



Feature

1. 320x240 dots
2. +5V power supply
3. 1/240 duty cycle
4. No controller
5. Touch panel option (analog type)

Mechanical Data

Item	Standard Value	Unit
Module Dimension	160.0 x 109.0	mm
Viewing Area	122.0 x 92.0	mm
Dot Size	0.34 x 0.34	mm
Dot Pitch	0.36 x 0.36	mm

Pin Assignment

Pin	Symbol	Function
1	DB0	Data bus line
2	DB1	Data bus line
3	DB2	Data bus line
4	DB3	Data bus line
5	DISPOFF	H:ON L:OFF
6	FRAME	First Line marker
7	M(NC)	Frame reverse signal (alternate signal)
8	LOAD	Data latch
9	CP	Data shift
10	Vdd	Power supply for LOGIC
11	Vss	GND (0V)
12	Vee	Power supply for LCD
13	Vo	Operating voltage LCD driving
14	FGND	Film ground

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	4.75	5.0	5.25	V
Input Voltage	VI	-0.3	--	VDD	V

Note: VSS=0 Volt, VDD=5.0 Volt.

Electronical Characteristics

Item	Symbol	Condition	Standard Value			Unit
			min.	typ.	max.	
Input Voltage	VDD	L level	0.7V _{DD}	--	V _{DD}	V
	VIO	H level	0	--	0.3V _{DD}	V
Supply Current	IDD	VDD=+5V	--	7.5	--	mA
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	0°C	22.0	23.0	24.0	V
		25°C	21.3	22.2	23.0	
		50°C	19.5	20.8	22.1	
CCFL Starting Voltage	VFLS	25°C	--	600	--	Vrms
CCFL Driving Voltage	VFLD	25°C	--	268	--	Vrms
CCFL Driving Current	IFLD	V _{FQ} =450Vrms 30KHZ	--	5.0	--	mA _{rms}
LED Forward Voltage	VF	25°C	--	4.2	4.6	V
LED Forward Current	IF	25°C	--	180	360	mA
EL Power Supply Current	IEL	Vel=110VAC;400Hz	--	--	5.0	mA