



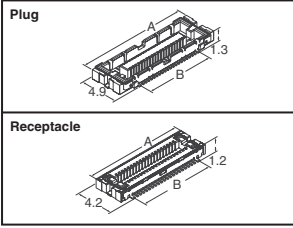
## FX12 Connectors with Dual Shields - 0.4mm Pitch



A

**Specifications:**

- Current Rating:** 0.3A
  - Voltage Rating:** 30VAC
  - Operating Temperature:** -55°C ~ 85°C
  - Insulation Resistance:** 50MΩ @ 100VDC
  - Withstanding Voltage:** No flashover or insulation breakdown @ 100VAC one minute
  - Contact Resistance:** 100mΩ Maximum @ 100mA
- Materials:**
- Insulator:** Polyamide, Black Finish, UL94V-0
  - Contacts:** Phosphor Bronze, Gold Plated Finish
  - Ground Plates:** Phosphor Bronze, Gold Plated
  - Metal Fittings:** Phosphor Bronze, Tin-Copper plated



No. of Contacts	Dimensions (mm)		Digi-Key Part No.	Cut Tape Price Each			T & R ▲ Pricing 3,000	Hirose Part No.
	A	B		1	10	50		
<b>Plugs</b>								
24	10.6	4.4	H11405CT-ND	1.38	1.13	.91	472.53/M	FX12B-24P-0.4SV
40	13.8	7.6	H11407CT-ND	1.42	1.19	.99	558.45/M	FX12B-40P-0.4SV
60	17.79	11.6	H11409CT-ND	1.93	1.61	1.34	758.36/M	FX12B-60P-0.4SV
<b>Receptacles</b>								
24	8.1	4.4	H11406CT-ND	1.38	1.13	.91	472.53/M	FX12B-24S-0.4SV
40	11.3	7.6	H11408CT-ND	1.42	1.19	.99	558.45/M	FX12B-40S-0.4SV
60	15.34	11.6	H11410CT-ND	1.85	1.54	1.29	726.97/M	FX12B-60S-0.4SV

▲ For Tape and Reel part number, change CT-ND to TR-ND.

## DF12 Surface Mount Connectors - 0.5mm Pitch



**Features:**

- Connectors furnished with reinforcement fittings to prevent peeling of the solder joints (due to mechanical stress) are also available and these can be mounted to FPC with confidence
- A specification with convenient guide posts for manual work is available as well as one without guide posts for automatic mounting

**Specifications:**

- Current Capacity: 0.3A • Rated Voltage: 50VAC
- Insulation Resistance: 100VDC, 500MΩ minimum • Withstand Voltage: 1 minute at rated value, 150VAC • Contact Resistance: 100mA, 50mΩ maximum

**Material (receptacle/header):**

- Insulation: Polyamide, beige (natural), UL94V-0
- Contacts: Phosphor copper with gold plating
- Fittings: Brass finish with tin-lead plating

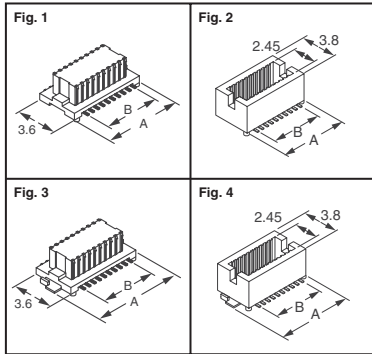


Fig.	No. of Contacts	Description	Dimension (mm)		Digi-Key Part No.	Cut Tape Price Each			T & R ▲ Pricing 1,000	Hirose Part No.
			A	B		1	25	100		
<b>Receptacles</b>										
<b>3.0mm Stacking Height - RoHS Compliant</b>										
1	10	With Guide Posts	4.6	2.0	H11712CT-ND	.66	.48	.40	230.48	DF12A(3.0)-10DS-0.5V(81)
	14		5.6	3.0	H11713CT-ND	.72	.53	.43	252.79	DF12A(3.0)-14DS-0.5V(81)
	20		7.1	4.5	H11714CT-ND	1.35	.98	.80	472.53	DF12A(3.0)-20DS-0.5V(81)
	30		9.6	7.0	H11754CT-ND	1.53	1.18	.95	626.18	DF12A(3.0)-30DS-0.5V(81)
	32		10.1	7.5	H5202CT-ND	1.64	1.26	1.01	669.97	DF12A(3.0)-32DS-0.5V(81)
	36		11.1	8.5	H11715CT-ND	1.78	1.37	1.10	725.32	DF12A(3.0)-36DS-0.5V(81)
	40		12.1	9.5	H11757CT-ND	1.93	1.49	1.19	791.40	DF12A(3.0)-40DS-0.5V(81)
	50		14.6	12.0	H5203CT-ND	2.31	1.78	1.43	945.06	DF12A(3.0)-50DS-0.5V(81)
3	32	With Reinforced Fittings	17.1	14.5	H5204CT-ND	2.40	1.86	1.49	1073.93	DF12A(3.0)-60DS-0.5V(81)
	40		22.1	19.5	H11716CT-ND	2.60	2.01	1.61	1065.67	DF12A(3.0)-80DS-0.5V(81)
	10		5.5	2.0	H11719CT-ND	.72	.53	.43	252.79	DF12B(3.0)-10DS-0.5V(86)
	20		8.0	4.5	H11721CT-ND	.91	.66	.54	318.87	DF12B(3.0)-20DS-0.5V(86)
	32		11.0	7.5	H11724CT-ND	1.26	.91	.75	439.49	DF12B(3.0)-32DS-0.5V(86)
	40		13.0	9.5	H11756CT-ND	1.45	1.05	.86	505.57	DF12B(3.0)-40DS-0.5V(86)
	60		18.0	14.5	H11760CT-ND	1.74	1.35	1.08	714.58	DF12B(3.0)-60DS-0.5V(86)
	<b>3.0mm Stacking Height</b>									
3	10	With Guide Posts	5.5	2.0	H11700CT-ND◆	.72	.53	.43	252.79	DF12(3.0)-10DS-0.5V(86)
	14		6.5	3.0	H11702CT-ND◆	.78	.57	.47	275.09	DF12(3.0)-14DS-0.5V(86)
	20		8.0	4.5	H11748CT-ND◆	.91	.66	.54	318.87	DF12(3.0)-20DS-0.5V(86)
	30		10.5	7.0	H11740CT-ND◆	1.35	.98	.80	472.53	DF12(3.0)-30DS-0.5V(86)
	32		11.0	7.5	H5205CT-ND◆	1.26	.91	.75	439.49	DF12(3.0)-32DS-0.5V(86)
	36		12.0	8.5	H11750CT-ND◆	1.50	1.10	.90	527.05	DF12(3.0)-36DS-0.5V(86)
	40		13.0	9.5	H11706CT-ND◆	1.45	1.05	.86	505.57	DF12(3.0)-40DS-0.5V(86)
	50		15.5	12.0	H1509-ND	1.74	1.35	1.08	—	DF12(3.0)-50DS-0.5V(80)
4	30	With Reinforced Fittings	15.5	12.0	H5206CT-ND◆	1.59	1.22	.98	648.49	DF12(3.0)-50DS-0.5V(86)
	50		18.0	14.5	H5207CT-ND◆	1.74	1.35	1.08	714.58	DF12(3.0)-60DS-0.5V(86)
	60		23.0	19.5	H5208CT-ND◆	2.45	1.88	1.51	999.58	DF12(3.0)-80DS-0.5V(86)

Fig.	No. of Contacts	Description	Dimension (mm)		Digi-Key Part No.	Cut Tape Price Each			T & R ▲ Pricing 1,000	Hirose Part No.		
			A	B		1	25	100				
<b>3.5 - 5.0mm Stacking Height - RoHS Compliant</b>												
1	20	With Guide Posts	7.1	4.5	H5209CT-ND	1.41	1.03	.84	494.83	DF12A-20DS-0.5V(81)		
	30		9.6	7.0	H5210CT-ND	1.59	1.22	.98	648.49	DF12A-30DS-0.5V(81)		
	36		10.1	7.5	H11717CT-ND	1.29	.94	.77	450.22	DF12A-32DS-0.5V(81)		
	40		11.1	8.5	H5211CT-ND	1.83	1.41	1.13	746.79	DF12A-36DS-0.5V(81)		
	40		12.1	9.5	H5212CT-ND	1.88	1.45	1.16	769.10	DF12A-40DS-0.5V(81)		
	60		17.1	14.5	H11758CT-ND	2.47	1.92	1.54	1106.15	DF12A-60DS-0.5V(81)		
3	20	With Reinforced Fittings	8.0	4.5	H11732CT-ND	.88	.64	.53	307.31	DF12B-20DS-0.5V(86)		
	30		10.5	7.0	H11733CT-ND	1.19	.87	.71	417.18	DF12B-30DS-0.5V(86)		
	32		11.0	7.5	H11734CT-ND	1.32	.96	.79	461.79	DF12B-32DS-0.5V(86)		
	36		12.0	8.5	H11735CT-ND	1.54	1.12	.92	538.62	DF12B-36DS-0.5V(86)		
	40		13.0	9.5	H11765CT-ND	1.41	1.03	.84	494.83	DF12B-40DS-0.5V(86)		
	60		15.5	12.0	H11766CT-ND	1.59	1.22	.98	648.49	DF12B-50DS-0.5V(86)		
3	20	With Guide Posts and Reinforced Fittings	8.0	4.5	H5214CT-ND	.88	.64	.53	307.31	DF12B-20DS-0.5V(86)		
	30		10.5	7.0	H5215CT-ND	1.19	.87	.71	417.18	DF12B-30DS-0.5V(86)		
	32		11.0	7.5	H11711CT-ND	1.32	.96	.79	461.79	DF12B-32DS-0.5V(86)		
	36		12.0	8.5	H5216CT-ND	1.54	1.12	.92	538.62	DF12B-36DS-0.5V(86)		
	40		13.0	9.5	H5217CT-ND	1.41	1.03	.84	494.83	DF12B-40DS-0.5V(86)		
	60		15.5	12.0	H5218CT-ND	1.59	1.22	.98	648.49	DF12B-50DS-0.5V(86)		
2	10	With Guide Posts	4.7	2.0	H11736CT-ND	.69	.50	.41	242.05	DF12D(3.0)-10DP-0.5V(81)		
	14		5.7	3.0	H11737CT-ND	.75	.55	.45	263.53	DF12D(3.0)-14DP-0.5V(81)		
	20		7.2	4.5	H11738CT-ND	1.38	1.00	.82	483.27	DF12D(3.0)-20DP-0.5V(81)		
	30		9.7	7.0	H11739CT-ND	1.59	1.22	.98	648.49	DF12D(3.0)-30DP-0.5V(81)		
	32		10.2	7.5	H5219CT-ND	1.67	1.29	1.03	681.53	DF12D(3.0)-32DP-0.5V(81)		
	36		11.2	8.5	H11740CT-ND	1.83	1.41	1.13	746.79	DF12D(3.0)-36DP-0.5V(81)		
	40		12.2	9.5	H11768CT-ND	1.99	1.53	1.23	812.88	DF12D(3.0)-40DP-0.5V(81)		
	50		14.7	12.0	H5220CT-ND	2.36	1.82	1.46	966.54	DF12D(3.0)-50DP-0.5V(81)		
	60		17.2	14.5	H5221CT-ND	2.47	1.92	1.54	1106.15	DF12D(3.0)-60DP-0.5V(81)		
	80		22.2	19.5	H11581CT-ND	2.58	1.99	1.59	1054.93	DF12D(3.0)-80DP-0.5V(81)		
	4		10	With Guide Posts and Reinforced Fittings	5.5	2.0	H11699CT-ND	.72	.53	.43	252.79	DF12(3.0)-10DP-0.5V(86)
14		6.5	3.0		H11701CT-ND	.78	.57	.47	275.09	DF12(3.0)-14DP-0.5V(86)		
20		8.0	4.5		H11747CT-ND	.88	.64	.53	307.31	DF12(3.0)-20DP-0.5V(86)		
30		10.5	7.0		H11703CT-ND	1.32	.96	.79	461.79	DF12(3.0)-30DP-0.5V(86)		
32		11.0	7.5		H5222CT-ND	1.26	.91	.75	439.49	DF12(3.0)-32DP-0.5V(86)		
36		12.0	8.5		H11749CT-ND	1.32	.96	.79	461.79	DF12(3.0)-36DP-0.5V(86)		
40		13.0	9.5		H11705CT-ND	1.45	1.05	.86	505.57	DF12(3.0)-40DP-0.5V(86)		
50		15.5	12.0		H5223CT-ND	1.59	1.22	.98	648.49	DF12(3.0)-50DP-0.5V(86)		
60		18.0	14.5		H5224CT-ND	1.69	1.31	1.05	692.27	DF12(3.0)-60DP-0.5V(86)		
80		23.0	19.5		H5225CT-ND	2.42	1.86	1.49	988.84	DF12(3.0)-80DP-0.5V(86)		
4		10	With Reinforced Fittings		5.5	2.0	H11718CT-ND	.72	.53	.43	252.79	DF12B(3.0)-10DP-0.5V(86)
	20	8.0		4.5	H11720CT-ND	.88	.64	.53	307.31	DF12B(3.0)-20DP-0.5V(86)		
	30	10.5		7.0	H11722CT-ND	1.32	.96	.79	461.79	DF12B(3.0)-30DP-0.5V(86)		
	32	11.0		7.5	H11723CT-ND	1.26	.91	.75	439.49	DF12B(3.0)-32DP-0.5V(86)		
	36	13.0		9.5	H11755CT-ND	1.45	1.05	.86	505.57	DF12B(3.0)-40DP-0.5V(86)		
	50	15.5		12.0	H11725CT-ND	1.59	1.22	.98	648.49	DF12B(3.0)-50DP-0.5V(86)		
	60	18.0		14.5	H11759CT-ND	1.69	1.31	1.05	692.27	DF12B(3.0)-60DP-0.5V(86)		
	<b>3.5mm Stacking Height</b>											
	2	20		With Guide Posts	7.2	4.5	H5226CT-ND	1.29	.94	.77	450.22	DF12D(3.5)-20DP-0.5V(81)
		30			9.7	7.0	H11741CT-ND	1.59	1.22	.98	648.49	DF12D(3.5)-30DP-0.5V(81)
		40			12.2	9.5	H5228CT-ND	1.88	1.45	1.16	769.10	DF12D(3.5)-40DP-0.5V(81)
50		14.7	12.0		H5229CT-ND	2.34	1.80	1.44	955.80	DF12D(3.5)-50DP-0.5V(81)		
60		17.2	14.5		H11742CT-ND	2.45	1.90	1.52	1095.41	DF12D(3.5)-60DP-0.5V(81)		
4		20	With Guide Posts and Reinforced Fittings		8.0	4.5	H5230CT-ND	.97	.71	.58	340.35	DF12(3.5)-20DP-0.5V(86)
	30	10.5		7.0	H11751CT-ND	1.29	.94	.77	450.22	DF12(3.5)-30DP-0.5V(86)		
	36	12.0		8.5	H5231CT-ND	1.35	1.04	.83	549.36	DF12(3.5)-36DP-0.5V(86)		
	40	13.0		9.5	H5232CT-ND	1.48	1.07	.88	516.31	DF12(3.5)-40DP-0.5V(86)		
	50	15.5		12.0	H5233CT-ND	1.64	1.26	1.01	669.97	DF12(3.5)-50DP-0.5V(86)		
	60	18.0		14.5	H11752CT-ND	1.80	1.39	1.11	736.06	DF12(3.5)-60DP-0.5V(86)		
4	20	With Reinforced Fittings	8.0	4.5	H11726CT-ND	.97	.71	.58	3			