



### Feature

1. Built-in controller (NT7107, NT7108 or equivalent)
2. +5V power supply (Also available for +3.3V)
3. 1/64 duty cycle
4. B/L can be driven by pin1, pin20

### Terminal Function

Pin No.	Symbol	Function
1	V <sub>SS</sub>	GND
2	V <sub>DD</sub>	Supply voltage for logic
3	V <sub>0</sub>	Contrast Adjustment
4	R/S	Data/Instruction
5	R/W	Data read/write
6	E	Enable signal
7-14	DB0-DB7	H/L Data bus line
15	CS1	Chip select for IC1
16	/RST	Reset signal
17	CS2	Chip select for IC2
18	CS3	Chip select for IC3
19	V <sub>ee</sub>	Negative Voltage output
20	A	Backlight LED+

### Mechanical Data

Item	Value
Outline (mm)	130.0 x 65.0 x 12.4MAX
Viewing Area (mm)	102.0 x 39.0
Active Area (mm)	97.49 x 32.46
Dot Size (mm)	0.458 x 0.458
Dot Pitch (mm)	0.508 x 0.508

### Electrical Characteristics

Item	Symbol	Min	Typ	Max
Operating Voltage(V)	V <sub>DD</sub>	4.7	5.0	5.3
Supply Voltage For LCD	V <sub>DD</sub> - V <sub>0</sub>	—	9.5	—
Input High Voltage(V)	V <sub>IH</sub>	0.7 V <sub>DD</sub>	—	V <sub>DD</sub>
Input Low Voltage(V)	V <sub>IL</sub>	V <sub>SS</sub>	—	0.6
Operating Current(mA)	I <sub>DD</sub>	—	2.5	5.0

### Backlight Characteristics

Item	Symbol	Min	Typ	Max
Forward Voltage (V)	V <sub>F</sub>	--	5.0	--
Forward Current (mA)	I <sub>F</sub>	--	64	80

### Absolute Maximum Rating

Item	Symbol	Min	Max
Power Supply(V)	V <sub>DD</sub> -V <sub>SS</sub>	-0.3	7.0
Operating Temperature(°C)	T <sub>op</sub>	-20	+70
Storage Temperature (°C)	T <sub>st</sub>	-30	+80