

8903N-FS SERIES

1.27mm PITCH LOW PROFILE CONNECTOR / FLEXIBLE STRAIGHT TYPE



FEATURES

- ▶ Standard stacked heights are 20, 22, 24, 26, and 30mm(0.787", 0.866", 0.945", 1.024", 1.102", 1.181").
- ▶ Other stacked heights from 20mm (0.787") to 32mm(1.260") are available.
- ▶ 8903N-FS series will mate with 8913/8930E/8931E series.
- ▶ Highly reliable contact design with independent and synchronized spring.
- ▶ Low insertion force and withdrawal force.
- ▶ Insulator protects the contacts from damage or breakage.
- ▶ Wide variations in the number of contacts (40, 50, 60, 68, 80, and 100 pins) are offered.
- ▶ Audible "click" assures users of complete mating.

ORDER CODE

8903N - **FS** - - **F**

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

- ① **[Type]** 8903N : Receptacle
- ② **[Number of contacts]** 040 : 40pin 050 : 50pin 060 : 60pin 068 : 68pin 080 : 80pin 100 : 100pin
- ③ **[Contact tail style]** FS : Flexible Straight
- ④ **[Plating of contact area]** Omit : Au 0.05 μ m (Standard) D : Au 0.25 μ m (Upon request)
- ⑤ **[Stacked height]** T : 20mm(0.787") U : 22mm(0.866") V : 24mm(0.945") W : 26mm(1.024") Y : 28mm(1.102") Z : 30mm(1.181")
- ⑥ **[RoHS]** F : RoHS Compliant

If you would like semi-customized products, please contact your local KEL sales office.

SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material	Glass-filled PBT (UL94V-0),Brown	Current rating	0.5A per contact
Contact material	Copper alloy	Contact resistance	40mΩ max.
Contact plating	(Contact area) Gold over Nickel (Terminal area) Tin copper over Nickel	Dielectric withstanding voltage	650V AC for 1 minute
Retention clip material	Copper alloy	Insulation resistance	1,000MΩ min. at 500V DC
Retention clip plating	Tin copper over Nickel	Operating temperature	-55°C to +85°C

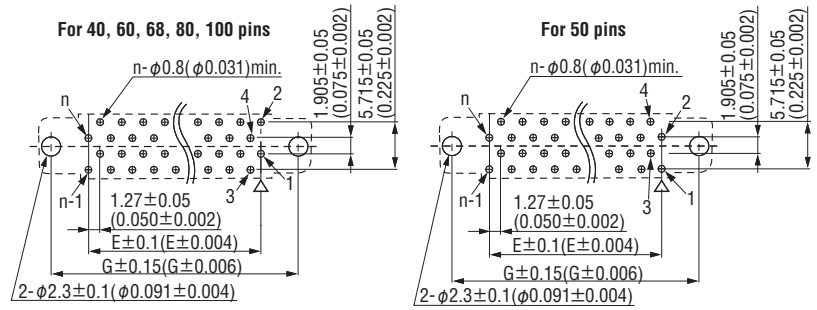
8903N-FS Series Stacked Mating Matrix

Order Code	8903N- FS- -T-F	8903N- FS- -U-F	8903N- FS- -V-F	8903N- FS- -W-F	8903N- FS- -Y-F	8903N- FS- -Z-F
8913- -178S -A-F	20 (0.787)	22 (0.866)	24(0.945)	26(1.024)	28(1.102)	30(1.181)
8913- -178S -C-F	22 (0.866)	24(0.945)	26(1.024)	28(1.102)	30(1.181)	32(1.260)
8913- -178MS -A-F	20 (0.787)	22 (0.866)	24(0.945)	26(1.024)	28(1.102)	30(1.181)
8930E- -178MS-F	20.1 (0.791)	22.1 (0.870)	24.1(0.949)	26.1(1.028)	28.1(1.106)	30.1(1.185)
8931E- -178S-F	20 (0.787)	22 (0.866)	24(0.945)	26(1.024)	28(1.102)	30(1.181)

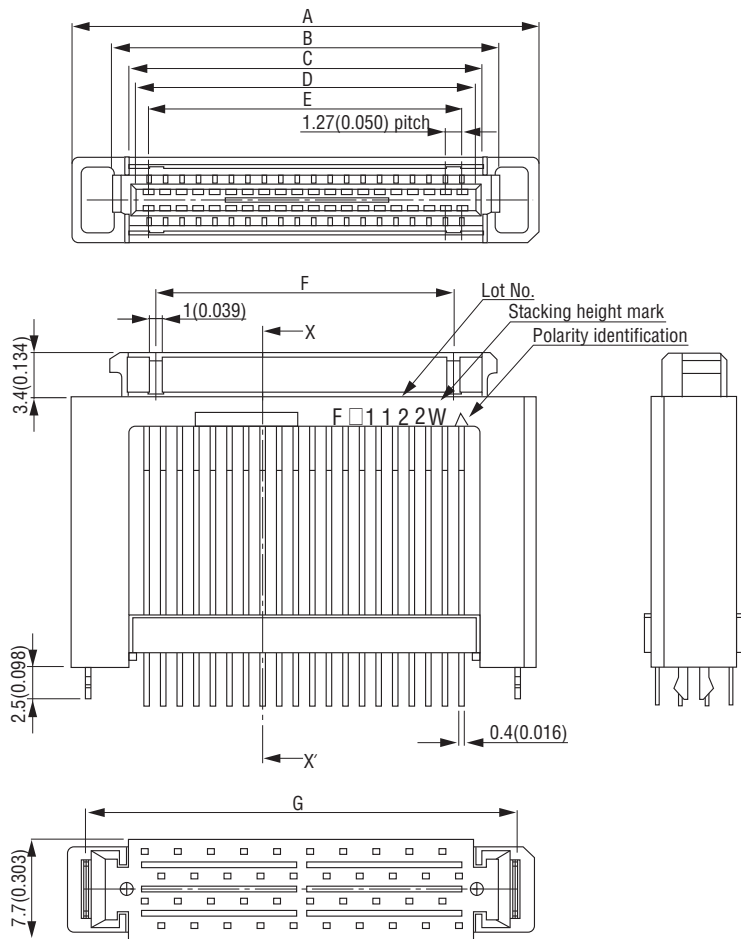
8903N-□□□FS□-□-F (Receptacle, Flexible straight)

Unit : mm(inch)

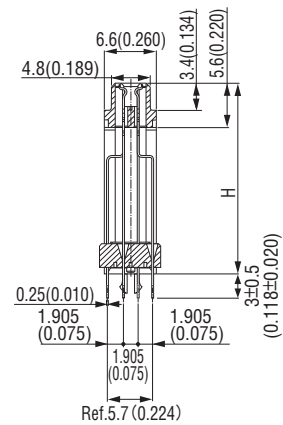
Printed Circuit Board Layout (Component Side View)



Recommended PCB Thickness $t=1.6^{+0.2}_{-0.1}$ (0.063^{+0.008}_{-0.004}) ▽=Polarity identification
"n" is number of contacts.



X-X' Cross Section



Product Table / Connector Height

Part Number	Stacked height	H
8903N-□□□FS□-T-F	20 (0.787)	18.4 (0.724)
8903N-□□□FS□-U-F	22 (0.866)	20.4 (0.803)
8903N-□□□FS□-V-F	24 (0.945)	22.4 (0.882)
8903N-□□□FS□-W-F	26 (1.024)	24.4 (0.961)
8903N-□□□FS□-Y-F	28 (1.102)	26.4 (1.039)
8903N-□□□FS□-Z-F	30 (1.181)	28.4 (1.118)

Packaging style

Pipe

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
40	8903N-040FS□-□-F	35.90 (1.413)	29.73 (1.170)	27.23 (1.072)	26.13 (1.029)	24.13 (0.950)	22.86 (0.900)	33.02 (1.300)	13
50	8903N-050FS□-□-F	42.25 (1.663)	36.08 (1.420)	33.58 (1.322)	32.48 (1.279)	30.48 (1.200)	29.21 (1.150)	39.37 (1.550)	11
60	8903N-060FS□-□-F	48.60 (1.913)	42.43 (1.670)	39.93 (1.572)	38.83 (1.529)	36.83 (1.450)	35.56 (1.400)	45.72 (1.800)	10
68	8903N-068FS□-□-F	53.68 (2.113)	47.51 (1.870)	45.01 (1.772)	43.91 (1.729)	41.91 (1.650)	40.64 (1.600)	50.80 (2.000)	9
80	8903N-080FS□-□-F	61.30 (2.413)	55.13 (2.170)	52.63 (2.072)	51.53 (2.029)	49.53 (1.950)	48.26 (1.900)	58.42 (2.300)	8
100	8903N-100FS□-□-F	74.00 (2.913)	67.83 (2.670)	65.33 (2.572)	64.23 (2.529)	62.23 (2.450)	60.96 (2.400)	71.12 (2.800)	6