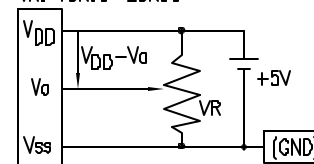


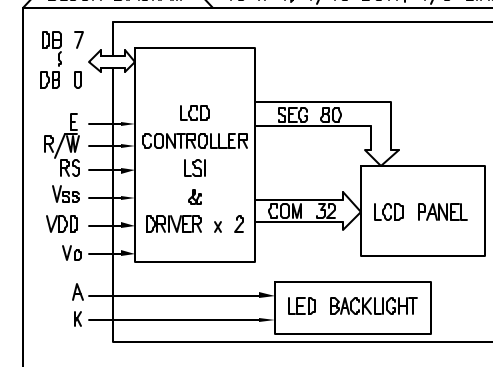
PIN CONFIGURATION

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 $\rightarrow$ 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
 V_R : 10K Ω —20K Ω



BLOCK DIAGRAM 16 x 4, 1/16 DUTY, 1/5 BIAS



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	V_{IH}	-	2.2	-	4.7	V
	V_{IL}	-	0	-	0.6	V
OUTPUT VOLTAGE	V_{OH}	-	2.4	-	-	V
	V_{OL}	-	-	-	0.4	V
*LED BACKLIGHT	VOLTAGE	V_f	$I_f=260mA$	4.2	4.5	V
	CURRENT	I_f	-	260	400	mA
	POWER CONSUMPTION	PD	-	1092	-	mW
	LUMINOUS	L	$I_f=260mA$	70	-	cd/m ²
	COLOR	-	-	-	-	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	$V_{DD}-V_{SS}$	$T_a=25^\circ C$	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	$T_a=25^\circ C$	V_{SS}	V_{DD}	V
OPERATING TEMPERATURE	T_{opr}	LCM-S	0	50	°C
		LCM-H	-20	70	°C
STORAGE TEMPERATURE	T_{stg}	LCM-S	-20	70	°C
		LCM-H	-30	85	°C

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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: 2 OF 2

SCALE: N/A

4.75mm TALL, 5 x 8 DOT MATRIX,

16 x 4 CHARACTER LCD MODULE, 1/16 DUTY, 1/5 BIAS.

SA/BC