



Feature

1. Built-in controller (RA6963 or equivalent)
2. +5V power supply (Also available for +3.3V)
3. 1/128 duty cycle

Mechanical Data

Item	Value
Outline (mm)	144.0 x 104.0 x 14.3MAX
Viewing Area (mm)	114.0 x 64.0
Active Area (mm)	107.98 x 57.58
Dot Size (mm)	0.43 x 0.43
Dot Pitch (mm)	0.45 x 0.45

Terminal Function

Pin No.	Symbol	Function
1	V _{SS}	GND
2	V _{DD}	Supply voltage for logic
3	V ₀	Contrast Adjustment
4	C/D	Command/data read/write
5	/RD	Data read
6	/WR	Data write s
7-14	DB0-DB7	H/L Data bus line
15	/CE	H-L Enable signal
16	/RST	Reset signal
17	V _{ee}	Negative Voltage output
18	MD2	Control signal
19	FS	FS="H", 6*8 character font FS="L", 8*8 character font
20	NC	No connection

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	—	19.1	—
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}	—	23	35

Backlight Characteristics

Item	Symbol	Min	Typ	Max
Forward Voltage (V)	V _F	--	5.0	--
Forward Current (mA)	I _F	--	72	120

Absolute Maximum Rating

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