

ULTRAMINIATURE CIRCULAR Series 806 Mil-Aero Connectors



806-026 Hermetic Receptacles, PC Tails, Threaded Standoff



Series 806 hermetic jam nut receptacles feature 304L stainless steel shells and glass-to-metal seals. Rated for -65°C to +200°C temperature range. Ultraminiature Series 806 connectors save size and weight compared to legacy aerospace-grade circular hermetic connectors. These high performance, parylene-compatible connectors are suitable for unpressurized aircraft areas subject to vibration, moisture, and temperature extremes. Equipped with low-profile, threaded standoff. For ultra-light, aluminum hermetic performance, see part no. 806-028.

Features

- Glass-to-metal seal
- Non-removable PC tail contacts
- Threaded holes for attaching to printed circuit boards
- High density #20HD and #22HD arrangements for reduced size and weight
- Aerospace-grade materials, construction

Specifications

- Operating temperature: -65°C to +200°C
- Leak Rate: 1E-7 cm³/s at 1 ATM pressure differential
- Dielectric withstanding voltage
#20HD layouts: 1800 Vac
#22HD layouts: 1300 Vac
- Current rating
#20HD contacts 5 A max.
#22HD contacts 3 A max.
- Shell-to-Shell Conductivity: 10 mV max.
- 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
- Indirect Lightning Strike: EIA-364-75 Type B Level 2 10kA Peak

Connector Construction

- Shell and jam-nut: 316L CRES
- Hermetic contacts: nickel-iron alloy, gold plated
- Socket contacts: copper alloy, gold plated
- Insulator, hermetic: vitreous glass
- Interfacial seal, peripheral seal, O-ring: fluorosilicone
- Insulator, socket: high grade rigid dielectric

How To Order							
SAMPLE PART NUMBER	806-026	-02	Z1	8-3	C	1	A
Product	806-026 = Hermetic Receptacle, PC Tails, Board Mount Flange						
Mounting Type	02 = Square Flange 07 = Jam Nut						
Shell Finish	Z1 = Passivated ZL = Nickel Plated						
Arrangement Number (Shell Size - Insert Arr.)	See Table 1						
Contact Type	C = Pin, PC Terminal D = Socket, PC Terminal						
PC Tail Length	1 = .125" (3.18 mm.) 2 = .250" (6.35 mm.)						
Polarizing Position (See Page 7)	A B C D E F						

Table I Contact Arrangements			
Contact Layout	Number of Contacts		
	22HD	20HD	8
7-3	3		
8-3		3	
8-4	4		
8-7	7		
9-5		5	
9-11			
10-1			1
10-8		8	
10-15	15		
11-10		10	
11-19	19		
12-15		15	
12-26	26		
14-20A	19		1
14-20		20	
14-21	17		

Table I Contact Arrangements			
Contact Layout	Number of Contacts		
	22HD	20HD	8
14-39	39		
16-31		31	
16-22	20		2
16-60	60		
18-21	18		3
18-41		41	
18-85	85		
20-28	24		4
20-55		55	
20-110	110		
22-44	40		4
22-69		69	
22-140	140		
24-92		92	
24-97	93		4
24-186	186		

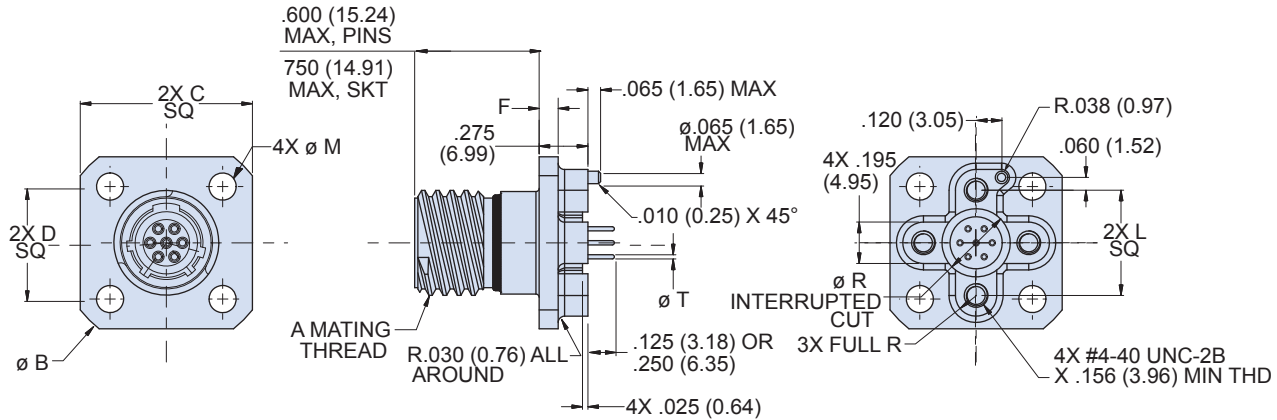
Size 8, El Ocho contacts must be purchased separately

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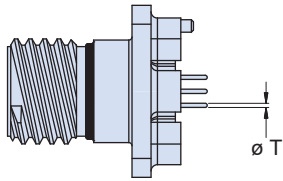
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806-026-02 Square Flange Receptacle Dimensions



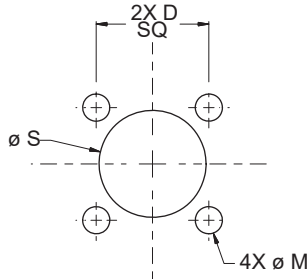
Shell Size	A Mating Thread	ϕB Max.		C Max		D		F Max		L		ϕM		ϕR		ϕS	
		In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	$\pm .015$	± 0.38	In.	mm.
8	.5000-.067P-.2L-TS-2A	1.040	26.42	.822	20.88	.531	13.49	.100	2.54	.534	13.56	.128	3.25	.325	8.26	.509	12.93
9	.5625-.067P-.2L-TS-2A	1.130	28.70	.885	22.48	.594	15.09	.100	2.54	.579	14.71	.128	3.25	.405	10.29	.577	14.66
10	.6250-.067P-.2L-TS-2A	1.174	29.82	.913	23.19	.625	15.88	.100	2.54	.679	17.25	.128	3.25	.465	11.81	.645	16.38
11	.6875-.067P-.2L-TS-2A	1.240	31.50	.960	24.38	.670	17.02	.100	2.54	.734	18.64	.128	3.25	.525	13.34	.712	18.08
12	.7500-.067P-.2L-TS-2A	1.354	34.39	1.040	26.42	.765	19.43	.100	2.54	.804	20.42	.128	3.25	.595	15.11	.768	19.51
14	.8750-.067P-.2L-TS-2A	1.510	38.35	1.133	28.78	.859	21.82	.100	2.54	.891	22.63	.128	3.25	.650	16.51	.890	22.61
16	1.0000-.067P-.2L-TS-2A	1.620	41.15	1.242	31.55	.938	23.83	.100	2.54	1.049	26.64	.128	3.25	.795	20.19	1.015	25.78
18	1.1250-.067P-.2L-TS-2A	1.784	45.31	1.343	34.11	1.016	25.81	.100	2.54	1.148	29.16	.128	3.25	.920	23.37	1.125	28.58
20	1.2500-.067P-.2L-TS-2A	1.910	48.51	1.444	36.68	1.109	28.17	.125	3.18	1.252	31.80	.154	3.91	1.030	26.16	1.275	32.39
22	1.3750-.067P-.2L-TS-2A	2.083	52.91	1.570	39.88	1.203	30.56	.125	3.18	1.369	34.77	.154	3.91	1.130	28.70	1.400	36.56
24	1.5000-.067P-.2L-TS-2A	2.200	55.88	1.696	43.08	1.312	33.32	.125	3.18	1.509	38.33	.154	3.91	1.275	32.39	1.525	38.74

PC Tail Diameters



Contact Size	ϕT $\pm .002 (0.05)$	
	In.	mm.
#20	.030	0.76
#22	.020	0.51

Recommended Panel Cutout

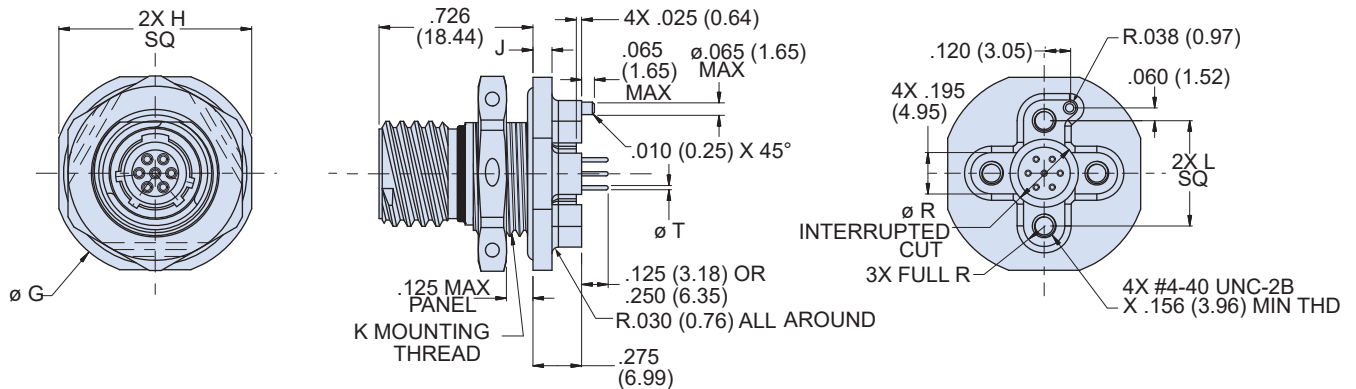


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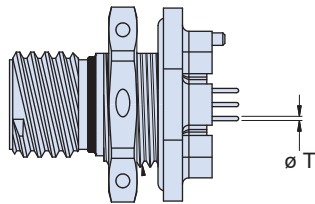
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806-026-07 Jam Nut Receptacle Dimensions

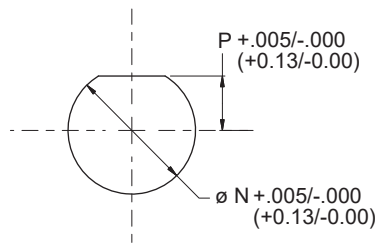


Shell Size	A Mating Thread	G Max		H Max		J Max		K Thread	L		Ø N		P		Ø R	
		In.	mm.	In.	mm.	In.	mm.		In.	mm.	In.	mm.	In.	mm.	± .015	± 0.38
8	.5000-.067P-.2L-TS-2A	.980	24.69	.920	23.37	.100	2.54	M15x1.0-6g-0.100R	.534	13.56	.601	15.27	.256	6.50	.325	8.26
9	.5625-.067P-.2L-TS-2A	1.040	26.42	.980	24.89	.100	2.54	M16x1.0-6g-0.100R	.579	14.71	.640	16.26	.287	7.29	.405	10.29
10	.6250-.067P-.2L-TS-2A	1.110	28.19	1.050	26.67	.100	2.54	M18x1.0-6g-0.100R	.679	17.25	.719	18.26	.318	8.08	.465	11.81
11	.6875-.067P-.2L-TS-2A	1.160	29.46	1.110	28.19	.100	2.54	M19x1.0-6g-0.100R	.734	18.64	.759	19.28	.350	8.89	.525	13.34
12	.7500-.067P-.2L-TS-2A	1.230	31.24	1.170	29.72	.100	2.54	M21x1.0-6g-0.100R	.804	20.42	.837	21.26	.381	9.67	.595	15.11
14	.8750-.067P-.2L-TS-2A	1.360	34.54	1.320	33.53	.100	2.54	M24x1.0-6g-0.100R	.891	22.63	.955	24.26	.443	11.25	.650	16.51
16	1.0000-.067P-.2L-TS-2A	1.515	38.48	1.444	36.68	.100	2.54	M27x1.0-6g-0.100R	1.049	26.64	1.073	27.25	.505	12.83	.795	20.19
18	1.1250-.067P-.2L-TS-2A	1.610	40.89	1.570	39.88	.100	2.54	M30x1.0-6g-0.100R	1.148	29.16	1.192	30.28	.568	14.43	.920	23.37
20	1.2500-.067P-.2L-TS-2A	1.850	46.99	1.760	44.70	.128	3.25	M34x1.0-6g-0.100R	1.252	31.80	1.349	34.26	.630	16.00	1.030	26.16
22	1.3750-.067P-.2L-TS-2A	2.010	51.05	1.913	48.59	.128	3.25	M37x1.0-6g-0.100R	1.369	34.77	1.467	37.26	.693	17.60	1.130	28.70
24	1.5000-.067P-.2L-TS-2A	2.195	55.75	2.070	52.58	.128	3.25	M41x1.0-6g-0.100R	1.509	38.33	1.624	41.25	.755	19.18	1.275	32.39

PC Tail Diameters



Recommended Panel Cutout



Contact Size	ØT ± .002 (0.05)	
	In.	mm.
#20	.030	0.76
#22	.020	0.51