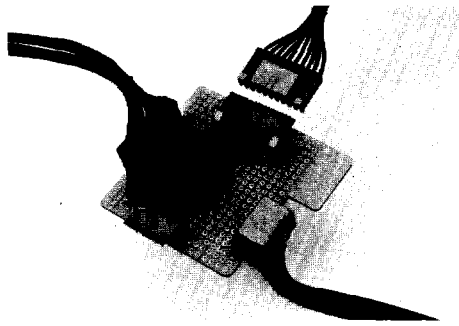


● 2.5 mm Pitch

Original

# IL Series



The original version among the IL Series connectors of 2.5 mm contact spacings. The connectors are designed to have friction locking mechanism, yet maintaining smooth mating/unmating. The "double-lock" design on the pin header and the socket housing functions as mating guide to avoid mismatching and as support means to prevent the socket connector from inclining.

Pin headers (soldered to P.C. board) and mating socket (having crimp, snap-in contacts) are usable for interconnection between P.C. board and cables. The pin headers, combined with Dip sockets (IL Series Type D), are usable for direct interconnection between P.C. boards. Pin headers are available in 3 types: straight, right-angle and bottom-entry type (which mates with socket from back side of P.C. board.)

● **Materials & Finish**

Insulator . . . . Nylon 66 (standard color: light brown), UL 94V-0.

Post . . . . Brass/Gold plating or tin plating.

Socket contact . . . . Phosphor bronze/ Selective gold plating or tin plating.

● **Specifications (for details, see page 15)**

Current Rating . . . . 3 A

Dielectric Withstanding Voltage . . . . AC1, 500 Vr.m.s.

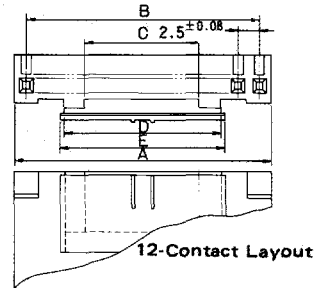
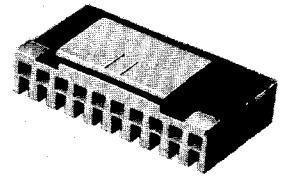
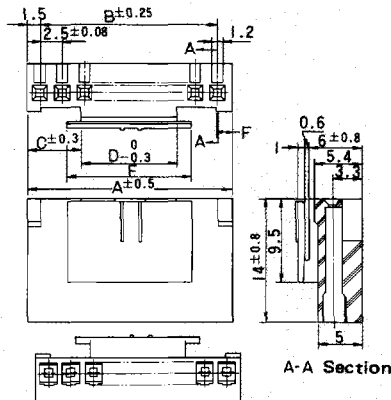
Insulation Resistance . . 100 megohms min.

Contact Resistance . . 20 milliohms max.

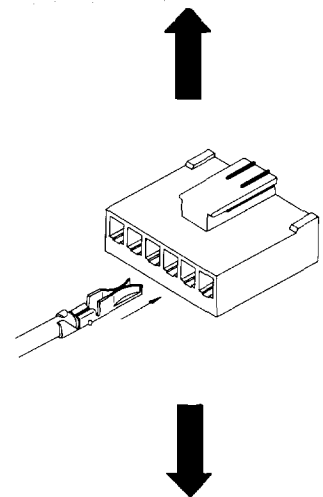
Operating Temperature Range . . . . -40°C to +85°C

● **Socket Housing**

## IL- \*\* S-S3L-(N)



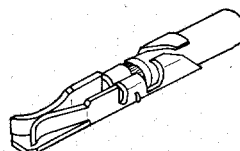
No. of Contacts	Part No.	A±0.5	B±0.25	C±0.3	D±0.3	E±0.5	F	Contact No. markings
2	IL-2S-S3L-(N)	5.5	2.5	2.1	1.4	2.4	1	1
3	IL-3S-S3L-(N)	8	5	3.1	1.9	2.9	1	1
4	IL-4S-S3L-(N)	10.5	7.5	4.1	2.4	3.4	1	1
5	IL-5S-S3L-(N)	13	10	5.1	2.9	3.9	1	1,5
6	IL-6S-S3L-(N)	15.5	12.5	6.1	3.4	4.4	1	1,5,6
7	IL-7S-S3L-(N)	18	15	6.1	5.9	6.9	1	1,5,6
8	IL-8S-S3L-(N)	20.5	17.5	6.1	8.4	9.4	1.5	1,5,6,8
9	IL-9S-S3L-(N)	23	20	6.1	10.9	11.9	1.5	1,5,6,8
10	IL-10S-S3L-(N)	25.5	22.5	6.1	13.4	14.4	3	1,5,6,8,10
12	IL-12S-S3L-(N)	30.5	27.5	13.5	18.4	19.4	3	1,5,6,8,10,12



● **Socket Contacts (crimp type)**

**IL-C2-5000** (tin plate)

**IL-C2-1-5000** (selective gold plate over nickel)



For details, see Page 16.

● **Applicable wire:**

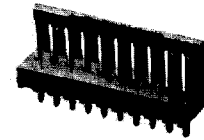
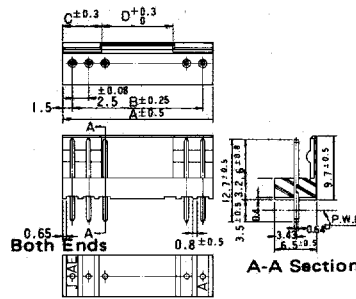
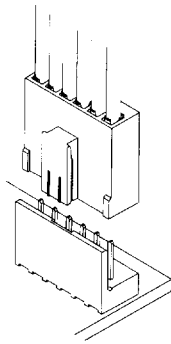
AWG #28 ~ #22, stranded wire  
Wire conductor cross-sectional area . . . 0.08 mm<sup>2</sup> to 0.32 mm<sup>2</sup>  
Overall dia. including insulation . . . 1.0 mm to 1.7 mm

● **Applicable semi-automatic crimping machine:** CT350-2B-IL

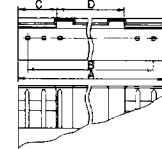
● **Applicable hand crimping tool:**  
JCT-IL-No. 1 (AWG #28 ~ #22)  
JCT-IL-No. 2 (AWG # 22 ~ #20)

• Straight Pin Header

IL- ※※ P-S3EN2

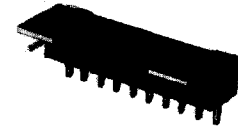
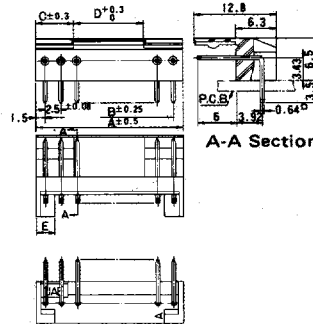
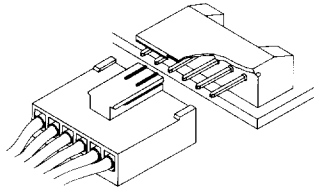


11-&12-Contact Layouts

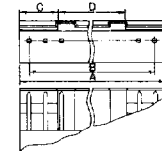


• Right-angle Pin Header

IL- ※※ P-S3FP2

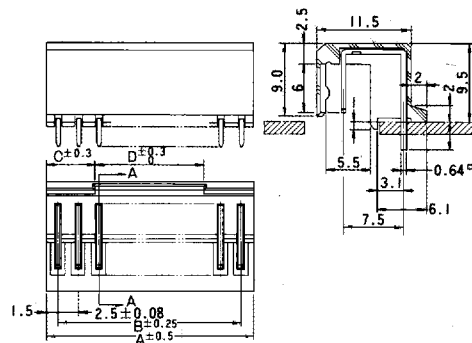
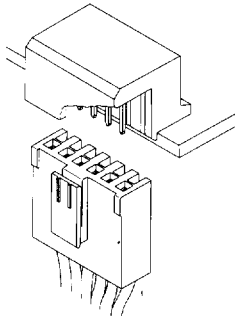


12-Contact Layout

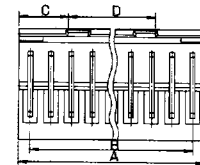


• Bottom-entry type Pin Header

IL- ※※ P-S3UX2

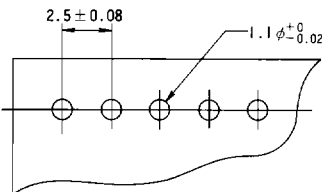


11-&12-Contact Layouts



• PC Board Mounting Dimensions

Applicable PC board thickness  
..... 1.6 ~ 2.4 mm



No. of Contacts	Part No.					Dimension				
	Straight Pin Header		Right-angle Pin Header		Bottom-entry type	A	B	C	D	E
	Tin plate	Gold plate	Tin plate	Gold plate	Tin plate					
2	IL-2P-S3EN2	IL-2P-S3EN2-1	IL-2P-S3FP2	IL-2P-S3FP2-1	IL-2P-S3UX2	±0.5	±0.25	±0.3	±0.3	1.7
3	IL-3P-S3EN2	IL-3P-S3EN2-1	IL-3P-S3FP2	IL-3P-S3FP2-1	IL-3P-S3UX2	5.5	2.5	2	1.5	3
4	IL-4P-S3EN2	IL-4P-S3EN2-1	IL-4P-S3FP2	IL-4P-S3FP2-1	IL-4P-S3UX2	8	5	3	2	3
5	IL-5P-S3EN2-(N)	IL-5P-S3EN2-1	IL-5P-S3FP2-(N)	IL-5P-S3FP2-1	IL-5P-S3UX2	10.5	7.5	4	2.5	3
6	IL-6P-S3EN2	IL-6P-S3EN2-1	IL-6P-S3FP2	IL-6P-S3FP2-1	IL-6P-S3UX2	13	10	5	3	3
7	IL-7P-S3EN2	IL-7P-S3EN2-1	IL-7P-S3FP2	IL-7P-S3FP2-1	IL-7P-S3UX2	15.5	12.5	6	3.5	3
8	IL-8P-S3EN2	IL-8P-S3EN2-1	IL-8P-S3FP2	IL-8P-S3FP2-1	IL-8P-S3UX2	18	15	6	6	3
9	IL-9P-S3EN2	IL-9P-S3EN2-1	IL-9P-S3FP2	IL-9P-S3FP2-1	IL-9P-S3UX2	20.5	17.5	6	8.5	3
10	IL-10P-S3EN2	IL-10P-S3EN2-1	IL-10P-S3FP2	IL-10P-S3FP2-1	IL-10P-S3UX2	23	20	6	11	3
11	IL-11P-S3EN2	IL-11P-S3EN2-1	-	-	IL-11P-S3UX2	25.5	22.5	6	13.5	3
12	IL-12P-S3EN2	IL-12P-S3EN2-1	IL-12P-S3FP2	IL-12P-S3FP2-1	IL-12P-S3UX2	28	25	6	16	3
						30.5	27.5	6	18.5	3