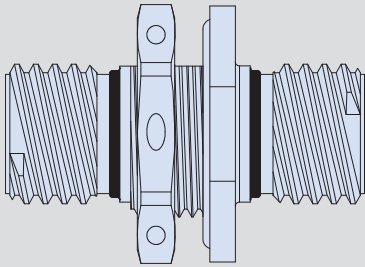


Series 806 Mil-Aero Connectors

806-083 Hermetic Bulkhead Feedthrough with RF Contacts



Features

- Glass-to-metal seal
- High density #20HD and #22HD arrangements for reduced size and weight plus size #16, 12, and #8 standard and hybrid layouts
- 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
#22HD contacts: 1300 VAC
#20HD contacts: 1800 VAC
#16 contacts: 1800 VAC
#12 contacts: 1800 VAC
#8 contacts: 1000 VAC
R/F Contacts - Per As39029 or Glenair Spec
- I.R.: 5000 megOhms min at 500 VDC
- 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: 300 Series
- Hermetic contacts: nickel-iron alloy, gold plate
- Socket contacts: copper alloy, gold plated
- Socket hood: 300 Series
- Hermetic insulator: vitreous glass
- Socket insulator : high grade rigid dielectric
- Seals and O-rings: fluorosilicone

Series 806 hermetic bulkhead feedthroughs feature RF contacts and stainless steel shells and glass-to-metal seals. Rated for -65°C to +200°C temperature range. Micro miniature Series 806 connectors save size and weight. These high performance connectors are suitable for use on pressurized bulkheads subject to vibration, moisture, and temperature extremes.

How To Order										
SAMPLE PART NUMBER		806-083	-07	Z1	9-1	C	P	A	-01	-75
Product	806-083 = Hermetic Bulkhead Feedthrough with RF Contacts									
Mounting Type	02 = Square Flange 13 = Weld Mount 07 = Jam-nut									
Shell Finish	Z1 = Passivated ZL = Nickel Plated									
Shell Size - Insert Arr.	See Table 1									
RF Contact	C = Co-Ax D = Differential Twin-Ax* Q = Quadrax* T = Concentric Twin-Ax* *Size 8 contacts; for signal/power, see 806-081									
Contact Style	P = Pin on Panel Side, Socket Opposite S = Socket on Panel Side, Pin Opposite									
Keyway Polarization	Per Polarization Key Code									
Panel Thickness	-01 = .125 -02 = .250 -03 = .500									
Nominal Impedance	#12 & #8 Quadrax -75 = 75 ohm; omit for std (50 ohm) -150 = 150 ohm; omit for std (100 ohm)									

Table I: Shell Size - Insert Arrangement

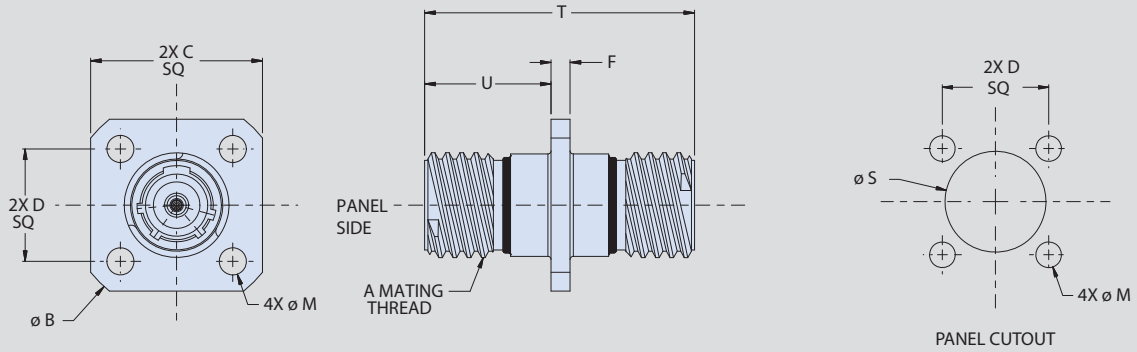
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69	69				16-2					2	
8-4	4					24-92	92				18-3					3	
8-7	7					8-1		1			20-4					4	
9-11	11					10-2		2			22-5					5	
10-15	15					11-4		4			24-8					8	
11-19	19					12-5		5			10-8A	6		2			
12-26	26					14-7		7			11-13	11		2			
14-39	39					16-12		12			12-27	26		1			
16-60	60					18-15		15			14-21	17		4			
18-85	85					20-22		22			16-41	37		4			
20-110	110					22-24		24			18-59	55		4			
22-140	140					24-35		35			11-14	13			1		
24-186	186					9-1			1		12-14	12			2		
8-3		3				12-2			2		14-22	20			2		
9-5		5				14-3			3		12-14	12			2		
10-8		8				16-4			4		16-42	40			2		
11-10		10				16-7			7		18-62	60			2		
12-15		15				18-8			8		14-20A	19				1	
14-20		20				20-11			11		16-22	20				2	
16-31		31				22-13			13		18-21	18				3	
18-41		41				24-19			19		20-28	24				4	
20-55		55				10-1				1	22-44	40				4	
											24-97	93				4	

Series 806 Mil-Aero Connectors

806-083 Hermetic Bulkhead Feedthrough with RF Contacts



806-083-02 Square Flange Dimensions

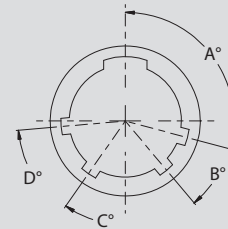


SHELL SIZES	A THREAD MATING	ø B MAX FLANGE	C SQ MAX FLANGE FLATS	D SQUARE BSC MOUNTING HOLES	F MAX FLANGE	ø M THRU MOUNTING HOLES	ø S THRU
7	.4375-.067P-.2L-TS-2A	0.968 (24.59)	0.750 (19.05)	0.469 (11.91)	0.100 (2.54)	0.128 (3.25)	0.445 (11.30)
8	.5000-.067P-.2L-TS-2A	1.040 (26.42)	0.822 (20.88)	0.531 (13.49)	0.100 (2.54)	0.128 (3.25)	0.509 (12.93)
9	.5625-.067P-.2L-TS-2A	1.130 (28.70)	0.885 (22.48)	0.594 (15.09)	0.100 (2.54)	0.128 (3.25)	0.577 (14.66)
10	.6250-.067P-.2L-TS-2A	1.174 (29.82)	0.913 (23.19)	0.625 (15.88)	0.100 (2.54)	0.128 (3.25)	0.645 (16.38)
11	.6875-.067P-.2L-TS-2A	1.240 (31.50)	0.960 (24.38)	0.670 (17.02)	0.100 (2.54)	0.128 (3.25)	0.712 (18.08)
12	.7500-.067P-.2L-TS-2A	1.354 (34.39)	1.040 (26.42)	0.765 (19.43)	0.100 (2.54)	0.128 (3.25)	0.768 (19.51)
14	.8750-.067P-.2L-TS-2A	1.510 (38.35)	1.133 (28.78)	0.859 (21.82)	0.100 (2.54)	0.128 (3.25)	0.890 (22.61)
16	1.0000-.067P-.2L-TS-2A	1.620 (41.15)	1.227 (31.17)	0.938 (23.83)	0.100 (2.54)	0.128 (3.25)	1.015 (25.78)
18	1.1250-.067P-.2L-TS-2A	1.784 (45.31)	1.320 (33.53)	1.016 (25.81)	0.100 (2.54)	0.128 (3.25)	1.125 (28.58)
20	1.2500-.067P-.2L-TS-2A	1.910 (48.51)	1.444 (36.68)	1.109 (28.17)	0.125 (3.18)	0.154 (3.91)	1.275 (32.39)
22	1.3750-.067P-.2L-TS-2A	2.083 (52.91)	1.570 (39.88)	1.203 (30.56)	0.125 (3.18)	0.154 (3.91)	1.400 (35.56)
24	1.5000-.067P-.2L-TS-2A	2.200 (55.88)	1.696 (43.08)	1.312 (33.32)	0.125 (3.18)	0.154 (3.91)	1.525 (38.73)

Dimensions Based on Panel Thickness Option

DASH NO	T MAX	U MAX
-01	1.275 (32.39)	0.750 (19.05)
-02	1.400 (35.56)	0.875 (22.23)
-03	1.650 (41.91)	1.125 (28.58)

Polarization Key Code



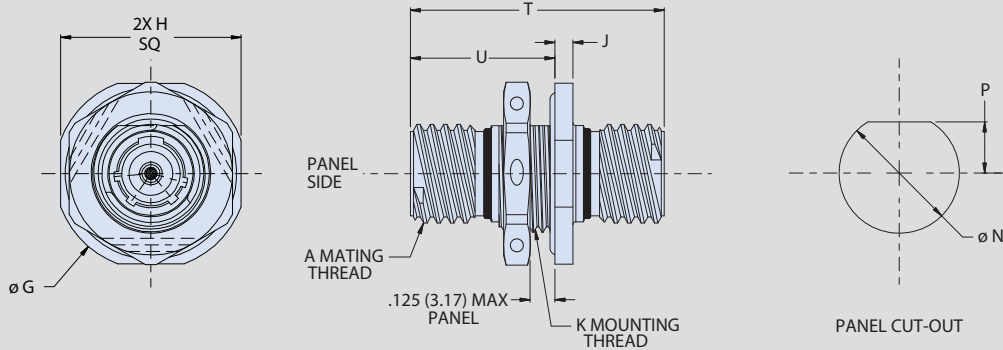
POS	A°	B°	C°	D°
A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

Series 806 Mil-Aero Connectors



806-083 Hermetic Bulkhead Feedthrough with RF Contacts

806-083-07 Jam-Nut

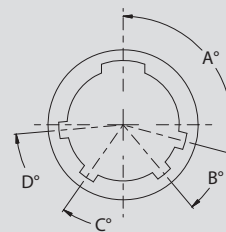


SHELL SIZES	A THREAD MATING	ø G MAX FLANGE	H SQUARE MAX FLANGE FLATS	J MAX FLANGE	ø N +.005/-0.000 (+0.13/- .000) MTG HOLE	P +.005/-0.000 (+0.13/- .000)MNTG FLAT
7	.4375-.067P-.2L-TS-2A	0.848 (21.54)	0.908 (23.06)	0.100 (2.54)	0.522 (13.26)	0.224 (5.69)
8	.5000-.067P-.2L-TS-2A	0.980 (24.89)	0.920 (23.37)	0.100 (2.54)	0.601 (15.27)	0.256 (6.50)
9	.5625-.067P-.2L-TS-2A	1.040 (26.42)	0.980 (24.89)	0.100 (2.54)	0.640 (16.26)	0.287 (7.29)
10	.6250-.067P-.2L-TS-2A	1.110 (28.19)	1.050 (26.67)	0.100 (2.54)	0.719 (18.26)	0.318 (8.08)
11	.6875-.067P-.2L-TS-2A	1.160 (29.46)	1.110 (28.19)	0.100 (2.54)	0.759 (19.28)	0.350 (8.89)
12	.7500-.067P-.2L-TS-2A	1.230 (31.24)	1.170 (29.72)	0.100 (2.54)	0.837 (21.26)	0.381 (9.68)
14	.8750-.067P-.2L-TS-2A	1.360 (34.54)	1.320 (33.53)	0.100 (2.54)	0.955 (24.26)	0.443 (11.25)
16	1.0000-.067P-.2L-TS-2A	1.515 (38.48)	1.444 (36.68)	0.100 (2.54)	1.073 (27.25)	0.505 (12.83)
18	1.1250-.067P-.2L-TS-2A	1.610 (40.89)	1.570 (39.88)	0.100 (2.54)	1.192 (30.28)	0.568 (14.43)
20	1.2500-.067P-.2L-TS-2A	1.850 (46.99)	1.760 (44.70)	0.128 (3.25)	1.349 (34.26)	0.630 (16.00)
22	1.3750-.067P-.2L-TS-2A	2.010 (51.05)	1.913 (48.59)	0.128 (3.25)	1.467 (37.26)	0.693 (17.60)
24	1.5000-.067P-.2L-TS-2A	2.195 (55.75)	2.070 (52.58)	0.128 (3.25)	1.624 (41.25)	0.755 (19.18)

Dimensions Based on Panel Thickness Option

DASH NO	T MAX	U MAX
-01	1.275 (32.39)	0.750 (19.05)
-02	1.400 (35.56)	0.875 (22.23)
-03	1.650 (41.91)	1.125 (28.58)

Polarization Key Code



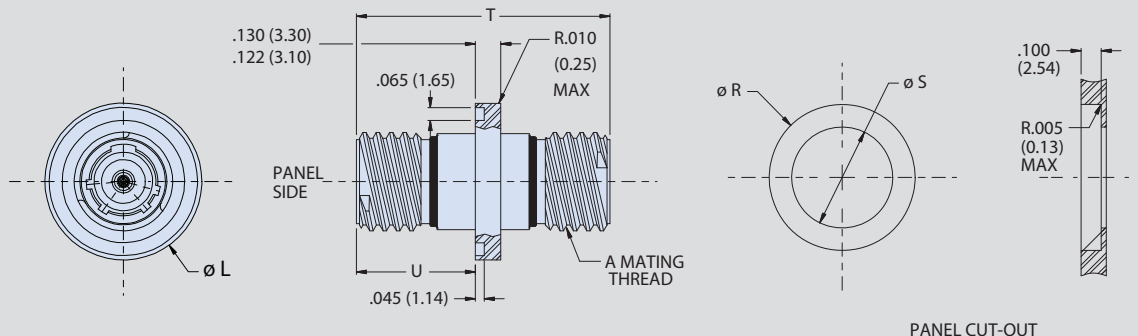
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A	105°	140°	215°	265°
B	102°	170°	248°	305°
C	80°	150°	230°	295°
D	68°	140°	205°	275°
E	64°	155°	234°	304°
F	72°	120°	200°	298°

Series 806 Mil-Aero Connectors

806-083 Hermetic Bulkhead Feedthrough with RF Contacts



806-083-13 Weld Mount

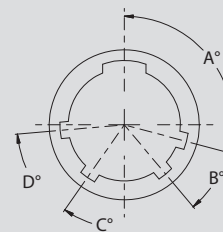


SHELL SIZES	A THREAD MATING	ϕL $\pm .002$ (0.05) FLANGE	ϕR $\pm .002$ (0.05) MTG HOLE	ϕS THRU
7	.4375-.067P-.2L-TS-2A	0.725 (18.42)	0.730 (18.54)	0.445 (11.30)
8	.5000-.067P-.2L-TS-2A	0.788 (20.02)	0.793 (20.14)	0.509 (12.93)
9	.5625-.067P-.2L-TS-2A	0.912 (23.16)	0.917 (23.29)	0.577 (14.66)
10	.6250-.067P-.2L-TS-2A	0.975 (24.76)	0.980 (24.89)	0.645 (16.38)
11	.6875-.067P-.2L-TS-2A	1.038 (26.37)	1.043 (26.49)	0.712 (18.08)
12	.7500-.067P-.2L-TS-2A	1.100 (27.94)	1.105 (28.07)	0.768 (19.51)
14	.8750-.067P-.2L-TS-2A	1.225 (31.12)	1.230 (31.24)	0.890 (22.61)
16	1.0000-.067P-.2L-TS-2A	1.350 (34.29)	1.355 (34.42)	1.015 (25.78)
18	1.1250-.067P-.2L-TS-2A	1.475 (37.47)	1.480 (37.59)	1.125 (28.58)
20	1.2500-.067P-.2L-TS-2A	1.600 (40.64)	1.605 (40.77)	1.275 (32.39)
22	1.3750-.067P-.2L-TS-2A	1.725 (43.82)	1.730 (43.94)	1.400 (35.56)
24	1.5000-.067P-.2L-TS-2A	1.850 (46.99)	1.855 (47.12)	1.525 (38.73)

Dimensions Based on Panel Thickness Option

DASH NO	T MAX	U MAX
-01	1.275 (32.39)	0.750 (19.05)
-02	1.400 (35.56)	0.875 (22.23)
-03	1.650 (41.91)	1.125 (28.58)

Polarization Key Code



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°
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F	72°	120°	200°	298°