 5 x 8 DOT MATRIX LCD MODULE, STN YELLOW, 1/16 DUTY, 1/5 BIAS.	

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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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