

8903N-FS SERIES

1.27mm PITCH LOW PROFILE CONNECTOR / FLEXIBLE STRAIGHT TYPE

RoHS
Compliant

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**

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*Please order in multiples of the quantity per package.

① **[Type]** 8903N : Receptacle② **[Number of contacts]** 040 : 40pin 050 : 50pin 060 : 60pin 068 : 68pin 080 : 80pin 100 : 100pin③ **[Contact tail style]** FS : Flexible Straight④ **[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	40m Ω 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	1,000M Ω min. at 500V DC
Retention clip plating	Tin copper over Nickel	Operating temperature	-55°C to +85°C

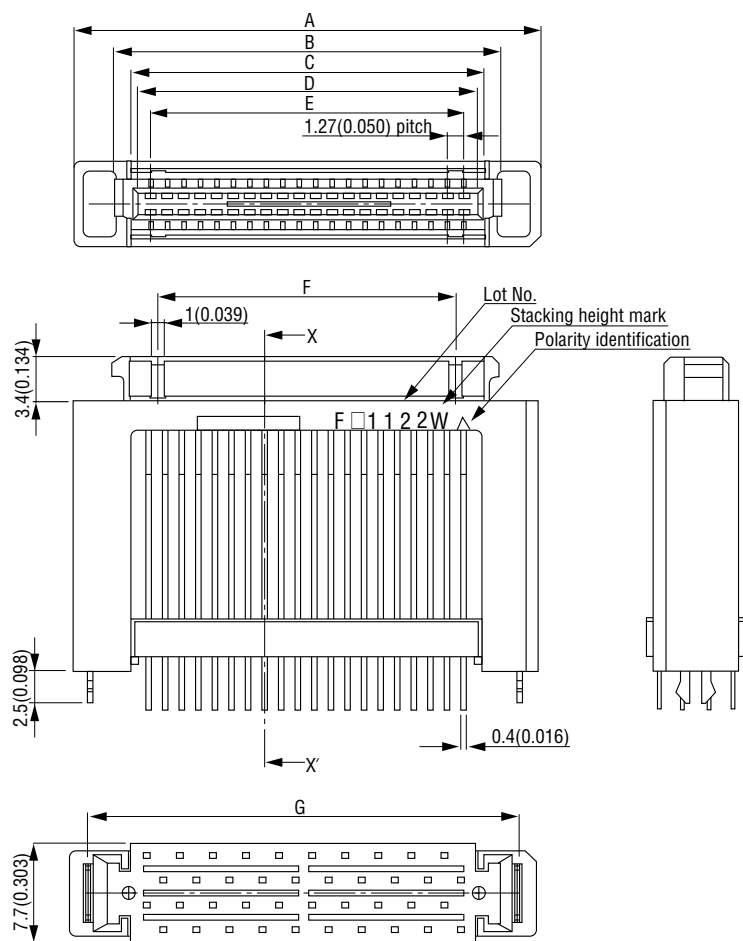
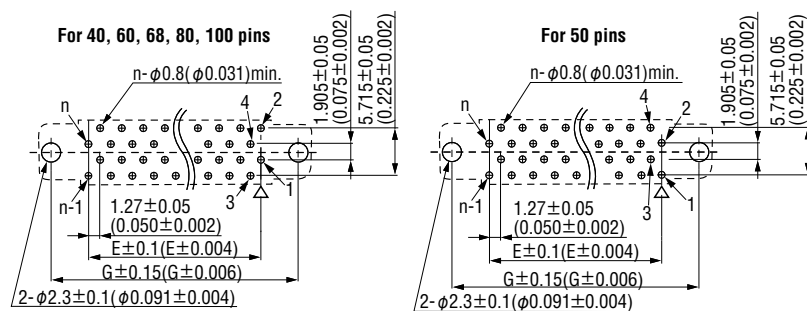
8903N-FS Series Stacked Mating Matrix

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)

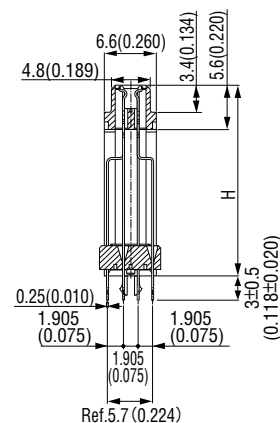
8903N-□□□FS□-□-F (Receptacle, Flexible straight)

Unit : mm(inch)

► Printed Circuit Board Layout (Component Side View)



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