

## Selection Guide

# Series 806

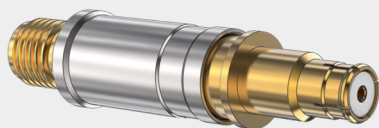
## Multi-Port RF Circular Connectors

- Mil-spec performance, micro miniature package
- Eighteen layouts for size #8, #12, or #16 RF contacts (sold separately)
- Rugged aluminum or stainless steel shells
- Environmental
- Scoop-proof interface
- EMI spring on plugs
- Snap-in, rear-release contacts
- Hermetic

### CONSTRUCTION

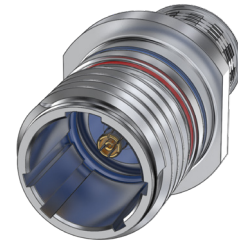
- Shell: aluminum or stainless steel
- Seal/Grommet: fluorosilicone blend
- Ground Spring: copper alloy

### G-Link<sup>RF</sup> Contacts



18 GHz G-Link<sup>RF</sup> contacts have a BMB-style mating end and a female SMA interface on the back end. Attach a standard SMA plug cable to the G-Link RF contact.

*One to 29 contacts, Size 8, 12, or 16.* Series 806 RF connectors have machined aluminum or stainless steel shells and fluorosilicone grommet for environmental protection. Plugs feature a copper alloy ground spring for EMI protection. Eighteen contact layouts available in eleven different shell sizes. Supplied without contacts, order #8 BMB, #12 SMPM, or #16 SMPs contacts separately.



## Connector Selection Guide



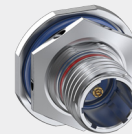
**806-072**  
Cable Plug  
(Socket Contacts)  
Page 55



**806-073**  
Wall-Mount Receptacle  
(Pin Contacts)  
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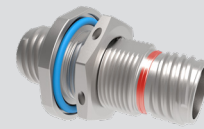
**806-079**  
In-Line Receptacle  
(Pin Contacts)  
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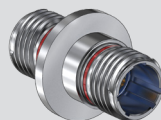
**806-080**  
Jam Nut Receptacle  
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**806-083-02**  
Hermetic Bulkhead Feedthru,  
Panel Mount  
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**806-083-07**  
Hermetic Bulkhead Feedthru,  
Jam Nut Mount  
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**806-083-13**  
Hermetic Bulkhead Feedthru,  
Weld Mount  
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SERIES 806 MULTI-PIN RF CONNECTORS

**806-072**  
 Plug Connector, Socket Contacts



**PART NUMBER**

<b>Base P/N</b>	Series 806 RF Plug (Socket Connector Less Contacts)	<b>806-072</b>	<b>ME</b>	<b>24RF8</b>	<b>M</b>	<b>A</b>
<b>Material/ Finish</b>	<b>NF</b> Alum/ Cad/O.D. over Electroless Nickel <b>MT</b> Alum/ Nickel-PTFE <b>ME</b> Alum/ Electroless Nickel <b>ZR</b> Alum/ Black Zinc-Nickel <b>ZL</b> SST/ Nickel Plating					
<b>Size and RF Insert Arrangement</b>	See Table					
<b>Shell Rear Style</b>	<b>M</b> Metric Accessory Threads <b>B</b> Nano Band Platform					
<b>Polarization</b>	<b>A (Normal), B, C, D, E, F</b>					

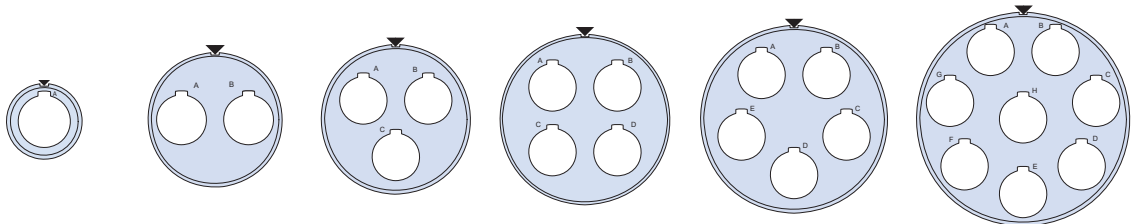
**POLARIZATION KEY CODE**

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 Size 8 RF Contact Arrangements**

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

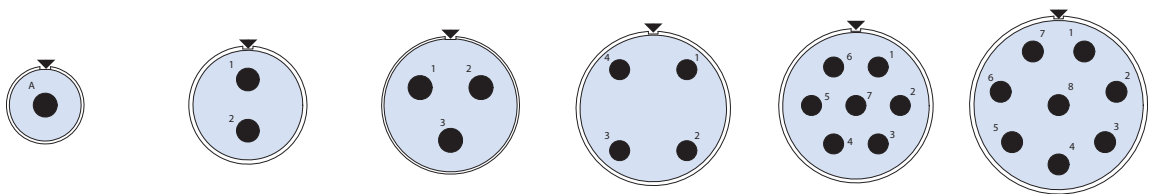


Arrangement No.	<b>10RF1</b>	<b>16RF2</b>	<b>18RF3</b>	<b>20RF4</b>	<b>22RF5</b>	<b>24RF8</b>
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**Series 806 Size 12 RF Contact Arrangements**

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

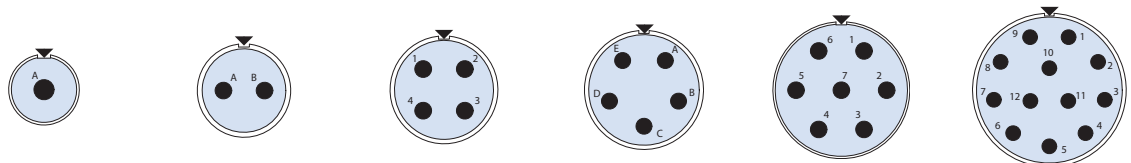


Arrangement No.	<b>9RF1</b>	<b>12RF2</b>	<b>14RF3</b>	<b>16RF4</b>	<b>16RF7</b>	<b>18RF8</b>
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**Series 806 Size 16 RF Contact Arrangements**

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

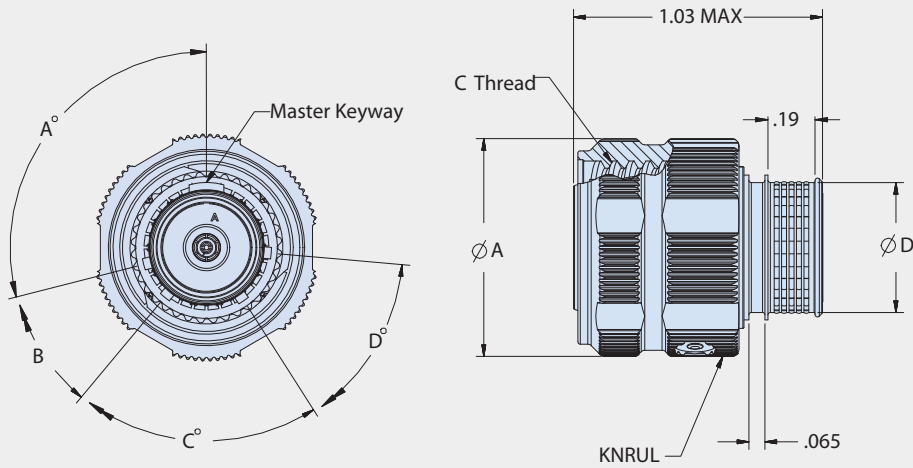


Arrangement No.	<b>8RF1</b>	<b>10RF2</b>	<b>11RF4</b>	<b>12RF5</b>	<b>14RF7</b>	<b>16RF12</b>
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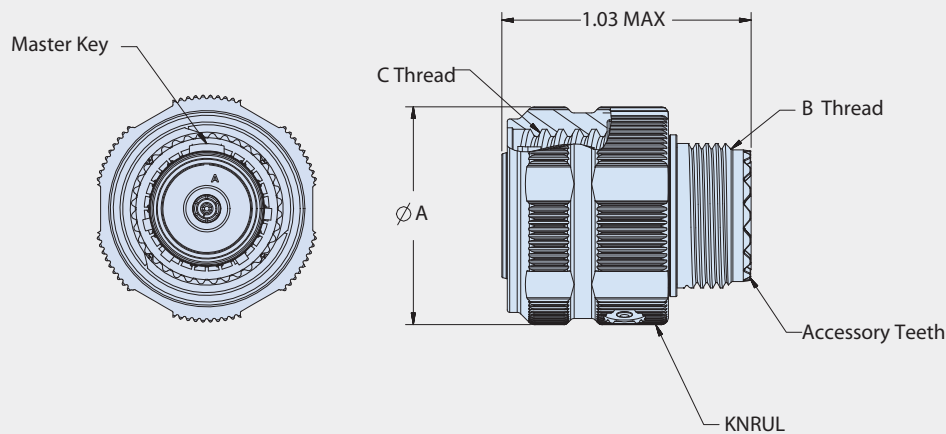
SERIES 806 MULTI-PIN RF CONNECTORS

**806-072**  
 Plug Connector (Socket Contacts)

**806-072 BAND PLATFORM**



**806-072 METRIC ACCESSORY THREAD**



Shell Size	Ø A Max	B Thread	C Mating THD Triple Start Modified 60° Stub ACME	Ø D
8	0.676	M10 X 1.0-6g-100R	0.500-.067P-.2L-TS-2B	0.327
9	0.771	M12 X 1.0-6g-100R	0.562-.067P-.2L-TS-2B	0.406
10	0.832	M14 X 1.0-6g-100R	0.625-.067P-.2L-TS-2B	0.484
11	0.890	M15 X 1.0-6g-100R	0.688-.067P-.2L-TS-2B	0.524
12	0.950	M17 X 1.0-6g-100R	0.750-.067P-.2L-TS-2B	0.603
14	1.110	M19 X 1.0-6g-100R	0.875-.067P-.2L-TS-2B	0.681
16	1.170	M22 X 1.0-6g-100R	1.000-.067P-.2L-TS-2B	0.782
18	1.350	M25 X 1.0-6g-100R	1.125-.067P-.2L-TS-2B	0.899
20	1.470	M28 X 1.0-6g-100R	1.250-.067P-.2L-TS-2B	1.043
22	1.600	M31 X 1.0-6g-100R	1.375-.067P-.2L-TS-2B	1.155
24	1.710	M34 X 1.0-6g-100R	1.500-.067P-.2L-TS-2B	1.273

**806-073**  
 Wall-Mount Receptacle (Pin Contacts)

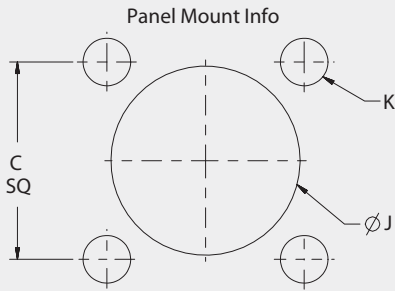


SERIES 806 MULTI-PIN RF CONNECTORS

**PART NUMBER**

		<b>806-073</b>	<b>ME</b>	<b>24RF8</b>	<b>M</b>	<b>T</b>	<b>A</b>
<b>Base P/N</b>	Series 806 RF Wall-Mt. Receptacle (Pin Connector Less Contacts)						
<b>Material/ Finish</b>	<b>NF</b>	Alum/ Cad/O.D. over Electroless Nickel					
	<b>MT</b>	Alum/ Nickel-PTFE					
	<b>ME</b>	Alum/ Electroless Nickel					
	<b>ZR</b>	Alum/ Black Zinc-Nickel					
	<b>ZL</b>	SST/ Nickel Plating					
<b>Insert Arrangement</b>	(See 806-015 For Contact Arr)						
<b>Shell Rear Style</b>	<b>M</b>	Metric Accessory Threads					
	<b>B</b>	Nano Band Platform					
<b>Panel Mounting Hole Style</b>	<b>T</b>	Thru Hole					
	<b>C</b>	Clinch Nut, 4-40 Thd M45938/6-4c (For Rear Panel Mounting)					
<b>Polarization</b>	See Table III						

**MOUNT INFO**



Size	J	With Clinch Nut	Without Clinch Nut
8	0.505		
9	0.572		
10	0.640		
11	0.707		
12	0.762		0.128
14	0.885	0.128	
16	1.01		
18	1.12		
20	1.27		
22	1.395		0.154
24	1.520		

**DIMENSIONS**

Shell Size	A Max	B Thread	C	D Mating Thread	Ø E Thru Hole	F Max	G Max	Ø H
8	0.822	M10 X 1-6g-100R	0.531	.5000-.067P-.2L-TS-2A	0.128	0.100	1.040	0.327
9	0.885	M12 X 1-6g-100R	0.594	.5625-.067P-.2L-TS-2A			1.130	0.406
10	0.913	M14 X 1-6g-100R	0.625	.6250-.067P-.2L-TS-2A			1.174	0.484
11	0.960	M15 X 1-6g-100R	0.670	.6875-.067P-.2L-TS-2A			1.200	0.524
12	1.040	M17 X 1-6g-100R	0.765	.7500-.067P-.2L-TS-2A			1.354	0.603
14	1.133	M19 X 1-6g-100R	0.859	.8750-.067P-.2L-TS-2A			1.510	0.681
16	1.227	M22 X 1-6g-100R	0.938	1.000-.067P-.2L-TS-2A	1.620	0.782		
18	1.320	M25 X 1-6g-100R	1.016	1.1250-.067P-.2L-TS-2A	1.784	0.899		
20	1.444	M28 X 1-6g-100R	1.109	1.250-.067P-.2L-TS-2A	1.910	1.043		
22	1.570	M31 X 1-6g-100R	1.203	1.3750-.067P-.2L-TS-2A	0.154	0.125	2.083	1.155
24	1.696	M34 X 1-6g-100R	1.312	1.5000-.067P-.2L-TS-2A			2.200	1.273

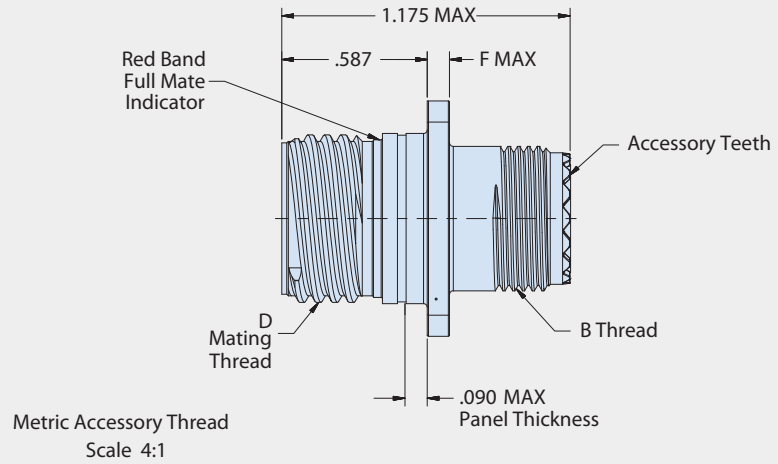
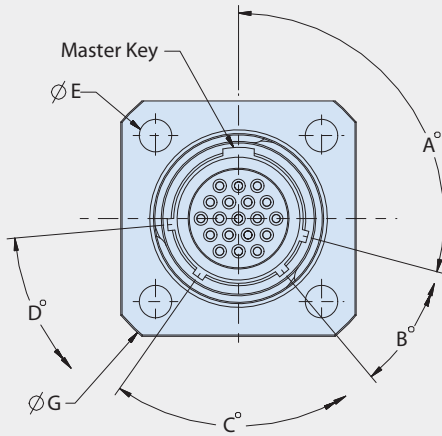
**POLARIZATION KEY CODE TABLE III**

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

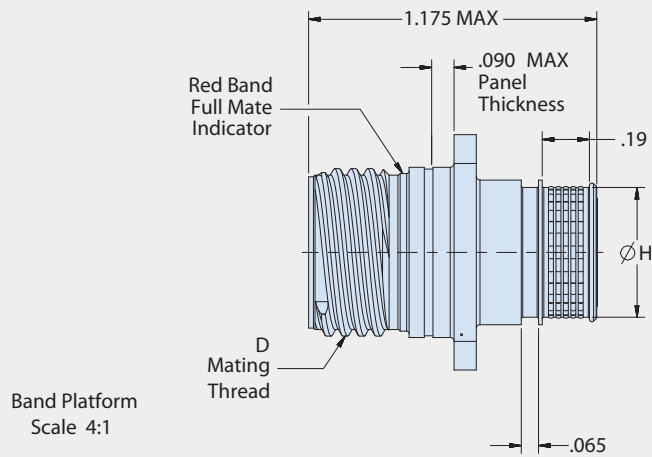
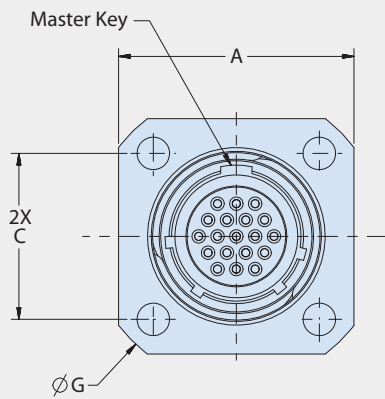
**806-073**  
 Wall-Mount Receptacle (Pin Contacts)

SERIES 806 MULTI-PIN RF CONNECTORS

**806-073 METRIC ACCESSORY THREAD**



**806-073 BAND PLATFORM**



# 806-079

## In-Line Receptacle (Pin Contacts)



SERIES 806 MULTI-PIN RF CONNECTORS

### PART NUMBER

		<b>806-079</b>	<b>-ME</b>	<b>24RF8</b>	<b>M</b>	<b>A</b>
<b>Base P/N</b>	Series 806 RF In-Line Receptacle (Pin Connector Less Contacts)					
<b>Material/ Finish</b>	<b>NF</b>	Alum/ Cad/O.D. over Electroless Nickel				
	<b>MT</b>	Alum/ Nickel-PTFE				
	<b>ME</b>	Alum/ Electroless Nickel				
	<b>ZR</b>	Alum/ Black Zinc-Nickel				
	<b>ZL</b>	SST/ Nickel Plating				
<b>Insert Arrangement</b>	(See 806-015 For Contact Arrangement)					
<b>Shell Style</b>	<b>M</b>	Metric Accessory Threads				
	<b>B</b>	Band (Platform for Attaching Cable Shield)				
<b>Polarization</b>	See Table III					

### DIMENSIONS

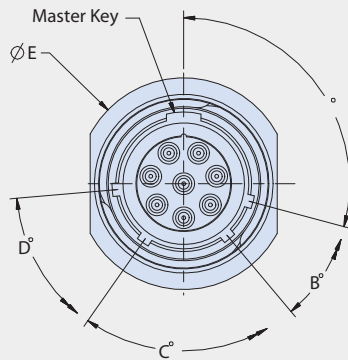
Shell Size	Ø A ± 0.01	B Thread	C Mating Thread	D Max	Ø E	Ø F
8	0.545	M10 X 1-6g-100R	.5000-.067P-.2L-TS-2A	0.100	0.635	0.327
9	0.612	M12 X 1-6g-100R	.5625-.067P-.2L-TS-2A		0.702	0.406
10	0.680	M14 X 1-6g-100R	.6250-.067P-.2L-TS-2A		0.770	0.484
11	0.747	M15 X 1-6g-100R	.6875-.067P-.2L-TS-2A		0.837	0.524
12	0.803	M17 X 1-6g-100R	.7500-.067P-.2L-TS-2A		0.893	0.603
14	0.925	M19 X 1-6g-100R	.8750-.067P-.2L-TS-2A		1.015	0.681
16	1.050	M22 X 1-6g-100R	1.000-.067P-.2L-TS-2A		1.140	0.782
18	1.16	M25 X 1-6g-100R	1.1250-.067P-.2L-TS-2A	1.250	0.899	
20	1.310	M28 X 1-6g-100R	1.250-.067P-.2L-TS-2A	0.125	1.400	1.043
22	1.435	M31 X 1-6g-100R	1.3750-.067P-.2L-TS-2A		1.525	1.155
24	1.560	M34 X 1-6g-100R	1.500-.067P-.2L-TS-2A		1.650	1.273

### POLARIZATION KEY CODE TABLE III

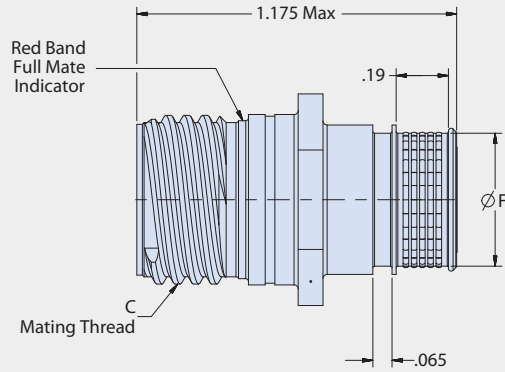
POS	A	B	C	D
A	105	140	215	265
B	102	170	248	305
C	80	150	230	295
D	68	140	205	275
E	64	155	234	304
F	72	120	200	298

**806-079**  
 In-Line Receptacle (Pin Contacts)

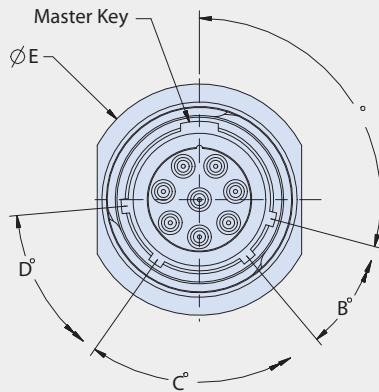
**806-079 METRIC ACCESSORY THREAD**



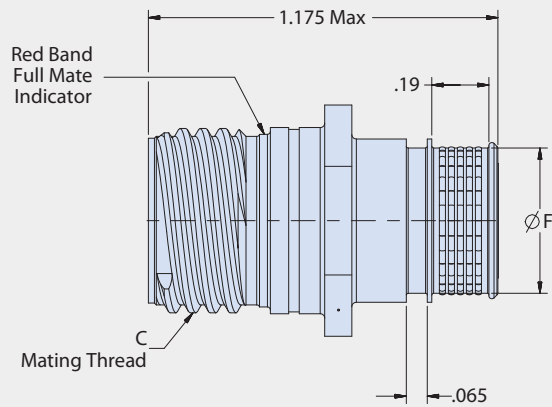
BAND PLATFORM



**806-079 BAND PLATFORM**

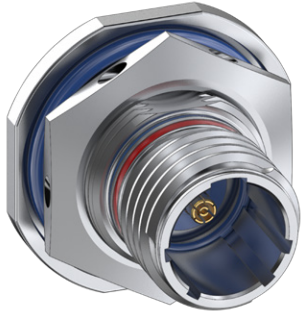


BAND PLATFORM



SERIES 806 MULTI-PIN RF CONNECTORS

**806-080**  
**Jam-Nut Receptacle (Pin Contacts)**



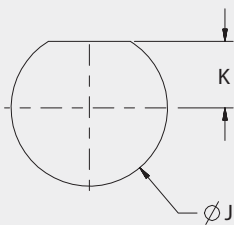
SERIES 806 MULTI-PIN RF CONNECTORS

**PART NUMBER**

		<b>806-080</b>	<b>ME</b>	<b>24RF8</b>	<b>M</b>	<b>A</b>
<b>Base P/N</b>	Series 806 RF Jam-Nut Receptacle (Pin Connector Less Contacts)					
<b>Material/ Finish</b>	<b>NF</b> Alum/ Cad/O.D. over Electroless Nickel <b>MT</b> Alum/ Nickel-PTFE <b>ME</b> Alum/ Electroless Nickel <b>ZR</b> Alum/ Black Zinc-Nickel <b>ZL</b> SST/ Nickel Plating					
<b>Insert Arrangement</b>	(See 806-015 For Contact Arrangement)					
<b>Shell Style</b>	<b>M</b> Metric Accessory Threads <b>B</b> Band (Platform for Attaching Cable Shield)					
<b>Polarization Keyway Code</b>	See Table III					

**MOUNT INFO**

RECOMMENDED MOUNTING HOLE DIMENSIONS



Size	K +.005 -.00	Ø J +.005 -.00
8	0.256	0.601
9	0.287	0.640
10	0.318	0.719
11	0.350	0.759
12	0.381	0.837
14	0.443	0.955
16	0.505	1.073
18	0.568	1.192
20	0.630	1.349
22	0.693	1.467
24	0.775	1.624

**DIMENSIONS**

Shell Size	Ø A Max	B Thread	C Max	D Mating Thread	E Max	F Thread	Ø H
8	0.980	M10 X 1-6g-100R	0.920	.5000-.067P-.2L-TS-2A	0.100	M15 X 1-6g-100R	0.327
9	1.040	M12 X 1-6g-100R	0.980	.5625-.067P-.2L-TS-2A		M16 X 1-6g-100R	0.406
10	1.110	M14 X 1-6g-100R	1.050	.6250-.067P-.2L-TS-2A		M18 X 1-6g-100R	0.484
11	1.160	M15 X 1-6g-100R	1.110	.6875-.067P-.2L-TS-2A		M19 X 1-6g-100R	0.524
12	1.230	M17 X 1-6g-100R	1.170	.7500-.067P-.2L-TS-2A		M21 X 1-6g-100R	0.603
14	1.360	M19 X 1-6g-100R	1.320	.8750-.067P-.2L-TS-2A		M24 X 1-6g-100R	0.681
16	1.515	M22 X 1-6g-100R	1.444	1.000-.067P-.2L-TS-2A		M27 X 1-6g-100R	0.782
18	1.610	M25 X 1-6g-100R	1.570	1.1250-.067P-.2L-TS-2A		M30 X 1-6g-100R	0.899
20	1.850	M28 X 1-6g-100R	1.760	1.250-.067P-.2L-TS-2A	0.128	M34 X 1-6g-100R	1.043
22	2.010	M31 X 1-6g-100R	1.913	1.3750-.067P-.2L-TS-2A		M37 X 1-6g-100R	1.155
24	2.195	M34 X 1-6g-100R	2.070	1.500-.067P-.2L-TS-2A		M41 X 1-6g-100R	1.273

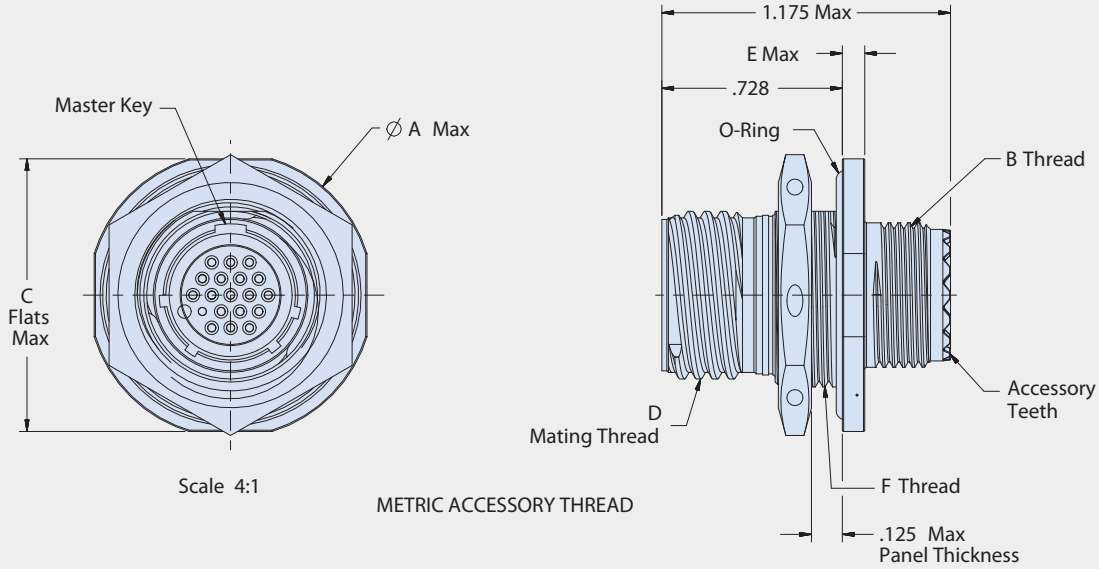
**POLARIZATION KEY CODE TABLE III**

POS	A	B	C	D
A	105	140	215	265
B	102	170	248	305
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E	64	155	234	304
F	72	120	200	298

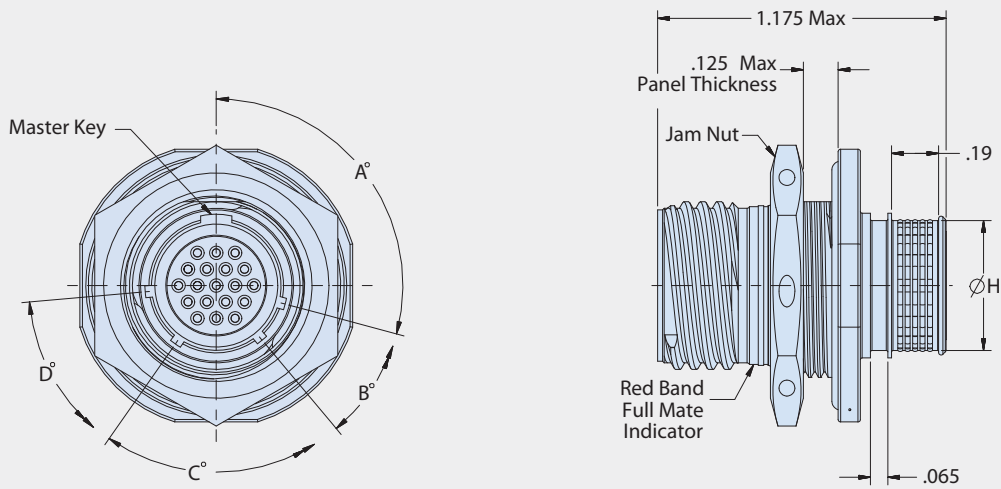


**806-080**  
 Jam-Nut Receptacle (Pin Contacts)

**806-080 METRIC ACCESSORY THREAD**



**806-080 BAND PLATFORM**



SERIES 806 MULTI-PIN RF CONNECTORS

**806-083**  
 Hermetic Bulkhead Feed-Thru

SERIES 806 MULTI-PIN RF CONNECTORS



**PART NUMBER**

		806-083	-07	Z1	9	C	1	P	A	-01	-75
<b>Base P/N</b>	Series 806 RF Hermetic Feedthru										
<b>Mounting Type</b>	01	Box Mount									
	07	Jam-Nut Mount									
	13	Weld Mount									
<b>Finish</b>	Z1	Passivated									
	ZL	Nickel Plated									
<b>Shell Size</b>											
<b>RF Contact</b>	C	Coax									
	D	Differential Twinax*									
	Q	QUADRAX*									
	T	Concentric Twinax*									
	*Only Size 8 Contacts										
	For Signal/Power, see 806-081										
<b>Insert Arrangement</b>	See 806-015 for Contact Arrangement										
<b>Contact Style</b>	P=Pin on Panel Side, Socket Opposite S=Socket on Panel Side, Pin Opposite										
<b>Keyway Polarization</b>	See Table III										
<b>Panel Thickness</b>	-01	.125									
	-02	.250									
	-03	.500									
<b>Nominal Impedance</b>	#12 & #8					Quadrax					
	-75=75OHM					-150=150 DHM					
	Omit for STD (50 DHM)					Omit for STD (100 DHM)					

**POLARIZATION KEY CODE TABLE III**

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

**PANEL THICKNESS**

	T Max	U Max
-01	1.275	.750
-02	1.400	.875
-03	1.650	1.125

**R/F STYLE CONTACT PERFORMANCE**

Size and Type	Frequency Max
12 Coax	2 GHz
8 Coax	1 GHz
8 Twinax (Conc.)	20 MHz
8 Quadrax	1 GHz

## 806-083

### Hermetic Bulkhead Feed-Thru

**DIMENSIONS TABLE I**

Shell Size	A Thread Mating	Ø B Max Flange	C Square Max Flange Flats	D Square BSC Mounting Holes	Ø E ±.010 Mounting Boss	F Max Flange	Ø G Max Flange	H Square Max Flange Flats
7	.4375-.067P-.2L-TS-2A	.968	.750	.469	.306	.100	.848	.908
8	.5000-.067P-.2L-TS-2A	1.040	.822	.531	.387		.980	.920
9	.5625-.067P-.2L-TS-2A	1.130	.885	.594	.468		1.040	.980
10	.6250-.067P-.2L-TS-2A	1.174	.913	.625	.546		1.110	1.050
11	.6875-.067P-.2L-TS-2A	1.240	.960	.670	.586		1.160	1.110
12	.7500-.067P-.2L-TS-2A	1.354	1.040	.765	.663		1.230	1.170
14	.8750-.067P-.2L-TS-2A	1.510	1.133	.859	.743		1.360	1.320
16	1.0000-.067P-.2L-TS-2A	1.620	1.227	.938	.842		1.515	1.444
18	1.1250-.067P-.2L-TS-2A	1.784	1.320	1.016	.959	1.610	1.570	
20	1.2500-.067P-.2L-TS-2A	1.810	1.444	1.109	1.105	.125	1.850	1.760
22	1.3750-.067P-.2L-TS-2A	2.083	1.570	1.203	1.215		2.010	1.913
24	1.5000-.067P-.2L-TS-2A	2.200	1.686	1.312	1.335		2.195	2.070

**DIMENSIONS (CONT.)**

Shell Size	J Max Flange	K Thread Mounting	Ø L ±.002 Flange	Ø M Thru MTG Holes	Ø N +.005/- .000 Mounting Hole	P +.005/- .000 Mounting Flat	Ø R ±.002 MTG Hole	Ø S Thru
7	.100	M13 X 1 -6g .100R	.725	.128	.522	.224	.730	.445
8		M15 X 1-6g .100R	.788		.601	.256	.793	.509
9		M16 X 1-6g .100R	.912		.640	.287	.917	.577
10		M18 X 1-6g .100R	.975		.719	.318	.980	.645
11		M19 X 1-6g .100R	1.038		.759	.350	1.043	.712
12		M21 X 1-6g .100R	1.100		.837	.381	1.105	.768
14		M24 X 1-6g .100R	1.225		.955	.443	1.230	.890
16		M27 X 1-6g .100R	1.350		1.073	.505	1.355	1.015
18	M30 X 1-6g .100R	1.475	1.192	.568	1.480	1.125		
20	.128	M34 X 1-6g .100R	1.600	.154	1.349	.630	1.605	1.275
22		M37 X 1-6g .100R	1.725		1.467	.693	1.730	1.400
24		M41 X 1-6g .100R	1.850		1.624	.755	1.855	1.525

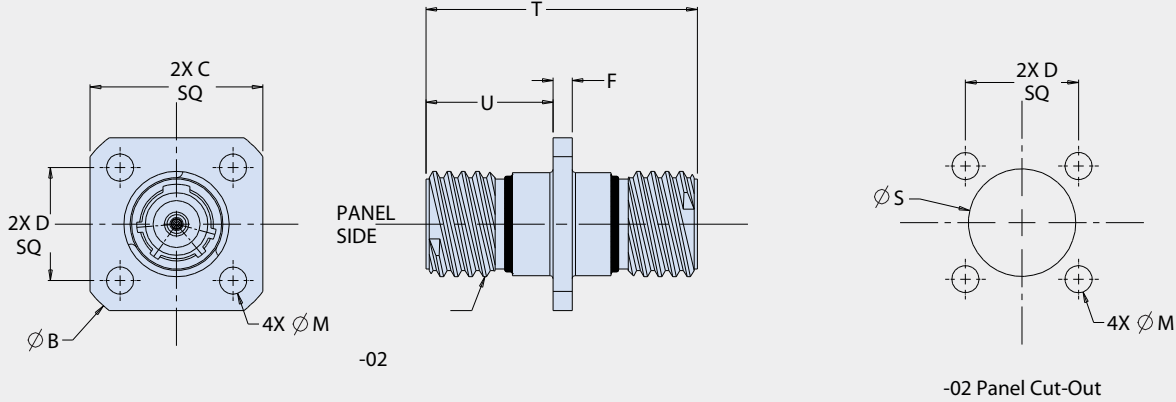
SERIES 806 MULTI-PIN RF CONNECTORS

## 806-083

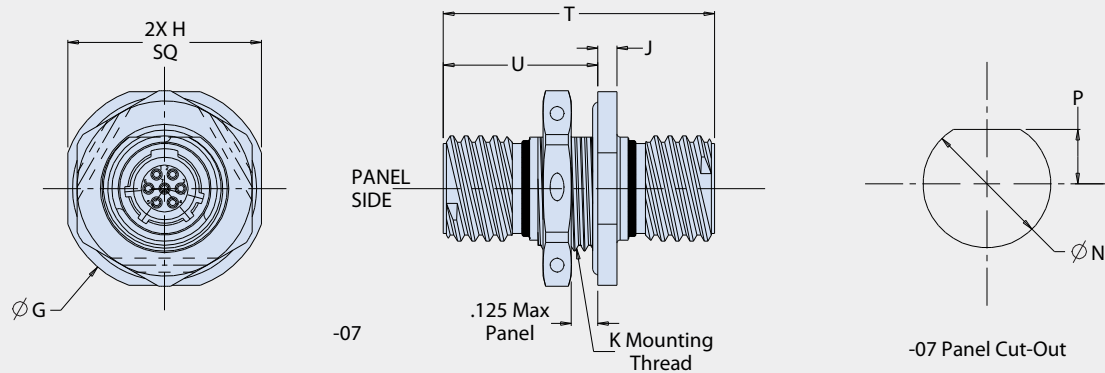
### Hermetic Bulkhead Feed-Thru

SERIES 806 MULTI-PIN RF CONNECTORS

#### 806-083-02 BOX MOUNT



#### 806-083-07 JAM-NUT MOUNT



#### 806-083-13 WELD-MOUNT

