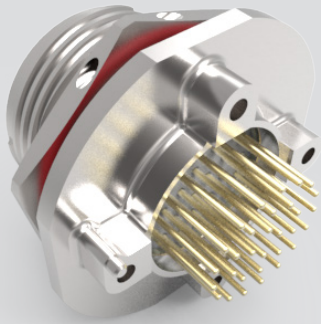


# Series 806 Mil-Aero Connectors



## 806-041 ThermaRex HT PC Tail Jam-Nut Connector



High-temperature 806-041 ThermaRex PCB jam-nut receptacles are rated to perform from -65° to 300°C. Intended for use in high temperature harsh applications, such as, engine aircraft zones subject to high heat, altitude, and temperature extremes while providing size and weight savings compared to conventional aerospace-grade circular connectors. Rugged ratchet mechanism and unique triple-start mating thread provide improved de-coupling resistance under vibration. Threaded PCB standoffs allow for secure attachment to PCB board or flex applications. Contacts are potted in place and non-removable. Parylene compatible.

### Features

- Operating temperature -65° to 300°C
- Triple-start stub ACME mating thread
- High density #22HD and #20HD arrangements for reduced size and weight plus #16, #12 and #8 standard and hybrid Crown Ring contact layouts
- Aerospace-grade materials, construction
- Band platform or accessory threads

### Specifications

- Operating temperature:  
Finish Z1: -65°C to +300°C
- Dielectric withstanding voltage  
#22HD contacts: 1300 VAC  
#20HD contacts: 1800 VAC  
#16 contacts: varies, contact factory  
#12 contacts: varies, contact factory  
#8 contacts: varies, contact factory
- 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

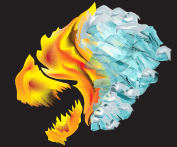
- Shell, jam-nut: passivated CRES
- Pin contact: copper alloy, gold plate
- Insulator: high grade ceramic dielectric
- Interfacial seal, grommet: high-temp silicone

How To Order ThermaRex Series 806 Mil-Aero Jam-nut Receptacle							
SAMPLE PART NUMBER		806-041	Z1	11-19	P	1	N
Series / Basic Part No.	806-041 ThermaRex PCB jam-nut receptacle						
Material/Finish	Z1 = Passivated CRES						
Shell Size/Insert Arr.	See Table I						
Contact Style	P = Pin contacts only						
PC Tail Length	1 = .125" 2 = .250"						
Polarization	A, B, C, D, E, F						

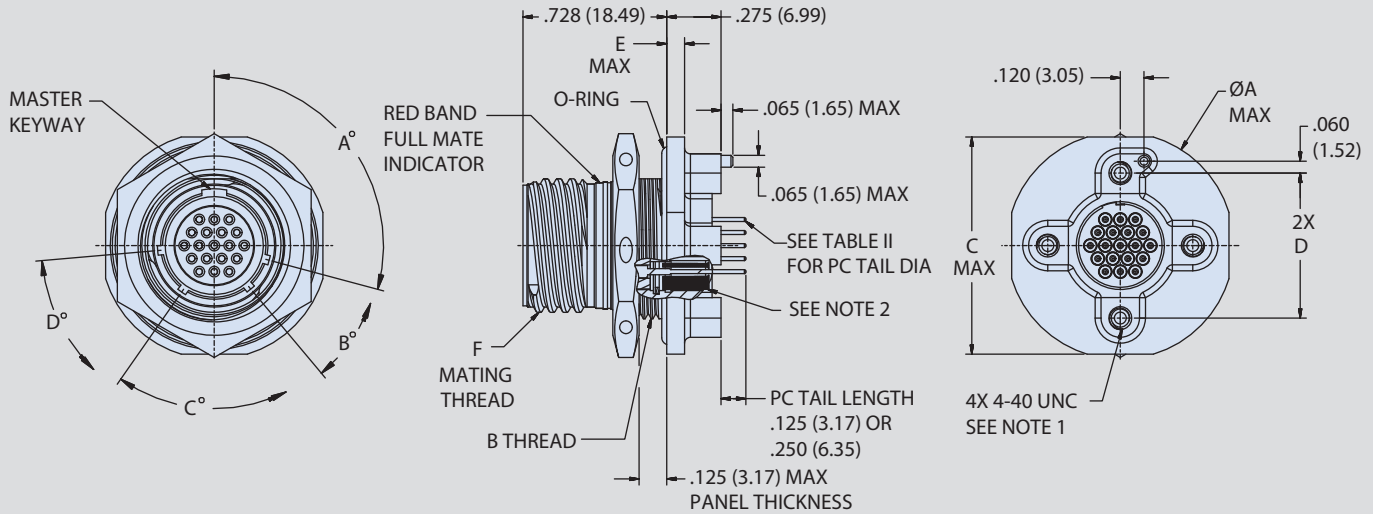
Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69	69				16-2				2		
8-4	4					24-92	92				18-3				3		
8-7	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

## 806-041 ThermoRex HT PC Tail Jam-Nut Connector



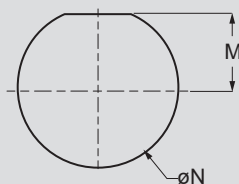
ThermoRex™  
HT



806-041 Dimensions

Shell Size	Øa Max	B Thread	C Max	D	E Max	F Mating Thread
7	0.848 (21.54)	M8X 1-6g-.100R	0.908 (23.06)	0.489 (12.42)	0.100 (2.54)	.4375-.067P-.2L-TS-2A
8	0.980 (24.89)	M15 X 1-6g-.100R	0.920 (23.37)	0.534 (13.56)		.5000-.067P-.2L-TS-2A
9	1.040 (26.42)	M16 X 1-6g-.100R	0.980 (24.89)	0.579 (14.71)		.5625-.067P-.2L-TS-2A
10	1.110 (28.19)	M18 X 1-6g-.100R	1.050 (26.67)	0.679 (17.25)		.6250-.067P-.2L-TS-2A
11	1.160 (29.46)	M19 X 1-6g-.100R	1.110 (28.19)	0.734 (18.64)		.6875-.067P-.2L-TS-2A
12	1.230 (31.24)	M21 X 1-6g-.100R	1.170 (29.72)	0.804 (20.42)		.7500-.067P-.2L-TS-2A
14	1.360 (34.54)	M24 X 1-6g-.100R	1.320 (33.53)	0.891 (22.63)		.8750-.067P-.2L-TS-2A
16	1.515 (38.48)	M27 X 1-6g-.100R	1.444 (36.68)	1.049 (26.64)		1.000-.067P-.2L-TS-2A
18	1.610 (40.89)	M30 X 1-6g-.100R	1.570 (39.88)	1.148 (29.16)		1.1250-.067P-.2L-TS-2A
20	1.850 (46.99)	M34 X 1-6g-.100R	1.760 (44.70)	1.252 (31.80)		1.250-.067P-.2L-TS-2A
22	2.010 (51.05)	M37 X 1-6g-.100R	1.913 (48.59)	1.369 (34.77)	0.128 (3.25)	1.3750-.067P-.2L-TS-2A
24	2.195 (55.75)	M41 X 1-6g-.100R	2.070 (52.58)	1.509 (38.33)		1.5000-.067P-.2L-TS-2A

Jam-Nut Cutout



Recommended Mounting Hole

Shell Size	Recommended Mounting Hole	
	M +.005 (0.13) 0.000 (0.00)	N +.005 (0.13) 0.00 (0.00)
7	.224 (5.69)	.522 (13.26)
8	.256 (6.50)	.601 (15.27)
9	.287 (7.29)	.640 (16.26)
10	.318 (8.08)	.719 (18.26)
11	.350 (8.89)	.759 (19.28)
12	.381 (9.68)	.837 (21.26)
14	.443 (11.25)	.955 (24.26)
16	.505 (12.83)	1.073 (27.25)
18	.568 (14.43)	1.192 (30.28)
20	.630 (16.00)	1.349 (34.26)
22	.693 (17.60)	1.467 (37.26)
24	.755 (19.18)	1.624 (41.25)

Table II: PC Tail Diameter

Contact Size	PC Tail Dia.
20	.030 (0.76)
22	.020 (0.51)