

Series 806

Mighty Mouse Mil-Aero Connectors

806-022 Square Flange Receptacle Connectors, PC Tail Contacts



Features

- Triple-start stub ACME mating thread
- High density #20HD and #22HD arrangements for reduced size and weight
- Aerospace-grade materials, construction
- Integral PC board standoffs
- Threaded holes for secure attachment to rigid or flex circuits
- Alignment post

Specifications

- Operating temperature:
Finishes ME, MT, Z1: -65°C to +200°C
Finishes NF, ZR: -65°C to +175°C
- Dielectric withstanding voltage
#20HD layouts: 1800 Vac
#22HD layouts: 1300 Vac
- Current rating
#20HD contacts 7.5 A
#22HD contacts 5 A
- Mating durability: 500 cycles
- Mechanical shock: EIA-364-27, 300g.
- Vibration (sine): MIL-DTL-38999M, 60g.
- Vibration (random) EIA-364-28 Condition VI, Letter J, 43.92 Grms, +200°C
- High Impact shock: MIL-S-901 Grade A
- Humidity: EIA-364-31 Method 4
- Salt spray (dynamic): EIA-364-26, 500 hours (96 hours for nickel-plated versions)
- Fluid immersion: EIA-364-10
- Altitude immersion: EIA-364-03 75,000 feet altitude
- Indirect Lightning Strike: EIA-364-75 Type B Level 2 10kA Peak

Connector Construction

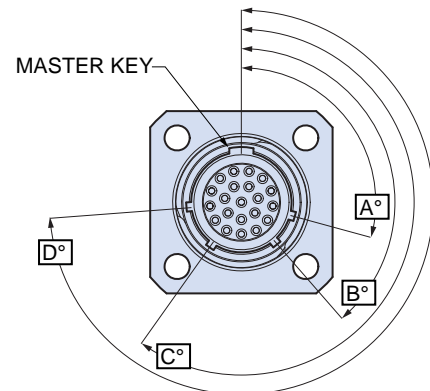
- Shell, jam nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Potting compound: epoxy
- Interfacial seal and peripheral seal: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Clinch nuts: stainless steel, passivated

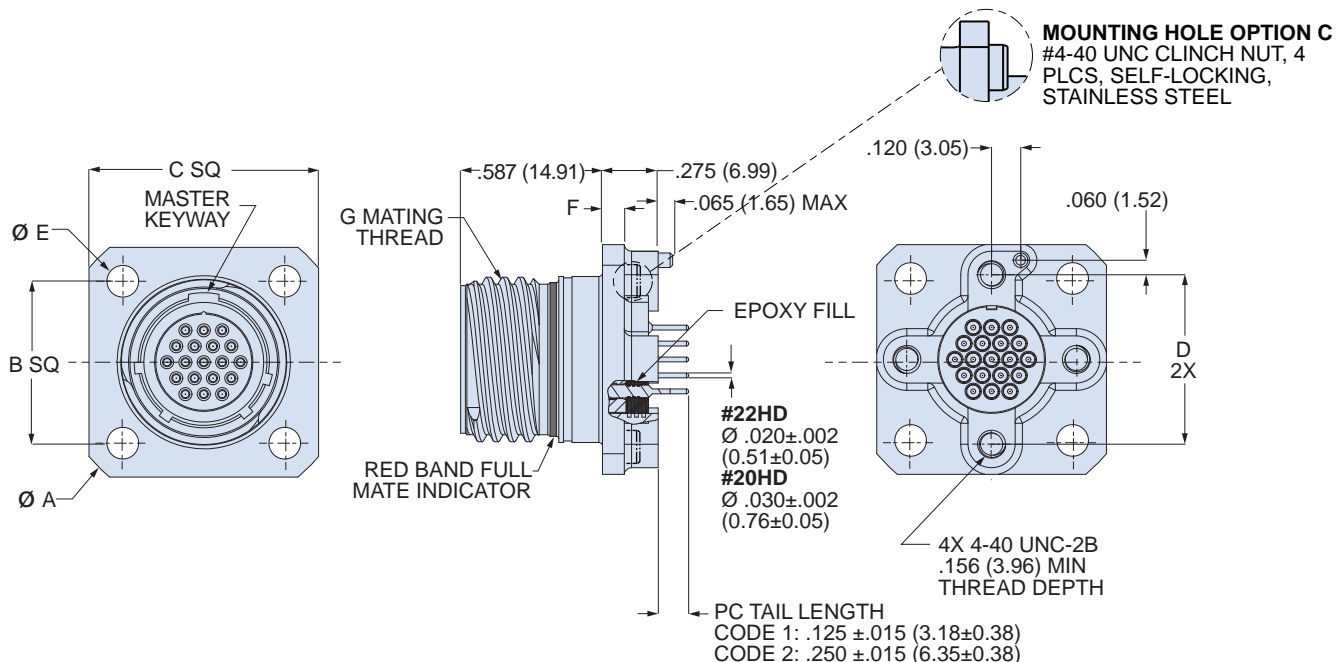
806-022 square flange receptacles feature potted-in-place printed circuit board terminals, integral standoffs and threaded holes for secure attachment to rigid or flex circuit boards. Ultraminiature Series 806 connectors save size and weight compared to legacy aerospace-grade circular connectors. These ultraminiature, high performance, parylene-compatible connectors are suitable for unpressurized aircraft areas subject to vibration, moisture, and temperature extremes.

How To Order	
SAMPLE PART NUMBER	806-022 -ME 11-19 P 1 C A
Product	806-022 = Square Flange Receptacle, PC Tails
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated
Arrangement Number (Shell Size - Insert Arr.)	See Table 1
Contact Type	P = Pin S = Socket
PC Tail Length	1 = .125" (3.18 mm.) 2 = .250" (6.35 mm.)
Mounting Hole Style	T = Thru holes C = Clinch nut, #4-40 (rear panel mounting)
Polarizing Position (Table 2)	A B C D E F

No. of Contacts	#20HD	#22HD	Arr.	Shell Size
3	●		8-3	8
4		●	8-4	8
5	●		9-5	9
7		●	8-7	8
8	●		10-8	10
10	●		11-10	11
11		●	9-11	9
15		●	10-15	10
15	●		12-15	12
19		●	11-19	11
20	●		14-20	14
26		●	12-26	12
31	●		16-31	16
39		●	14-39	14
41	●		18-41	18
55	●		20-55	20
60		●	16-60	16
69	●		22-69	22
85		●	18-85	18
92	●		24-92	24
110		●	20-110	20
140	●		22-140	22
186		●	24-186	24

Position	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

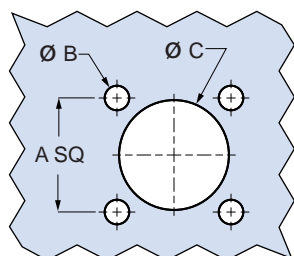




806-022 Receptacle Dimensions

Shell Size	A Max		B		C Max		D		øE		F Max		G Mating Thread	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
8	1.040	26.42	.531	13.49	.822	20.88	.534	13.56	.128	3.25	.100	2.54	.5000-.067P-.2L-TS-2A	
9	1.130	28.70	.594	15.09	.885	22.48	.579	14.71	.128	3.25	.100	2.54	.5625-.067P-.2L-TS-2A	
10	1.174	29.82	.625	15.88	.913	23.19	.679	17.25	.128	3.25	.100	2.54	.6250-.067P-.2L-TS-2A	
11	1.240	31.50	.670	17.02	.960	24.38	.734	18.64	.128	3.25	.100	2.54	.6875-.067P-.2L-TS-2A	
12	1.354	34.39	.765	19.43	1.040	26.42	.804	20.42	.128	3.25	.100	2.54	.7500-.067P-.2L-TS-2A	
14	1.510	38.35	.859	21.82	1.133	28.78	.891	22.63	.128	3.25	.100	2.54	.8750-.067P-.2L-TS-2A	
16	1.620	41.15	.938	23.83	1.242	31.55	1.049	26.64	.128	3.25	.100	2.54	1.0000-.067P-.2L-TS-2A	
18	1.784	45.31	1.016	25.81	1.343	34.11	1.148	29.16	.128	3.25	.100	2.54	1.1250-.067P-.2L-TS-2A	
20	1.910	48.51	1.109	28.17	1.444	36.68	1.252	31.80	.154	3.91	.125	3.18	1.2500-.067P-.2L-TS-2A	
22	2.083	52.91	1.203	30.56	1.570	39.88	1.369	34.77	.154	3.91	.125	3.18	1.3750-.067P-.2L-TS-2A	
24	2.200	55.88	1.312	33.35	1.704	43.28	1.509	38.33	.154	3.91	.125	3.18	1.5000-.067P-.2L-TS-2A	

806-022 Panel Cutout Dimensions



Shell Size	A		øB with Clinch Nut		øB without Clinch Nut		øC	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
8	.531	13.49	.128	3.25	.128	3.25	.509	12.93
9	.594	15.09	.128	3.25	.128	3.25	.577	14.66
10	.625	15.88	.128	3.25	.128	3.25	.645	16.38
11	.670	17.02	.128	3.25	.128	3.25	.712	18.08
12	.765	19.43	.128	3.25	.128	3.25	.768	19.51
14	.859	21.82	.128	3.25	.128	3.25	.890	22.61
16	.938	23.83	.128	3.25	.128	3.25	1.015	25.78
18	1.016	25.81	.128	3.25	.128	3.25	1.125	28.58
20	1.109	28.17	.128	3.25	.154	3.91	1.275	32.39
22	1.203	30.56	.128	3.25	.154	3.91	1.400	36.56
24	1.312	33.32	.128	3.25	.154	3.91	1.525	38.74