



PC2004E-O Series (20x4) Character Display

Features

- *20 Character, 4 Line
- *View Angle 12H or 6H
- *STN Fluid Yellow, Gray or Blue
- *Extended Temperature Range available
- *LED Backlight available
- *RoHS Compliant



Absolute Maximum Ratings at T_A = 25°C

Item	Symbol	Min	Max	Unit
Power Supply (Logic)	Vdd	-0.3	7.0	V
Power Supply (LCD)	Vlcd (Vdd-Vo)	-13.5	0.3	V
Input Voltage	Vi	-0.3	Vdd+0.3	V
Operating Temperature (Standard)	Topr	0	50	°C
Storage Temperature (Standard)	Tstg	-10	60	°C
Extended Operating Temperature	Topr	-20	70	°C
Extended Storage Temperature	Tstg	-30	80	°C

Electrical Characteristics at T_A = 25°C, Vdd=5V±0.25V

Item	Symbol	Min	Typ	Max	Unit
Power Supply (Logic)	Vdd-Vss	4.5	5.0	5.5	V
Supply Current	Idd	2.0	2.4	3.0	mA
LCD Driving Voltage	Vdd -Vo	12.5	13.0	13.5	V
LCD Driving Current	Ilcd	-	-	-	mA

Interface Pin Connection

No	Symbol	Function	No	Symbol	Function
1	Vss	Power Supply (GND)	9	DB2	Data Bus Line 2
2	Vdd	Power Supply (+5V)	10	DB3	Data Bus Line 3
3	Vo	Contrast Adjust	11	DB4	Data Bus Line 4
4	RS	Instruction/Register Select	12	DB5	Data Bus Line 5
5	R/W	Read/Write	13	DB6	Data Bus Line 6
6	E	Enable Signal	14	DB7	Data Bus Line 7
7	DB0	Data Bus Line 0	15	A	Power Supply for LED Backlight (+)
8	DB1	Data Bus Line 1	16	K	Power Supply for LED Backlight (-)

LED Backlight Specifications

Forward Voltage	Forward Current	Power Dissipation	Peak Wavelength
4.3V (Max)	235mA (Max)	1000mW (Max)	570nm (Typ)

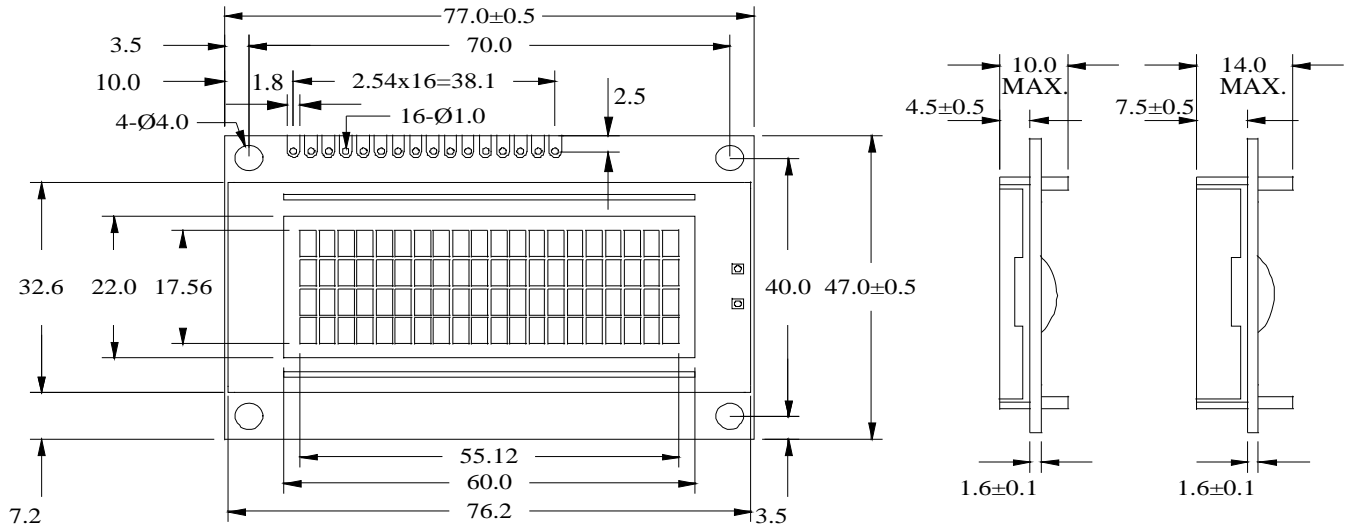
Mechanical Specifications

Item	Overall Size	Viewing Area	Character Size	Character Pitch	Dot Size
Specifications	77.0W x 47.0H x 10.0/BL14.0T	60.0W x 22.0H	2.30W x 4.03H	2.78x4.51	0.42W x 0.46H

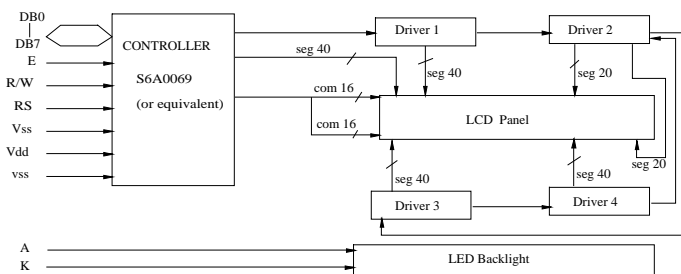
All dimensions are in mm. Tolerance is ± 0.3 Unless otherwise specified



PC2004E-O Series (20x4) Character Display

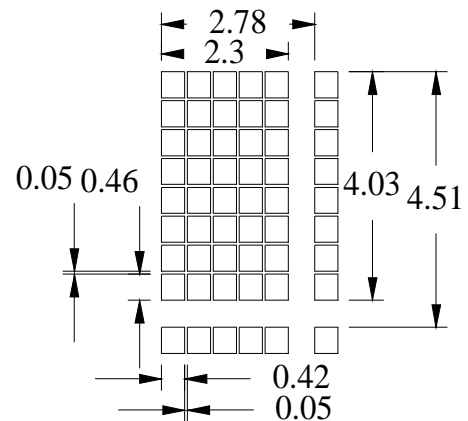


LCD Block Diagram



S6A0069 or Equivalent

Dot Layout



All dimensions are in mm. Tolerance is ± 0.3 Unless otherwise specified