



Feature

1. Built-in controller (RA6963 or equivalent)
2. +5V power supply(Also available for +3.3V)
3. 1/64duty cycle
4. B/L can be driven by pin2,pin3,or A and K

Terminal Function

Pin No.	Symbol	Function
1	FG	Frame ground
2	V _{SS}	GND
3	V _{DD}	Supply voltage for logic
4	V ₀	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	V _{ee}	Negative Voltage output
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	NC/ V _{ee}	No connection/ Negative Voltage output
21	A	Backlight LED+
22	K	Backlight LED+

Mechanical Data

Item	Value
Outline (mm)	180.0 x 65.0x16.0MAX
Viewing Area (mm)	133.0 x 39.0
Active Area (mm)	127.16 x 33.88
Dot Size (mm)	0.49 x 0.49
Dot Pitch (mm)	0.53 x 0.53

Electrical Characteristics

Item	Symbol	Min	Typ	Max
Operating Voltage(V)	V _{DD}	4.7	5.0	5.3
Supply Voltage For LCD	V _{DD} -V ₀	—	12.5	—
Input High Voltage(V)	V _{IH}	0.7 V _{DD}	—	V _{DD}
Input Low Voltage(V)	V _{IL}	V _{SS}	—	0.6
Operating Current(mA)	I _{DD}	—	45	50

Backlight Characteristics

Item	Symbol	Min	Typ	Max
Forward Voltage (V)	V _F	--	5.0	--
Forward Current (mA)	I _F	--	64	80

Absolute Maximum Rating

Item	Symbol	Min	Max
Power Supply(V)	V _{DD} -V _{SS}	-0.3	7.0
Operating Temperature(°C)	Top	-20	+70
Storage Temperature (°C)	T _{st}	-30	+80