



Feature

1. Built-in controller Samsung (KS0107 –KS0108 or Equivalent)
2. +5V power supply
3. 1/64 duty cycle
4. N.V. Built-in

Pin Assignment

Pin	Symbol	Function
1	VSS	Power Supply (0V)
2	VDD	Power supply for logic
3	Vo	Power supply for LCD driver
4	D/I	Data write
5	R/W	H/L Read / write signal
6	E	H→L Enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
15	CS1	H→Chip1 Enable
16	CS2	H→Chip2 Enable
17	RES	Reset
18	VOUT	Negative voltage output
19	A	Power supply for B/L
20	K	Power supply for B/L

Mechanical Data

Item	Standard Value	Unit
Module Dimension	113 x 53	mm
Viewing Area	72.0 x 40.0	mm
Mounting hole	88.0 x 65.0	mm
Dot Pitch	0.52 x 0.52	mm

Absolute Maximum Rating

Item	Symbol	Standard Value			Unit
		min.	typ.	max.	
Power Supply	VDD-VSS	4.75	5	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	--	2.5	7.5	mA		
Recommended LC Driving Voltage for Normal Temp. Version module	VDD-V0	-20°C	9.9	10.4	10.9	V		
		0°C	9.7	10.2	10.7			
		25°C	8.9	9.4	9.9			
		50°C	8.6	9.1	9.6			
		70°C	8.4	8.9	9.4			
LED Forward Voltage	V _F	25°C	--	4.2	4.6	V		
LED Forward Current	IF	25°C	Array	High	---	330	660	mA
				Low	---	120	240	mA
EL Power Supply Current	IEL	Vel=110VAC;400Hz	--	--	5.0	mA		