



### Feature

1. Built-in controller(ST7920 or equivalent)
2. +5V power supply(Also available for +3.3V)
3. 1/64duty cycle
4. B/L can be driven by pin1,pin2,or A and K

### Mechanical Data

Item	Value
Outline (mm)	93.0 x70.0x13.6MAX
Viewing Area (mm)	72.0x40.0
Active Area (mm)	66.52x33.24
Dot Size (mm)	0.48x 0.48
Dot Pitch (mm)	0.52x 0.52

### 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	RS(CS)	Data/Instruction (Chip select)
5	R/W(SID)	Data read/write (Serial data input)
6	E(SCLK)	Enable signal (Serial clock)
7-14	DB0-DB7	Data bus line
15	PSB	H:parallel mode L:serial mode
16	NC	No connection
17	/RST	Reset signal
18	V <sub>ee</sub>	Negative Voltage output
19	A	Backlight LED+
20	K	Backlight LED-

### 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>	—	6.0	—
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>	—	3.0	3.9

### 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