

"ZERO-CROSSTALK" Series 806 Mil-Aero VersaLink™ Connectors



806-048 VersaLink PCB Square Flange Receptacle

SERIES 806 VERSALINK CONNECTORS



PART NUMBER DEVELOPMENT						
Sample Part Number	806-048	-ME	18-14V4	S	T	A
Series / Basic No.	806-048 = PCB square flange receptacle					
Material / Finish	ME = Aluminum alloy, electroless nickel (96 hour salt spray) MT = Aluminum alloy, nickel-PTFE NF = Aluminum alloy, cad/O.D. over electroless nickel ZR = Aluminum alloy, zinc nickel, black (trivalent chromium) Z1 = Aluminum alloy, stainless steel passivated (trivalent chromium) ZL = Aluminum alloy, electro-deposited nickel					
Insert Layout	See Insert Arrangement Table (See page 13–14 for layouts)					
Contact Gender	P = Pin S = Socket					
Panel Mount Hole Style	T = Thru hole C = Clinch nut, 4-40 Thd, M45938/6-4C					
Polarization	A, B, C, D, E, F ; see Polarization Table					

MATERIALS

- Shell: see part number development
- Pin contact: copper alloy / 50μ gold over nickel
- Socket contact: copper alloy with stainless steel hood (22HD and 20HD) / 50μ gold over nickel, contact hood passivate
- Insulators: high-grade rigid dielectric
- Seals: fluorosilicone/silicone blend
- Potting: epoxy

PERFORMANCE SPECIFICATIONS

- Current rating for 20HD and 22HD
20 AWG: 7.5 amps
22 AWG: 5 amps
- DWV
20HD: 1800 VAC at sea level
22HD: 1300 VAC at sea level
VersaLink: 500 VAC at sea level
- Insulation resistance:
5000 MΩ min. at ambient temperature
1000 MΩ min. at elevated temperature
- Operating temperature: -65° to +200° C

NOTES

1. Integral PCB stand off 4x 4-40 UNC, .156 minimum thread and locating post.
2. Connector is backfilled with epoxy, contacts are non-removable.
3. Receptacle connector mates with 806-044 of the same arrangement, polarization, and opposite gender.
4. Refer to Refer to Series 806 PCB footprints on page 38.
5. Red band indicates full mate.

INSERT ARRANGEMENT

SHELL SIZE-LAYOUT	NUMBER OF CONTACTS		
	VersaLink	22HD	20HD
8-1V ¹	1		
9-2V ²	2		
10-2V2	2		2
11-4V ³	4		
11-2V9 ⁴	2	9	
12-4V4	4	4	
14-6V7	6	7	
14-4V15 ⁵	4	15	
16-10V4	10	4	
16-8V10	8	10	
18-14V4	14	4	
18-8V31	8	31	
20-18V8	18	8	
22-25V4	25	4	
22-16V19	16	19	
24-32V	32		
24-16V66	16	66	

Support for:

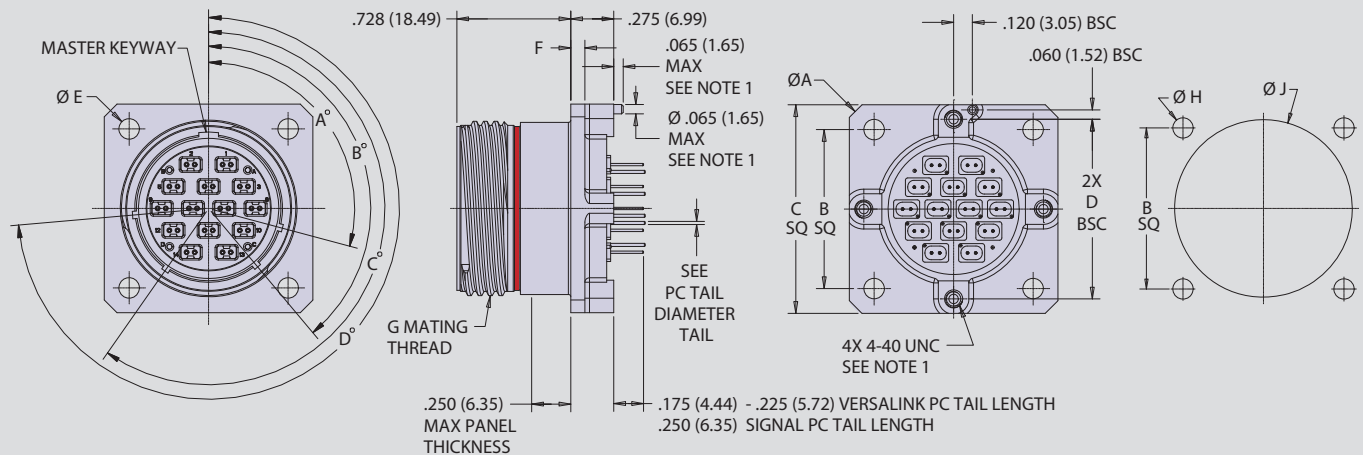
1. 10G SPE
2. SATA 3
3. 40G Ethernet
4. USB 3.1 Gen 2
5. USB 3.2, USB 4, HDMI, DP, DVI Single Link

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DIMENSIONS

SHELL SIZE	Ø A MAX	B	C MAX	D	Ø E THRU HOLES	F FLANGE	G MATING THREAD
8	1.040 (26.42)	0.531 (13.49)	0.822 (20.88)	0.534 (13.56)	0.128 (3.25)	0.100 (2.54)	.5000-.067P-.2L-TS-2B
9	1.130 (28.70)	0.594 (15.09)	0.885 (22.48)	0.579 (14.71)	0.128 (3.25)	0.100 (2.54)	.5625-.067P-.2L-TS-2B
10	1.174 (29.82)	0.625 (15.88)	0.913 (23.19)	0.679 (17.25)	0.128 (3.25)	0.100 (2.54)	.6250-.067P-.2L-TS-2B
11	1.240 (31.50)	0.670 (17.02)	0.960 (24.38)	0.734 (18.64)	0.128 (3.25)	0.100 (2.54)	.6875-.067P-.2L-TS-2B
12	1.354 (34.39)	0.765 (19.43)	1.040 (26.42)	0.804 (20.42)	0.128 (3.25)	0.100 (2.54)	.7500-.067P-.2L-TS-2B
14	1.510 (38.35)	0.859 (21.82)	1.133 (28.78)	0.891 (22.63)	0.128 (3.25)	0.100 (2.54)	.8750-.067P-.2L-TS-2B
16	1.620 (41.15)	0.938 (23.83)	1.242 (31.55)	1.049 (26.64)	0.128 (3.25)	0.100 (2.54)	1.0000-.067P-.2L-TS-2B
18	1.784 (45.31)	1.016 (25.81)	1.343 (34.11)	1.148 (29.16)	0.128 (3.25)	0.100 (2.54)	1.1250-.067P-.2L-TS-2B
20	1.910 (48.51)	1.109 (28.17)	1.444 (36.68)	1.252 (31.80)	0.154 (3.91)	0.125 (3.18)	1.2500-.067P-.2L-TS-2B
22	2.083 (52.91)	1.203 (30.56)	1.570 (39.88)	1.369 (34.77)	0.154 (3.91)	0.125 (3.18)	1.3750-.067P-.2L-TS-2B
24	2.200 (55.88)	1.312 (33.32)	1.704 (43.28)	1.509 (38.33)	0.154 (3.91)	0.125 (3.18)	1.5000-.067P-.2L-TS-2B

POLARIZATION

POS	A	B	C	D
A	105	140	215	265
B	102	170	248	305
C	80	150	230	295
D	68	140	205	275
E	64	155	234	304
F	72	120	200	298

CUTOUT PANEL DIMENSIONS

SHELL SIZE	Ø J	Ø H	
		WITH CLINCH NUT	WITHOUT CLINCH NUT
8	0.509 (12.93)	0.128 (3.25)	0.128 (3.25)
9	0.577 (14.66)	0.128 (3.25)	0.128 (3.25)
10	0.645 (16.38)	0.128 (3.25)	0.128 (3.25)
11	0.712 (18.08)	0.128 (3.25)	0.128 (3.25)
12	0.768 (19.51)	0.128 (3.25)	0.128 (3.25)
14	0.890 (22.61)	0.128 (3.25)	0.128 (3.25)
16	1.015 (25.78)	0.128 (3.25)	0.128 (3.25)
18	1.125 (28.58)	0.128 (3.25)	0.128 (3.25)
20	1.275 (32.39)	0.128 (3.25)	0.154 (3.91)
22	1.400 (35.56)	0.128 (3.25)	0.154 (3.91)
24	1.525 (38.74)	0.128 (3.25)	0.154 (3.91)

PC TAIL DIAMETERS

CONTACT	MAX PC TAIL DIAMETER
#20	0.030 (0.76)
#22	0.020 (0.51)
VL SIGNAL	0.017 (0.43)
VL GROUND	0.022 (0.56)