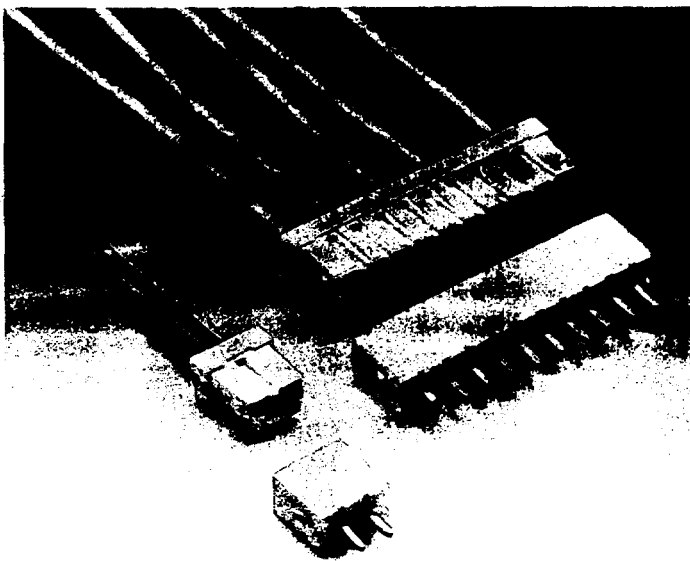


Model 810



Features

- Mounted height from PC board is only 9.5 mm (0.374 in.).
- Fully shrouded plug ensures strong resistance to external force when coupled with the socket, and protects contacts from scattered flux.
- Built-in polarization ensures correct insertion.
- UL94V-0 flame-resistant material.
- Colored housing (white, red, yellow, blue, black) prevents incorrect coupling.
- Lanceless (no lock spring) contacts prevent themselves from deformation in handling.
- Formed terminals of plug allow temporary fixing on the PC board, preventing lifting during soldering process.

Specifications

Temperature range	-55° C to +105° C
Current rating	3A DC
Voltage rating	250 VAC
Contact resistance	10 mΩ max. (6 VDC, 0.3A)
Insulation resistance	1,000 MΩ min. (500 VDC)
Dielectric withstand voltage	500 VAC for 1 min.
Maximum insertion force	4 kg (2-terminal), 24 kg (20-terminal)
Minimum withdrawal force	0.62 kg (2-terminal), 1.7 kg (20-terminal)
Applicable wire	AWG #20 to #28 outer diameter of insulation φ1 mm (0.039 in.) to 1.9 mm (0.075 in.)
Applicable PC board (standard)	1.6 mm (0.063 in.)

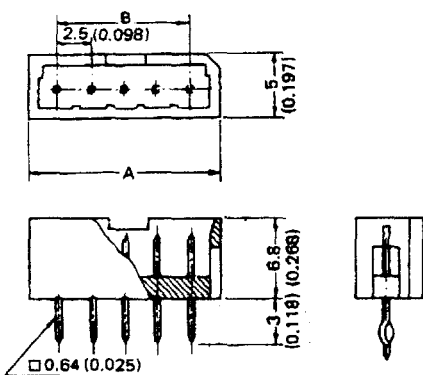
Materials

Contact	Plug: Brass Socket: Phosphor bronze (spring grade)
Insulator	PBT, UL94V-0
Contact plating	Tin

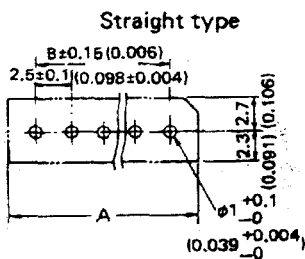
Dimensions

Unit: mm (in.)

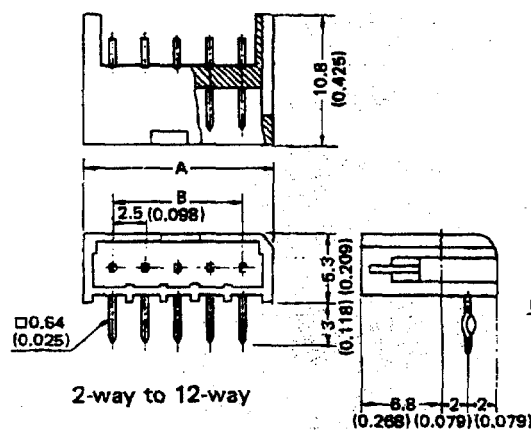
Plug Straight type



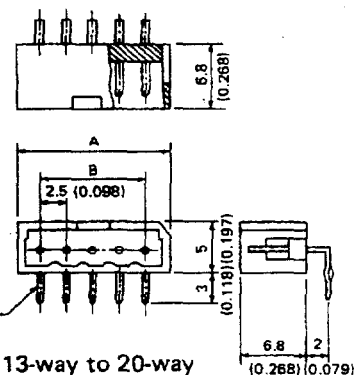
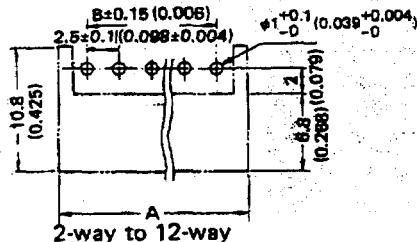
Mounting hole layout Straight type



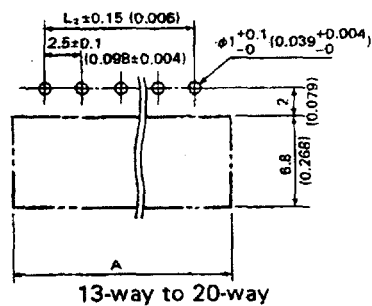
Right-angle type



Right-angle type 2-way to 12-way



13-way to 20-way



CONNECTORS

Designations

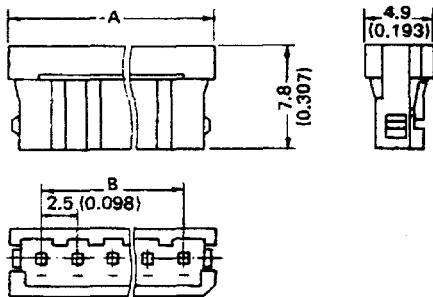
Number of contacts	Plug designations		Dimensions (Unit: mm (in.))	
	Straight type	Right-angle type	A	B
2	FCN-814P002-T□	FCN-815P002-T□	7.1 (0.280)	2.5 (0.098)
3	FCN-814P003-T□	FCN-815P003-T□	9.6 (0.378)	5.0 (0.197)
4	FCN-814P004-T□	FCN-815P004-T□	12.1 (0.476)	7.5 (0.295)
5	FCN-814P005-T□	FCN-815P005-T□	14.6 (0.575)	10.0 (0.394)
6	FCN-814P006-T□	FCN-815P006-T□	17.1 (0.673)	12.5 (0.492)
7	FCN-814P007-T□	FCN-815P007-T□	19.6 (0.772)	15.0 (0.591)
8	FCN-814P008-T□	FCN-815P008-T□	22.1 (0.870)	17.5 (0.689)
→ 9	FCN-814P009-T□	FCN-815P009-T□	24.6 (0.969)	20.0 (0.787)
10	FCN-814P010-T□	FCN-815P010-T□	27.1 (1.067)	22.5 (0.886)
11	FCN-814P011-T□	FCN-815P011-T□	29.6 (1.165)	25.0 (0.984)
12	FCN-814P012-T□	FCN-815P012-T□	32.1 (1.264)	27.5 (1.083)
13	FCN-814P013-T□	FCN-815P013-T□	34.6 (1.362)	30.0 (1.181)
14	FCN-814P014-T□	FCN-815P014-T□	37.1 (1.461)	32.5 (1.280)
15	FCN-814P015-T□	FCN-815P015-T□	39.6 (1.559)	35.0 (1.378)
16	FCN-814P016-T□	FCN-815P016-T□	42.1 (1.657)	37.5 (1.476)
17	FCN-814P017-T□	FCN-815P017-T□	44.6 (1.756)	40.0 (1.575)
18	FCN-814P018-T□	FCN-815P018-T□	47.1 (1.854)	42.5 (1.673)
19	FCN-814P019-T□	FCN-815P019-T□	49.6 (1.953)	45.0 (1.772)
20	FCN-814P020-T□	FCN-815P020-T□	52.1 (2.051)	47.5 (1.870)

Designate A for white; B for blue; R for red; K for black; or Y for yellow in the □. (Standard color is white.)

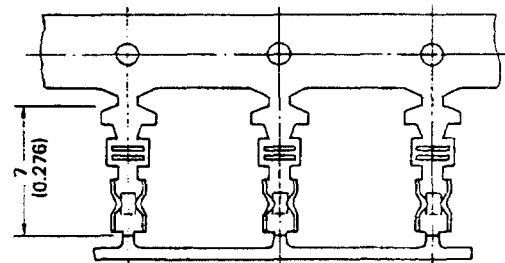
Unit: mm (in.)

Unit: mm (in.)

Socket Housing



Female contact



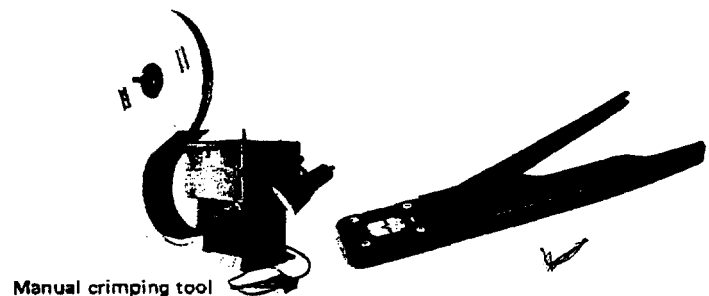
Number of contacts	Housing designation	Dimensions (Unit: mm (in.))	
		A	B
2	FCN-813J002-□	7.1 (0.280)	2.5 (0.098)
3	FCN-813J003-□	9.6 (0.378)	5.0 (0.197)
4	FCN-813J004-□	12.1 (0.476)	7.5 (0.295)
5	FCN-813J005-□	14.6 (0.575)	10.0 (0.394)
6	FCN-813J006-□	17.1 (0.673)	12.5 (0.492)
7	FCN-813J007-□	19.6 (0.772)	15.0 (0.591)
8	FCN-813J008-□	22.1 (0.870)	17.5 (0.689)
9	FCN-813J009-□	24.6 (0.969)	20.0 (0.787)
10	FCN-813J010-□	27.1 (1.067)	22.5 (0.886)
11	FCN-813J011-□	29.6 (1.165)	25.0 (0.984)
12	FCN-813J012-□	32.1 (1.209)	27.5 (1.083)
13	FCN-813J013-□	34.6 (1.362)	30.0 (1.181)
14	FCN-813J014-□	37.1 (1.461)	32.5 (1.280)
15	FCN-813J015-□	39.6 (1.559)	35.0 (1.378)
16	FCN-813J016-□	42.1 (1.657)	37.5 (1.476)
17	FCN-813J017-□	44.6 (1.756)	40.0 (1.575)
18	FCN-813J018-□	47.1 (1.854)	42.5 (1.673)
19	FCN-813J019-□	49.6 (1.953)	45.0 (1.772)
20	FCN-813J020-□	52.1 (2.051)	47.5 (1.870)

Designate A for white; B for blue; R for red; K for black; or Y for yellow in the □.

	AWG20-22	AWG24-28
Strip form	FCN-813J-T/T	FCN-813J-T/R
Loose piece	FCN-813J-T/S	→ FCN-813J-T/Q

Crimping Tools

Hand crimping tool	FCN-813T-T013/H	AWG (24 ~ 28)
	FCN-813T-T012/H	AWG (20 ~ 22)
Automatic crimping machine	Press	FCN-M100
	Applicator	FCN-A113 AWG (24~28) FCN-A112 AWG (20~22)



Manual crimping tool

Automatic crimping machine (Press and applicator)