

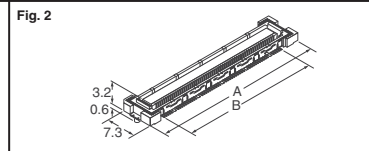
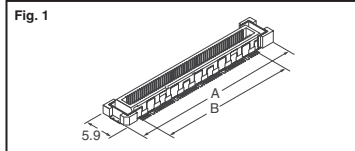


FX10A Series - Surface Mount

0.5mm Conn. with Ground Plate for Board-to-Board Connections

Features:

Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle. Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to high-density applications. The signal contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting. Board-to-Board dimensions of 4mm and 5mm are available.



Materials: • Insulator: LCP resin, Beige, UL94V-0 • Contacts: Phosphor bronze • Header Engagement Area: Gold plating of 0.1µm • Termination Area: Solder plating • Receptacle Engagement Area: Gold plating of 0.1µm • Termination Area: Flash plating Ground plate: Phosphor bronze, solder plating • Reinforced fitting: Phosphor bronze, Tin plating
Electrical: • Rated current: 0.3A • Operating temperature range: -55 ~ 85°C • Rated voltage: 50VAC • Operating humidity range: Relative humidity 95% or less (No condensation)
Note: The thickness of the solder paste is not included in the stack height.



Fig.	Mounting Height	No. of Contacts Signal	No. of Contacts Ground	Dimensions (mm)		Digi-Key Part No.	Price Each			Hirose Part No.	Digi-Key Part No.	T&R Pricing 1,000	Hirose Part No.		
				A	B			1	25	100					
Headers															
With Guideposts															
1	4mm	80	8	31.1	23.5	H11240-ND	4.15	3.22	2.58	FX10A-80P/8-SV(71)	H11240TR-ND	1727.15	FX10A-80P/8-SV(91)		
		100	10	37.1	29.5	H2477-ND	4.72	3.66	2.93	FX10A-100P/10-SV	—	—	FX10A-100P/10-SV(21)		
		100	10	37.1	29.5	H11241-ND	4.63	3.60	2.88	FX10A-100P/10-SV(71)	H11241TR-ND	1925.35	FX10A-100P/10-SV(91)		
		120	12	43.1	35.5	H11242-ND	5.03	3.91	3.13	FX10A-120P/12-SV(71)	H11243TR-ND	2095.24	FX10A-120P/12-SV(91)		
		140	14	49.1	41.5	H11244-ND	4.97	4.01	3.16	FX10A-140P/14-SV(71)	H11244TR-ND	2302.87	FX10A-140P/14-SV(91)		
		5mm	80	8	31.1	23.5	H11245-ND	4.15	3.22	2.58	FX10A-80P/8-SV1(71)	H11245TR-ND	1717.72	FX10A-80P/8-SV1(91)	
	100		10	37.1	29.5	H11246-ND	4.59	3.57	2.85	FX10A-100P/10-SV1(71)	H11246TR-ND	1906.48	FX10A-100P/10-SV1(91)		
	120		12	43.1	35.5	H2486-ND	4.68	3.63	2.91	FX10A-120P/12-SV1	—	—	—		
	120		12	43.1	35.5	H11247-ND	5.01	3.89	3.12	FX10A-120P/12-SV1(71)	H11247TR-ND	2085.80	FX10A-120P/12-SV1(91)		
	140		14	49.1	41.5	H2487-ND	5.12	3.97	3.18	FX10A-140P/14-SV1	—	—	FX10A-140P/14-SV1(21)		
	140		14	49.1	41.5	H11248-ND	4.93	3.98	3.13	FX10A-140P/14-SV1(71)	H11248TR-ND	2284.00	FX10A-140P/14-SV1(91)		
	Without Guideposts — RoHS Compliant														
	1		4mm	80	8	31.1	23.5	H2480-ND	3.86	2.99	2.40	FX10B-80P/8-SV	—	—	—
		80		8	31.1	23.5	H11249-ND	4.15	3.22	2.58	FX10B-80P/SV(71)	H11249TR-ND	1727.15	FX10B-80P/8-SV(91)	
100		10		37.1	29.5	H11225-ND	4.63	3.60	2.88	FX10B-100P/10-SV(71)	H11225TR-ND	1925.35	FX10B-100P/10-SV(91)		
120		12		43.1	35.5	H11226-ND	5.03	3.91	3.13	FX10B-120P/12-SV(71)	H11226TR-ND	2095.24	FX10B-120P/12-SV(91)		
140		14		49.1	41.5	H11227-ND	4.97	4.01	3.16	FX10B-140P/14-SV(71)	H11227TR-ND	2302.87	FX10B-140P/14-SV(91)		
5mm		80		8	31.1	23.5	H11228-ND	4.15	3.22	2.58	FX10B-80P/8-SV1(71)	H11228TR-ND	1717.72	FX10B-80P/8-SV1(91)	
		100	10	37.1	29.5	H11229-ND	4.59	3.57	2.85	FX10B-100P/8-SV1(71)	H11229TR-ND	1906.48	FX10B-100P/10-SV1(91)		
		120	12	43.1	35.5	H11230-ND	5.01	3.89	3.12	FX10B-120P/12-SV1(71)	H11230TR-ND	2085.80	FX10B-120P/12-SV1(91)		
		140	14	49.1	41.5	H11231-ND	4.93	3.98	3.13	FX10B-140P/14-SV1(71)	H11231TR-ND	2284.00	FX10B-140P/14-SV1(91)		
		Receptacles — RoHS Compliant													
		With Guideposts													
		2	—	80	8	31.1	23.5	H11232-ND	4.19	3.26	2.61	FX10A-80S/8-SV(71)	H11232TR-ND	1746.03	FX10A-80S/8-SV(91)
				100	10	37.1	29.5	H11233-ND	4.70	3.65	2.92	FX10A-100S/10-SV(71)	H11233TR-ND	1944.23	FX10A-100S/10-SV(91)
120				12	43.1	35.5	H11234-ND	5.24	4.07	3.26	FX10A-120S/12-SV(71)	H11234TR-ND	2180.18	FX10A-120S/12-SV(91)	
140	14			49.1	41.5	H11235-ND	5.21	4.21	3.31	FX10A-140S/14-SV(71)	H11235TR-ND	2360.23	FX10A-140S/14-SV(91)		
Without Guideposts															
2	—	80	8	31.1	23.5	H11236-ND	4.19	3.26	2.61	FX10B-80S/8-SV(71)	H11236TR-ND	1746.03	FX10B-80S/8-SV(91)		
		100	10	37.1	29.5	H11237-ND	4.70	3.65	2.92	FX10B-100S/10-SV(71)	H11237TR-ND	1944.23	FX10B-100S/10-SV(91)		
		120	12	43.1	35.5	H11238-ND	5.24	4.07	3.26	FX10B-120S/12-SV(71)	H11238TR-ND	2180.18	FX10B-120S/12-SV(91)		
		140	14	49.1	41.5	H11239-ND	5.21	4.21	3.31	FX10B-140S/14-SV(71)	H11239TR-ND	2360.23	FX10B-140S/14-SV(91)		

• RoHS Compliant

FX11L Series - Surface Mount - 0.5mm Connectors with Ground Plate for 2mm Board-to-Board Connections



Features: Low Profile Design. The board-to-board mating height of 2mm suits smaller, thinner case designs. Improved transmission efficiency between boards. Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle. Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to High-Density Applications. The signal contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting.

Applications: Notebook computers, PDA, and other miniature electronic equipment.

Material: • Insulator: LCP resin, Beige, UL94V-0 • Contacts: Copper alloy • Header: Phosphor bronze • Receptacle: Engagement area: Gold plating of 0.1 µm Termination Area: Flash plating Ground plate: Phosphor bronze solder plating • Reinforced fitting/plate: Phosphor bronze, Tin plating

Electrical: • Rated current: 0.3 A • Operating temperature range: -55 ~ 80°C • Rated voltage: 50VAC • Operating humidity range: Relative humidity 95% or less (No condensation)

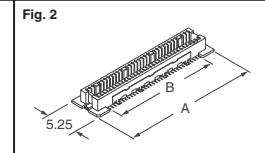
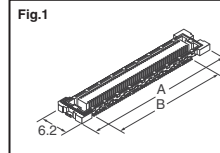


Fig.	No. of Contacts Signal	No. of Contacts Ground	Dim. (mm)		Digi-Key Part No.	Price Each			Hirose Part No.	
				A	B			1	25	100
Receptacles										
With Ground Plate and Guideposts										
1	60	6	25	17.5	H10776-ND	3.51	2.73	2.19	FX11LA-60S/6-SV(71)	
	80	8	31	23.5	H10777-ND	3.90	3.03	2.42	FX11LA-80S/8-SV(71)	
	100	10	37	29.5	H10778-ND	4.28	3.32	2.66	FX11LB-100S/10-SV(71)	
	120	12	43	35.5	H10779-ND	4.65	3.61	2.89	FL11LA-120S/12-SV(71)	
With Ground Plate, Without Guideposts										
1	60	6	25	17.5	H10780-ND	3.51	2.73	2.19	FX11LB-60S/6-SV(71)	
	80	8	31	23.5	H10781-ND	3.90	3.03	2.42	FX11LB-80S/8-SV(71)	
	100	10	37	29.5	H10782-ND	4.28	3.32	2.66	FX11LB-100S/10-SV(71)	
	120	12	43	35.5	H10783-ND	4.65	3.61	2.89	FX11LB-120S/12-SV(71)	
Without Ground Plate, With Guideposts										
1	68	—	25	16.5	H2541-ND	3.09	2.41	1.93	FX11LA-68S-SV	
	92	—	31	22.5	H2542-ND	3.54	2.75	2.20	FX11LA-92S-SV	
	116	—	37	28.5	H2543-ND	3.91	3.04	2.44	FX11LA-116S-SV	
	140	—	43	34.5	H2544-ND	4.30	3.34	2.67	FX11LA-140S-SV	
Without Ground Plate and Guideposts										
1	68	—	25	16.5	H2545-ND	3.09	2.41	1.93	FX11LB-68S-SV	
	92	—	31	22.5	H2546-ND	3.46	2.68	2.15	FX11LB-92S-SV	
	116	—	37	28.5	H2547-ND	3.86	2.99	2.40	FX11LB-116S-SV	
	140	—	43	34.5	H2548-ND	4.30	3.34	2.67	FX11LB-140S-SV	

Fig.	No. of Contacts Signal	No. of Contacts Ground	Dim. (mm)		Digi-Key Part No.	Price Each			Hirose Part No.	
				A	B			1	25	100
Headers										
With Ground Plate and Guideposts										
2	60	6	22.6	17.5	H10768-ND	3.39	2.63	2.11	FX11LA-60P/6-SV(71)	
	80	8	28.6	23.5	H10769-ND	3.77	2.93	2.34	FX11LA-80P/8-SV(71)	
	100	10	34.6	29.5	H10770-ND	4.12	3.21	2.57	FX11LA-100P/10-SV(71)	
	120	12	40.6	35.5	H10771-ND	4.51	3.50	2.80	FX11LA-120P/12-SV(71)	
With Ground Plate, Without Guideposts										
2	60	6	22.6	17.5	H10772-ND	3.39	2.63	2.11	FX11LB-60P/6-SV(71)	
	80	8	28.6	23.5	H10773-ND	3.77	2.93	2.34	FX11LB-80P/8-SV(71)	
	100	10	34.6	29.5	H10774-ND	4.12	3.21	2.57	FX11LB-100P/10-SV(71)	
	120	12	40.6	35.5	H10775-ND	4.51	3.50	2.80	FX11LB-120P/12-SV(71)	
Without Ground Plate, With Guideposts										
2	68	—	22.6	16.5	H2533-ND	2.61	2.03	1.63	FX11LA-68P-SV	
	92	—	28.6	22.5	H2534-ND	3.01	2.34	1.87	FX11LA-92P-SV	
	116	—	34.6	28.5	H2535-ND	3.22	2.50	2.00	FX11LA-116P-SV	
	140	—	40.6	34.5	H2536-ND	3.62	2.81	2.25	FX11LA-140P-SV	
Without Ground Plate and Guideposts										
2	68	—	22.6	16.5	H2537-ND	2.61	2.03	1.63	FX11LB-68P-SV	
	92	—	28.6	22.5	H2538-ND	3.01	2.34	1.87	FX11LB-92P-SV	
	116	—	34.6	28.5	H2539-ND	3.22	2.50	2.00	FX11LB-116P-SV	
	140	—	40.6	34.5	H2540-ND	3.62	2.81	2.25	FX11LB-140P-SV	

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