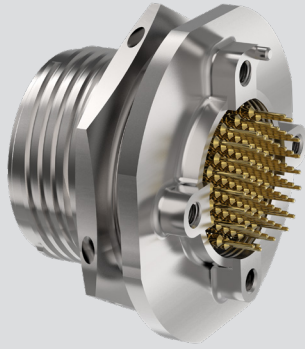


# Series 806 Mil-Aero Connectors



## 806-021 Jam-nut Receptacle, PC Tail or Solder Cup Contacts



### Features

- Triple-start stub ACME mating thread
- High density #22HD and #20HD 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  
#22HD contacts: 1300 VAC  
#20HD contacts: 1800 VAC
- 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 and jam-nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Potting compound: epoxy
- Dielectric inserts: high grade rigid dielectric
- Panel O-ring: fluorosilicone

806-021 panel mount jam-nut receptacles feature potted-in-place printed circuit board terminals, integral standoffs and threaded holes for secure attachment to rigid or flex circuit boards. Gold-plated terminals are factory-installed, non-removeable and sealed with epoxy. Boss on shell flange guarantees correct connector orientation. These high performance connectors are suitable for harsh environmental areas such as unpressurized aircraft zones subject to vibration, moisture, altitude, and temperature extremes.

How To Order						
SAMPLE PART NUMBER	806-021	-ME	10-15	S	2	A
<b>Product</b>	806-021 = Jam-nut Receptacle with PC Tails					
<b>Shell Material and Finish</b>	<b>ME</b> = Aluminum, Electroless Nickel <b>MT</b> = Aluminum, Ni/PTFE <b>ZR</b> = Aluminum, Black Zinc-Nickel <b>NF</b> = Aluminum, Olive Drab Cadmium <b>Z1</b> = Stainless Steel, Passivated					
<b>Arrangement Number (Shell Size - Insert Arr.)</b>	See Table 1					
<b>Contact Type</b>	<b>P</b> = Pin <b>S</b> = Socket <b>E</b> = Solder Cup, Pin <b>F</b> = Solder Cup, Socket Not Available with El Ochito contacts see 806-039					
<b>PC Tail Length</b>	PC Tail Length <b>1</b> = .125" (3.18 mm.) <b>2</b> = .250" (6.35 mm.)		Solder Cup <b>Omit</b> = Soldercup			
<b>Polarization</b>	<b>A B C D E F</b>					

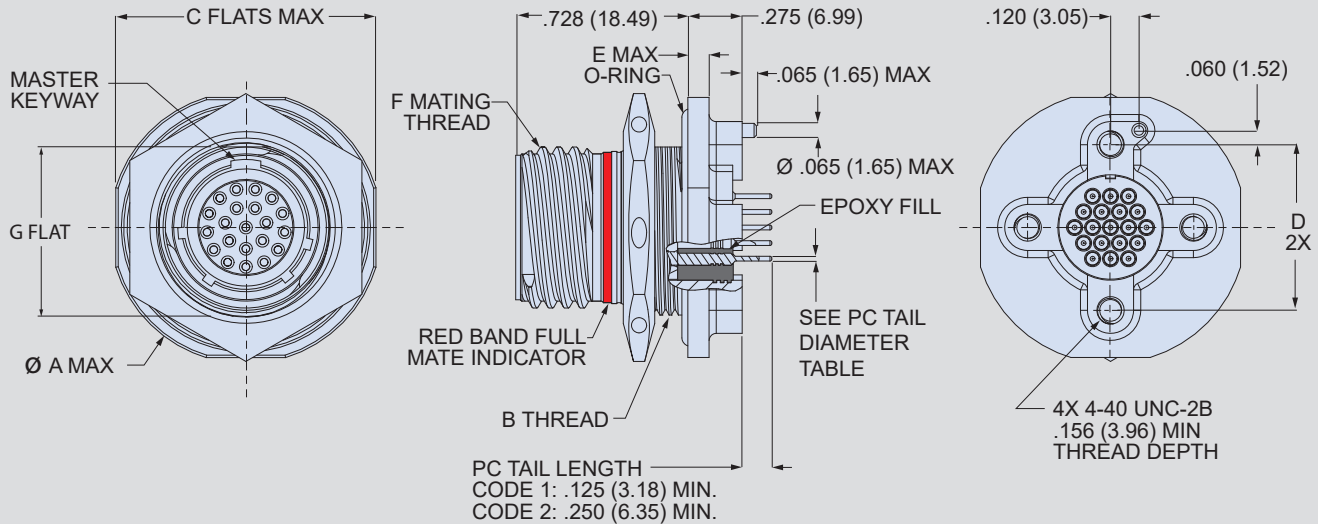
Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
<b>7-3</b>	3					<b>22-69</b>	69				<b>16-2</b>					2	
<b>8-4</b>	4				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

# ENVIRONMENTAL, MICRO MINIATURE CIRCULAR

## Series 806

### Mil-Aero Connectors

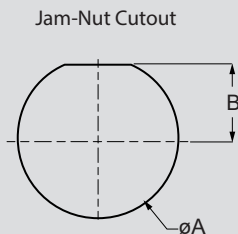
#### 806-021 Jam-nut Receptacle, PC Tail Contacts



**806-021 Receptacle Dimensions**

Shell Size	$\varnothing A$ Max	B Thread	C Max	D	E Max	F Mating Thread	G Flat
7	.908 (23.06)	M8x1.0-6g-0.100R	.848 (21.54)	.489 (12.42)	.100 (2.54)	.4375-.067P-2L-TS-2A	.463 (11.76)
8	.980 (24.89)	M15x1.0-6g-0.100R	.920 (23.37)	.534 (13.56)	.100 (2.54)	.5000-.067P-2L-TS-2A	.534 (13.56)
9	1.040 (26.42)	M16x1.0-6g-0.100R	.980 (24.89)	.579 (14.71)	.100 (2.54)	.5625-.067P-2L-TS-2A	.585 (14.86)
10	1.110 (28.19)	M18x1.0-6g-0.100R	1.050 (26.67)	.679 (17.25)	.100 (2.54)	.6250-.067P-2L-TS-2A	.656 (16.66)
11	1.160 (29.46)	M19x1.0-6g-0.100R	1.110 (28.19)	.734 (18.64)	.100 (2.54)	.6875-.067P-2L-TS-2A	.707 (17.96)
12	1.230 (31.24)	M21x1.0-6g-0.100R	1.170 (29.72)	.804 (20.42)	.100 (2.54)	.7500-.067P-2L-TS-2A	.777 (19.74)
14	1.360 (34.54)	M24x1.0-6g-0.100R	1.320 (33.53)	.891 (22.63)	.100 (2.54)	.8750-.067P-2L-TS-2A	.899 (22.83)
16	1.515 (38.48)	M27x1.0-6g-0.100R	1.444 (36.68)	1.049 (26.64)	.100 (2.54)	1.0000-.067P-2L-TS-2A	1.020 (25.91)
18	1.610 (40.89)	M30x1.0-6g-0.100R	1.570 (39.88)	1.148 (29.16)	.100 (2.54)	1.1250-.067P-2L-TS-2A	1.142 (29.01)
20	1.850 (46.99)	M34x1.0-6g-0.100R	1.760 (44.70)	1.252 (31.80)	.128 (3.25)	1.2500-.067P-2L-TS-2A	1.283 (32.59)
22	2.010 (51.05)	M37x1.0-6g-0.100R	1.913 (48.59)	1.369 (34.77)	.128 (3.25)	1.3750-.067P-2L-TS-2A	1.405 (35.69)
24	2.195 (55.75)	M41x1.0-6g-0.100R	2.070 (52.58)	1.509 (38.33)	.128 (3.25)	1.5000-.067P-2L-TS-2A	1.546 (39.27)

**806-021 Jam-nut D-Hole Dimensions**



Shell Size	$\varnothing A$ +.005/-0.00 (+0.13/-0.00)	B +.005/-0.00 (+0.13/-0.00)
7	.522 (13.26)	.224 (5.69)
8	.601 (15.27)	.256 (6.50)
9	.640 (16.26)	.287 (7.29)
10	.719 (18.26)	.318 (8.08)
11	.759 (19.28)	.350 (8.89)
12	.837 (21.26)	.381 (9.68)
14	.955 (24.26)	.443 (11.25)
16	1.073 (27.25)	.505 (12.83)
18	1.192 (30.28)	.568 (14.43)
20	1.349 (34.26)	.630 (16.00)
22	1.467 (37.26)	.693 (17.60)
24	1.624 (41.25)	.755 (19.18)

**PC Tail Diameter**

Contact Size	Diameter
#22 HD	.020 (0.51)
#20 HD	.030 (0.76)
#16	.062 (1.57)
#12	.094 (2.39)
#8	.180 (4.57)