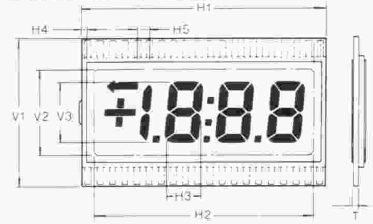


LIQUID CRYSTAL DISPLAYS (STANDARD PRODUCTS)

FEATURES

- Easy on the eyes due to the non-radiating display
- Low power consumption
- Variety of display patterns
- High contrast and wide viewing angle
- High reliability
- Pin type LCDs are available for easy mounting

DIMENSIONS INDEX



Notes

- H1×V1: Panel size
- H2×V2: Viewing area
- H3×V3: Digit size
- T: Glass thickness
- H4: Glass edge to center of first contact pad
- H5: Terminal pitch

Unit : mm

Model	Display contents	Panel size (H1×V1)	Viewing area (H2×V2)	Digit size (H3×V3)	T	H4	H5	Suitable LSI
SP501P	4½ digits ÷ LOBAT	50.80×30.48	45.72×17.78	5.50×12.00	1.10	1.65	2.54	INTERSIL ICM7224
SP503P	3½ digits ÷ ←	50.80×30.48	45.72×17.78	7.00×12.70	1.10	1.27	2.54	INTERSIL ICL7106
SP505P	4 digits	50.80×30.48	45.72×17.78	7.00×12.70	1.10	1.27	2.54	OKI MSM58292B
SP511P	6 digits	93.85×38.10	88.90×25.40	8.50×17.78	1.10	16.45	2.54	RCA CD4055A
SP513P	4 digits	93.85×38.10	88.90×25.40	14.00×17.78	1.10	1.27	2.54	—
SP516P	4½ digits ÷ ←	50.80×22.86	45.72×12.70	4.50×7.62	1.10	1.27	2.54	INTERSIL ICM7224
SP521P/SP521	3½ digits ÷ LOBAT	50.80×30.48	45.72×17.78	7.00×12.70	1.10	1.27	2.54	INTERSIL ICL7106
SP530P/SP530	3½ digits ÷ ←	50.80×22.86	45.72×12.70	5.59×8.89	1.10	1.65	2.54	INTERSIL ICL7106
SP531P	4 digits	50.80×22.86	45.72×12.70	5.59×8.89	1.10	1.65	2.54	OKI MSM58292B
SP532P	6 digits	69.85×30.48	64.77×17.78	6.60×12.70	1.10	5.72	2.54	RCA CD4055A
SP538P	5 digits	81.28×38.10	76.20×25.40	9.14×17.78	1.10	10.16	2.54	RCA CD4055A

*SP□□□P Pin (DIP) type SP□□□ Rubber (zebra) connector type

STANDARD SPECIFICATIONS

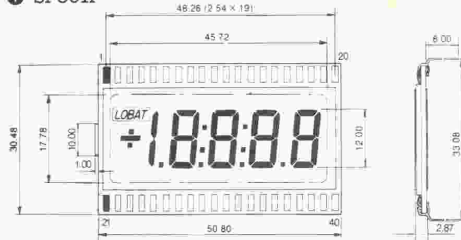
- Driving method
 - Static
 - Operating voltage: 3.0V
- Environmental condition
 - Operating temperature range: -10°C to +60°C
 - Storage temperature range: -20°C to +60°C
- Connector
 - Rubber (zebra) connector type or pin type
- Viewing angle
 - 6 o'clock
- Polarizer
 - Normal color
 - Reflective type
- LCD
 - TN LCD

OPTION SPECIFICATIONS

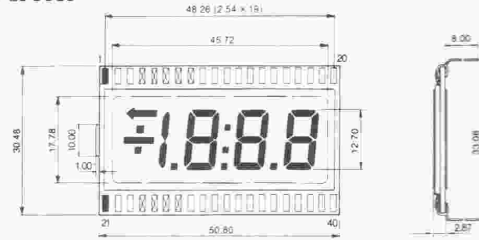
- Environmental condition
 - (Wide temperature range: High reliability type)
 - Operating temperature range: -30°C to +80°C
 - Storage temperature range: -40°C to +85°C
- Viewing angle
 - 12 o'clock
- Polarizer
 - Color: Gold, Red, Blue, Green
 - Type: Transmissive, Transflective

DRAWINGS Unit: mm (typ.)

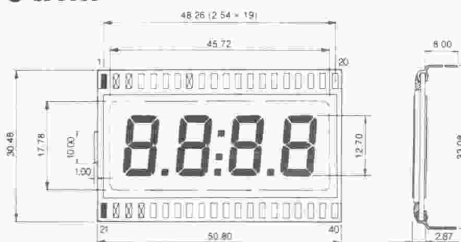
1 SP501P



2 SP503P



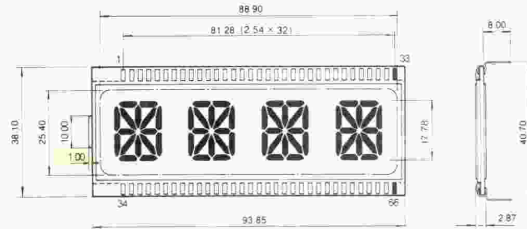
3 SP505P



4 SP511P



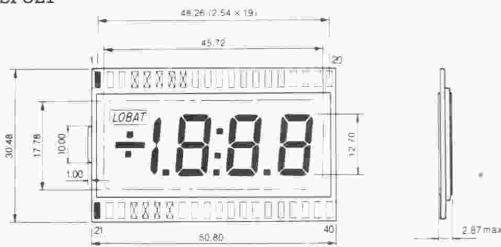
5 SP513P



6 SP516P



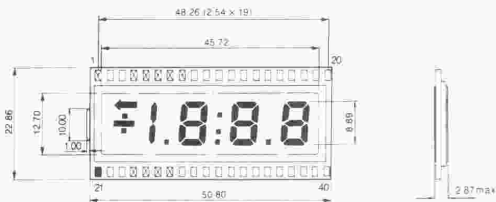
7 SP521



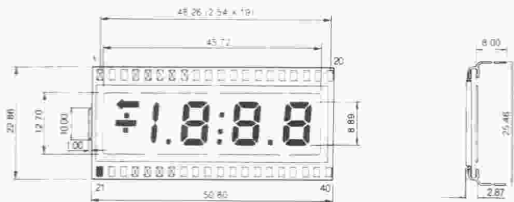
8 SP521P



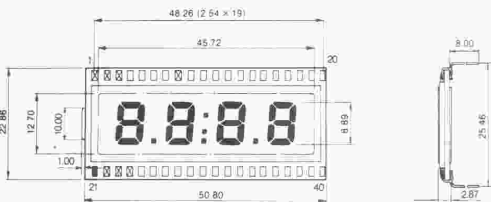
9 SP530



10 SP530P



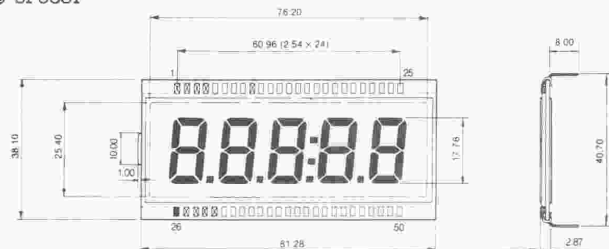
11 SP531P



12 SP532P

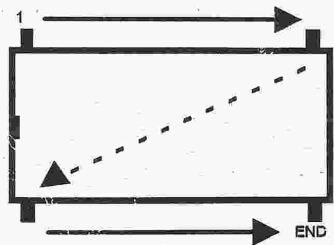


13 SP538P



SEIKO INSTRUMENTS

LIQUID CRYSTAL DISPLAYS - STANDARD PRODUCTS - TERMINALS CONFIGURATION											
PIN NO	SP501P	SP503P	SP505P	SP511P	SP513P	SP516P	SP521P	SP530P	SP531P	SP532P	SP538P
1	BP	BP	BP	1G	1S	NC	BP	NC	NC	6G	NC
2	PLUS	PLUS	NC	1F	1H	PLUS	PLUS	PLUS	NC	6F	NC
3	LOBAT	←	NC	1A	1J	←	LOBAT	←	NC	6A	NC
4	1G	NC	1G	1B	1A	1G	NC	NC	4G	6B	NC
5	1F	NC	1F	2G	1K	1F	NC	NC	4F	5G	5G
6	1A	NC	1A	2F	1B	1A	NC	NC	4A	5F	5F
7	1B	NC	1B	2A	1L	1B	NC	NC	4B	5A	5A
8	COL1	NC	NC	2B	1C	COL1	NC	NC	NC	5B	5B
9	2G	1G	2G	COL1	2S	2G	1G	3G	3G	COL2	NC
10	2F	1F	2F	3G	2H	2F	1F	3F	3F	4G	4G
11	2A	1A	2A	3F	2J	2A	1A	3A	3A	4F	4F
12	2B	1B	2B	3A	2A	2B	1B	3B	3B	4A	4A
13	COL2	COL	COL	3B	2K	COL2	COL	COL	COL	4B	4B
14	3G	2G	3G	4G	2B	3G	2G	2G	2G	3G	3G
15	3F	2F	3F	4F	2L	3F	2F	2F	2F	3F	3F
16	3A	2A	3A	4A	2C	3A	2A	2A	2A	3A	3A
17	3B	2B	3B	4B	3S	3B	2B	2B	2B	3B	3B
18	4G	3G	4G	COL2	3H	4G	3G	1G	1G	COL2	COL
19	4F	3F	4F	5G	3J	4F	3F	1F	1F	2G	2G
20	4A	3A	4A	5F	3A	4A	3A	1A	1A	2F	2F
21	BP	BP	BP	5A	3K	BP	BP	BP	BP	2A	2A
22	MINUS	MINUS	NC	5B	3B	MINUS	MINUS	MINUS	NC	2B	2B
23	K	K	NC	6G	3L	K	K	K	NC	1G	1G
24	1DP	NC	NC	6F	3C	1DP	NC	NC	NC	1F	1F
25	1E	NC	1E	6A	4S	1E	NC	NC	4E	1A	1A
26	1D	NC	1D	BP	4H	1D	NC	NC	4D	BP	BP
27	1C	NC	1C	1E	4J	1C	NC	NC	4C	6E	NC
28	2DP	1DP	1DP	1D	4A	2DP	1DP	3DP	3DP	6D	NC
29	2E	1E	2E	1C	4K	2E	1E	3E	3E	6C	NC
30	2D	1D	2D	1DP	4B	2D	1D	3D	3D	5DP	NC
31	2C	1C	2C	2E	4L	2C	1C	3C	3C	5E	5E
32	3DP	2DP	2DP	2D	4C	3DP	2DP	2DP	2DP	5D	5D
33	3E	2E	3E	2C	BP	3E	2E	2E	2E	5C	5C
34	3D	2D	3D	2DP	1G	3D	2D	2D	2D	4DP	4DP
35	3C	2C	3C	3E	1B	3C	2C	2C	2C	4E	4E
36	4DP	3DP	3DP	3D	1F	4DP	3DP	1DP	1DP	4D	4D
37	4E	3E	4E	3C	1P	4E	3E	1E	1E	4C	4C
38	4D	3D	4D	3DP	1E	4D	3D	1D	1D	3DP	3DP
39	4C	3C	4C	4E	1N	4C	3C	1C	1C	3E	3E
40	4B	3B	4B	4D	1D	4B	3B	1B	1B	3D	3D
41				4C	1M					3C	3C
42				4DP	2G					2DP	2DP
43				5E	2B					2E	2E
44				5D	2F					2D	2D
45				5C	2P					2C	2C
46				5DP	2E					1DP	1DP
47				6E	2N					1E	1E
48				6D	2D					1D	1D
49				6C	2M					1C	1C
50				6B	3G					1B	1B
51					3B						
52					3F						
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59					4B						
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62					4E						
63					4N						
64					4D						
65					4M						
66					BP						



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