



**Feature**

1. 128x128 dots includes cursor
2. Built-in controller(RA6963 or equivalent)
3. +5V power supply(Also available for +3V)
4. 1/128duty cycle
5. LED can be driven by pin2, pin3, or A and K

**Mechanical Data**

Item	Value	Unit
Outline	85.0 x100.0	mm
Viewing Area	62.0x44.0	mm
Active Area	56.3x38.38	mm
Dot Size	0.42x 0.58	mm
Dot Pitch	0.44x 0.60	mm

**Terminal Function**

Pin No.	Symbol	Function
1	FG	Frame ground
2	Vss	GND
3	V <sub>DD</sub>	Supply voltage for logic
4	V <sub>0</sub>	Contrast Adjustment
5	/WR	Data write s
6	/RD	Data read
7	/CE	H-L Enable signal
8	C/D	Command/data read/write
9	NC	No connection
10	/RST	Reset signal
11-18	DB0-DB7	H/L Data bus line
19	FS	FS="H", 6*8character font FS="L", 8*8character font
20	Vee	Negative Voltage output
21	A	Backlight LED+
22	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>	—	17	—
Input High Voltage(V)	V <sub>IH</sub>	0.7	—	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>	—	1.5	4.0

**Backlight Characteristics**

Item	Symbol	Min	Typ	Max	Unit
Forward Voltage	V <sub>f</sub> (edge)	3.4	3.5	3.6	V
Forward Current	I <sub>f</sub> (edge)	64	80	100	mA

**Absolute Maximum**

Item	Symbo	Min	Max
Operating Voltage(V)	V <sub>dd</sub>	-0.3	5.5
Operating Temperature(°C)	Top	-20	+70
Storage Temperature (°C)	T <sub>st</sub>	-30	+80