



Feature

1. 5x7 dots with cursor
2. Built in Controller (HD44780 or SPLC780A or Equivalent)
3. +5V Power Supply
4. 1/16 Duty Cycle

Electical Characteristics

Item		Symbol	Condition	Min.	Type	Max.	Unit
Supply Voltage	Logic	Vdd	–	4.5	5	5.5	V
Input Voltage	H level	Vih	Vdd = 5V	2.2	–	Vdd	V
	L level	Vil		–0.3	–	0.6	
Output Voltage	H level	Voh	Ioh=–0.1mA	2.4	–	Vdd	V
	L level	Vol	Iol=0.1mA	–	–	0.4	
Frame Frequency		F flm	Vdd=5V	59	–	110	HZ
Current Consumption		Idd	Vdd=5V	–	–	2	MA
			No B/L			30	
			B/L				
Internal Clock Frequency		Fosc	Rf=91kΩ	190	270	350	KHZ
LCD Driving Voltage		Vlcd	Vdd–V5	–	4.5	–	V
Operating Voltage		Vop	Vdd–Vo	–	5.1	–	V

Maximum Ratings

Item		Symbol	Min	Max	Unit
Supply voltage	Logic	Vdd	–0.3	7.0	V
	LCD driver	Vlcd	Vdd–12	Vdd+0.3	V
Input Voltage		Vin	–0.3	Vdd+0.3	V
Operating temperature		Topr	0	50	°C
Storage temperature		Tstg	–10	60	°C
Humidity		–	–	90	%RH

Interface Pin Connection



NO.	SYM.	LEVEL	FUNCTION	NO.	SYM.	LEVEL	FUNCTION
1	VSS	-----	Ground (0V)	9	DB2	H/L	Data bit 2
2	VDD	-----	VCC (5V)	10	DB3	H/L	Data bit 3
3	VO	-----	Contrast ADJ.	11	DB4	H/L	Data bit 4
4	RS	H/L	Register select	12	DB5	H/L	Data bit 5
5	R/W	H/L	Read/Write	13	DB6	H/L	Data bit 6
6	E	H,H->L	Enable Signal	14	DB7	H/L	Data bit 7
7	DB0	H/L	Data bit 0	15			
8	DB1	H/L	Data bit 1	16			

Thickness

Version	T1	T2	UNIT
EL&NO backlight	5.3	9.7	mm
LED backlight	8.0	12.6	mm

Display Character Address Code

Display position	1	2	3	4	5	-----	20	21	22	23	24
DDRAM Address	00	01	02	03	04	-----	13	14	15	16	17
DDRAM Address	40	41	42	43	44	-----	53	54	55	56	57

Outline Dimension

