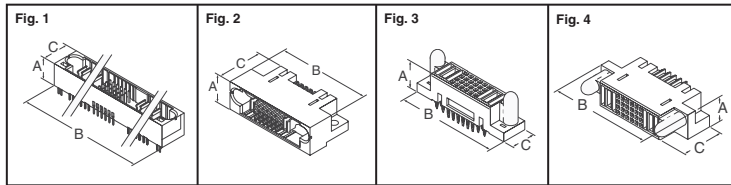


FCI PwrBlade™ Power Distribution Connector System

PwrBlade Power Distribution Connector System consists of power and signal contacts. This system is designed to economically satisfy the demanding requirements of server applications. The connectors are configured to satisfy the specific requirements of Industry SSI design standards.



Materials:

- Housing:** Glass filled high temperature nylon • Color: Black
- Contacts:** • Power Contacts: Beryllium-copper • Signal Pins: Phosphor-bronze • Signal Contacts: Beryllium-copper
- Plating:** • All contacts: 0.76µm (30µ in.) Gold over 1.27µm (50µ in.) Nickel

Electrical and Mechanical Performance:

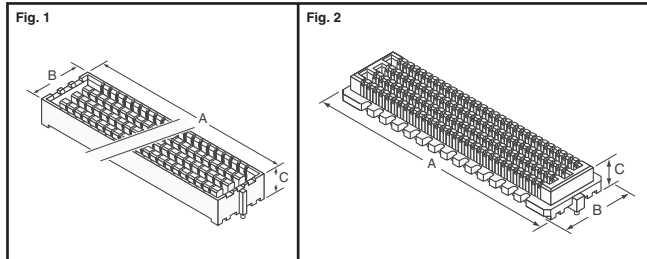
- Insulation Resistance: 20MΩ minimum
- Withstanding Voltage: 1,200V RMS
- Current Rating: 48A for single-powered contact; derated to 30 for 12-powered contact
- Contact Resistance: 0.5mΩ maximum at rated power
- Mating Force: 12 pounds typical for 11 power, 24 signal configuration

Fig.	Configuration	Termination	Dimension - Inch (mm)			Digi-Key Part No.	Price Each			FCI Part No.
			A	B	C		1	25	100	
Header — Vertical										
1	1P, 24S, 1P 1P, 24S, 1P	PCB	0.500 (12.70)	1.925 (48.90)	0.574 (14.58)	609-2086-ND	4.68	2.93	2.68	51952-001LF
		Pressfit	0.500 (12.70)	1.925 (48.90)	0.574 (14.58)	609-2087-ND	7.94	5.63	5.18	51952-002LF
Header — Right Angle										
2	1P, 24S, 1P 6p, 24S, 5P	PCB	0.574 (14.58)	1.925 (48.90)	0.930 (23.62)	609-2077-ND	4.67	3.11	2.79	51415-001LF
		PCB	0.574 (14.58)	4.350 (110.49)	0.930 (23.62)	609-2079-ND	6.29	4.46	3.93	51624-XX001LF
Receptacle — Vertical										
3	1P, 24S, 1P 6P, 24S, 5P	Pressfit	0.500 (12.70)	1.925 (48.90)	0.470 (11.94)	609-2081-ND	3.72	2.38	2.17	51666-001LF
		Pressfit	0.500 (12.70)	4.350 (110.49)	0.470 (11.94)	609-2082-ND	6.21	4.40	3.88	51667-XX001LF
Receptacle — Right Angle										
4	1P, 24S, 1P 6P, 24S, 5P 6P, 24S, 5P	PCB	0.470 (11.94)	1.925 (48.90)	0.820 (20.83)	609-2078-ND	4.15	2.64	2.42	51416-001LF
		PCB	0.470 (11.94)	4.350 (110.49)	0.820 (20.83)	609-2080-ND	8.19	5.81	5.35	51625-XX001LF
		Pressfit	0.470 (11.94)	4.350 (110.49)	0.865 (21.97)	609-2085-ND	13.22	9.76	8.98	51866-008LF

samtec SEAF and SEAM Series



- Specifications:** • Insulator Material: Black Liquid Crystal Polymer • Contact Material: Copper Alloy
- Current Rating: 2.7A • Operating Temperature Range: -55°C ~ 125°C • Plating: Au over 50µ (1.27µm) Ni
- Contact Resistance: 5.5mΩ • Working Voltage: 240 VAC • Mated Cycles: 100

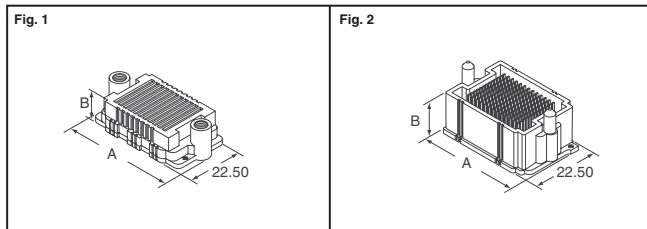


Pins per Row and No. of Rows	Dimensions (mm)			Digi-Key Part No.	Price Each		Samtec Part No.
	A	B	C		1	10	
Fig. 1 — Receptacle							
20 x 8	31.22	10.69	5.05	SAM8000-ND	14.30	11.24	SEAF-20-05.0-S-08-2-A
20 x 10	31.22	13.23	5.05	SAM8001-ND	15.48	12.62	SEAF-20-05.0-S-10-2-A
20 x 8	31.22	10.69	6.55	SAM8002-ND	14.52	11.84	SEAF-20-06.5-S-08-2-A
20 x 10	31.22	13.23	6.55	SAM8003-ND	16.49	13.45	SEAF-20-06.5-S-10-2-A

Pins per Row and No. of Rows	Dimensions (mm)			Digi-Key Part No.	Price Each		Samtec Part No.
	A	B	C		1	10	
Fig. 2 — Header							
30 x 8	43.92	10.69	5.05	SAM8004-ND	16.90	13.78	SEAF-30-05.0-S-08-2-A
30 x 10	43.92	13.23	5.05	SAM8005-ND	19.21	15.66	SEAF-30-05.0-S-10-2-A
30 x 8	43.92	10.69	6.55	SAM8006-ND	18.02	14.69	SEAF-30-06.5-S-08-2-A
40 x 8	56.62	10.69	5.05	SAM8008-ND	20.66	16.84	SEAF-40-05.0-S-08-2-A
40 x 10	56.62	13.23	5.05	SAM8009-ND	22.89	18.79	SEAF-40-05.0-S-10-2-A
40 x 8	56.62	10.69	6.55	SAM8010-ND	19.40	15.81	SEAF-40-06.5-S-08-2-A
40 x 10	56.62	13.23	6.55	SAM8011-ND	24.41	20.03	SEAF-40-06.5-S-10-2-A
50 x 10	69.32	13.23	5.05	SAM8013-ND	26.01	21.34	SEAF-50-05.0-S-10-2-A
50 x 8	69.32	10.69	6.55	SAM8014-ND	24.41	20.03	SEAF-50-06.5-S-08-2-A
Fig. 2 — Header							
20 x 8	30.38	12.14	4.6	SAM8016-ND	14.75	12.03	SEAM-20-02.0-S-08-2-A
20 x 10	30.38	14.68	4.6	SAM8017-ND	16.77	13.67	SEAM-20-02.0-S-10-2-A
20 x 8	30.38	12.14	6.1	SAM8018-ND	15.65	12.76	SEAM-20-03.5-S-08-2-A
20 x 10	30.38	14.68	6.1	SAM8019-ND	17.79	14.50	SEAM-20-03.5-S-10-2-A
30 x 8	43.08	12.14	4.6	SAM8020-ND	15.43	12.58	SEAM-30-02.0-S-08-2-A
30 x 10	43.08	14.68	4.6	SAM8021-ND	20.81	16.96	SEAM-30-02.0-S-10-2-A
30 x 8	43.08	12.14	6.1	SAM8022-ND	19.44	15.85	SEAM-30-03.5-S-08-2-A
40 x 8	55.78	12.14	4.6	SAM8024-ND	21.83	17.92	SEAM-40-02.0-S-08-2-A
40 x 10	55.78	14.68	4.6	SAM8025-ND	21.82	17.90	SEAM-40-02.0-S-10-2-A
40 x 8	55.78	12.14	6.1	SAM8026-ND	20.91	17.05	SEAM-40-03.5-S-08-2-A
40 x 10	55.78	14.68	6.1	SAM8027-ND	26.32	21.60	SEAM-40-03.5-S-10-2-A
50 x 10	68.48	14.68	4.6	SAM8029-ND	24.79	20.34	SEAM-50-02.0-S-10-2-A
50 x 8	68.48	12.14	6.1	SAM8030-ND	26.32	21.60	SEAM-50-03.5-S-08-2-A

HDAM and HDAF Arrays

- Specifications:** • Insulator Material: Black Liquid Crystal Polymer • Contact Material: Copper Alloy
- Current Rating: 2.3A @ 80°C Ambient • Operating Temperature Range: -55°C ~ 125°C • Plating: Gold or Tin over 50µ (1.27µm) Nickel • Contact Resistance: 19mΩ max • Working Voltage: 200 VAC • Mated Cycles: 100



Pairs per Row and No. of Rows	Dimensions (mm)		Digi-Key Part No.	Price Each		Samtec Part No.
	A	B		1	10	
Fig. 1 — HDAF Arrays						
11 x 13	39.92	10.51	SAM8650-ND	14.62	11.92	HDAF-11-08.0-S-13-1
11 x 13	39.92	20.51	SAM8656-ND	15.06	12.28	HDAF-11-18.0-S-13-1
15 x 13	47.92	10.51	SAM8652-ND	18.28	14.90	HDAF-15-08.0-S-13-1
15 x 13	47.92	20.51	SAM8658-ND	18.82	15.34	HDAF-15-18.0-S-13-1

Pairs per Row and No. of Rows	Dimensions (mm)		Digi-Key Part No.	Price Each		Samtec Part No.
	A	B		1	10	
23 x 13	63.92	10.51	SAM8654-ND	24.84	20.39	HDAF-23-08.0-S-13-1
23 x 13	63.92	20.51	SAM8660-ND	25.57	20.98	HDAF-23-18.0-S-13-1
Fig. 1 — HDAF Arrays — RoHS Compliant						
11 x 13	39.92	10.51	SAM8651-ND	14.62	11.92	HDAF-11-08.0-S-13-2
11 x 13	39.92	20.51	SAM8657-ND	15.06	12.28	HDAF-11-18.0-S-13-2
15 x 13	47.92	10.51	SAM8653-ND	18.28	14.90	HDAF-15-08.0-S-13-2
15 x 13	47.92	20.51	SAM8659-ND	18.82	15.34	HDAF-15-18.0-S-13-2
23 x 13	63.92	10.51	SAM8655-ND	24.84	20.39	HDAF-23-08.0-S-13-2
23 x 13	63.92	20.51	SAM8661-ND	25.57	20.98	HDAF-23-18.0-S-13-2
Fig. 2 — HDAM Arrays						
11 x 13	38.06	14.41	SAM8638-ND	14.91	12.16	HDAM-11-12.0-S-13-1
11 x 13	38.06	19.41	SAM8644-ND	15.23	12.42	HDAM-11-17.0-S-13-1
15 x 13	46.06	14.41	SAM8640-ND	18.64	15.20	HDAM-15-12.0-S-13-1
15 x 13	46.06	19.41	SAM8646-ND	19.04	15.52	HDAM-15-17.0-S-13-1
23 x 13	62.06	14.41	SAM8642-ND	25.33	20.79	HDAM-23-12.0-S-13-1
23 x 13	62.06	19.41	SAM8648-ND	25.88	21.24	HDAM-23-17.0-S-13-1
Fig. 2 — HDAM Arrays — RoHS Compliant						
11 x 13	38.06	14.41	SAM8639-ND	14.91	12.16	HDAM-11-12.0-S-13-2
11 x 13	38.06	19.41	SAM8645-ND	15.23	12.42	HDAM-11-17.0-S-13-2
15 x 13	46.06	14.41	SAM8641-ND	18.64	15.20	HDAM-15-12.0-S-13-2
15 x 13	46.06	19.41	SAM8647-ND	19.04	15.52	HDAM-15-17.0-S-13-2
23 x 13	62.06	14.41	SAM8643-ND	25.33	20.79	HDAM-23-12.0-S-13-2
23 x 13	62.06	19.41	SAM8649-ND	25.88	21.24	HDAM-23-17.0-S-13-2

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