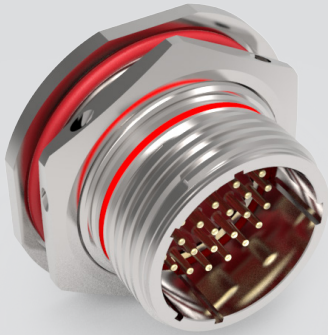


# Series 806 Mil-Aero Connectors

## 806-053 ThermaRex HT Jam-Nut



High-temperature 806-053 ThermaRex jam-nut receptacles are rated to perform from -65° to 300°C while providing size and weight savings compared to conventional aerospace-grade circular connectors. Unique triple-start mating thread provide improved de-coupling resistance under vibration. Series 806 enhanced performance connectors are intended for use in high temperature harsh application areas such as engine aircraft zones subject to high heat, altitude, and temperature extremes. Connectors feature snap-in, rear release Crown Ring contacts (shielded, high-speed, or RF contacts not supported).

### Features

- Operating temperature -65° to 300°C
- Triple-start stub ACME mating thread
- High density #20HD and #22HD arrangements for reduced size and weight plus size #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: passivated CRES
- Pin contact: copper alloy, gold plate
- Skt contact: copper alloy, gold plate; skt hood: CRES; crown ring: spring grade CRES
- 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		806-053	Z1	11-19	S	M A
Series / Basic Part No.	806-053 ThermaRex jam-nut receptacle					
Material/Finish	Z1 = Passivated CRES					
Shell Size/Insert Arr.	See Table I					
Contact Style	P = Pin A = Pin connector, less contacts S = Socket B = Socket connector, less contacts					
Shell Style	M = Metric accessory thread B = Banding platform					
Polarization	A, B, C, D, E, F					

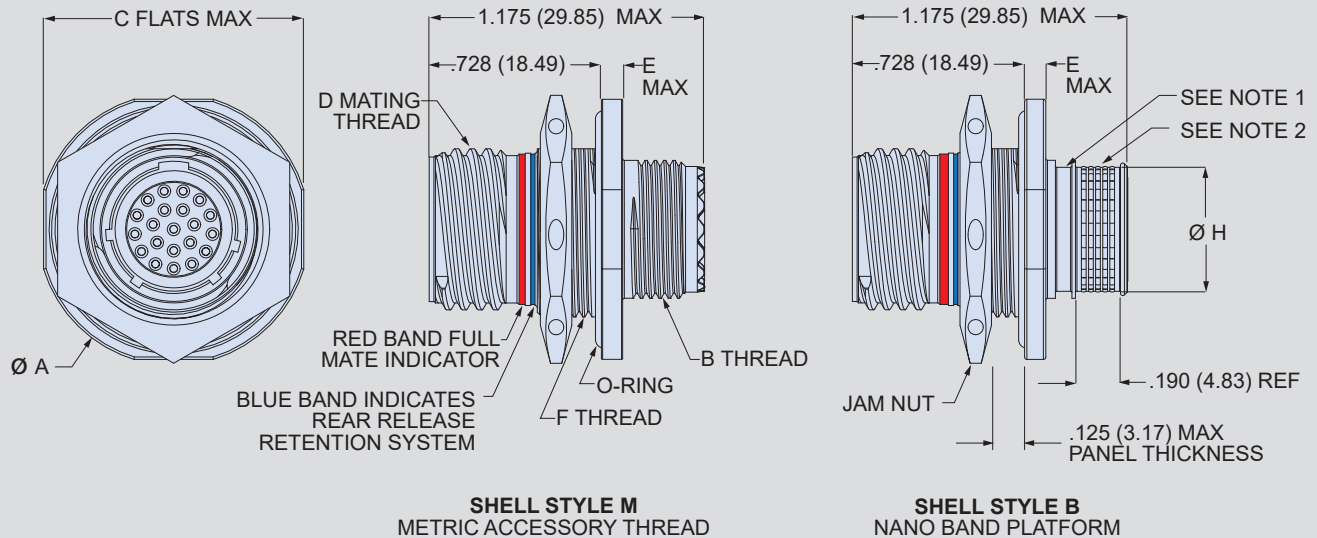
Table I: Shell Size - Insert Arrangement															
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout			
	22HD	20HD	16	12	8		22HD	20HD	16	12	8				
7-3	3					22-69	69				16-2				2
8-4	4					24-92	92				18-3				3
8-7	7					8-1		1			20-4				4
9-11	11					10-2		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

# HIGH-TEMPERATURE, MICRO MINIATURE CIRCULAR

## Series 806

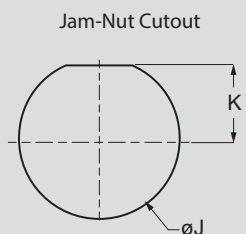
### Mil-Aero Connectors

#### 806-053 ThermoRex HT Jam-Nut



**806-053 Receptacle Dimensions**

Shell Size	ØA Max	B Thread	C Max	D Mating Thread	E Max	F Thread	ØH
7	.848 (21.54)	M8x1.0-6g-0.100R	.908 (23.06)	.4375-.067P-.2L-TS-2A	.100 (2.54)	M13x1.0-6g-0.100R	.265 (6.73)
8	.980 (24.89)	M10x1.0-6g-0.100R	.920 (23.37)	.5000-.067P-.2L-TS-2A	.100 (2.54)	M15x1.0-6g-0.100R	.327 (8.31)
9	1.040 (26.42)	M12x1.0-6g-0.100R	.980 (24.89)	.5625-.067P-.2L-TS-2A	.100 (2.54)	M16x1.0-6g-0.100R	.406 (10.31)
10	1.110 (28.19)	M14x1.0-6g-0.100R	1.050 (26.67)	.6250-.067P-.2L-TS-2A	.100 (2.54)	M18x1.0-6g-0.100R	.484 (12.29)
11	1.160 (29.46)	M15x1.0-6g-0.100R	1.110 (28.19)	.6875-.067P-.2L-TS-2A	.100 (2.54)	M19x1.0-6g-0.100R	.524 (13.31)
12	1.230 (31.24)	M17x1.0-6g-0.100R	1.170 (29.72)	.7500-.067P-.2L-TS-2A	.100 (2.54)	M21x1.0-6g-0.100R	.603 (15.32)
14	1.360 (34.54)	M19x1.0-6g-0.100R	1.320 (33.53)	.8750-.067P-.2L-TS-2A	.100 (2.54)	M24x1.0-6g-0.100R	.681 (17.30)
16	1.515 (38.48)	M22x1.0-6g-0.100R	1.444 (36.68)	1.0000-.067P-.2L-TS-2A	.100 (2.54)	M27x1.0-6g-0.100R	.782 (19.86)
18	1.610 (40.89)	M25x1.0-6g-0.100R	1.570 (39.88)	1.1250-.067P-.2L-TS-2A	.100 (2.54)	M30x1.0-6g-0.100R	.899 (22.83)
20	1.850 (46.99)	M28x1.0-6g-0.100R	1.760 (44.70)	1.2500-.067P-.2L-TS-2A	.128 (3.25)	M34x1.0-6g-0.100R	1.043 (26.49)
22	2.010 (51.05)	M31x1.0-6g-0.100R	1.913 (48.59)	1.3750-.067P-.2L-TS-2A	.128 (3.25)	M37x1.0-6g-0.100R	1.155 (29.34)
24	2.195 (55.75)	M34x1.0-6g-0.100R	2.070 (52.58)	1.5000-.067P-.2L-TS-2A	.128 (3.25)	M41x1.0-6g-0.100R	1.273 (32.33)



**Recommended Mounting Hole**

SHELL SIZE	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)

- NOTES:**
1. Boot groove for use with 809-463 ThermoRex Autoshrink boots
  2. Terminate shield with Glenair Band-Master ATS tool 601-108 and Glenair Nanoband
  3. High temperature crown ring pin and socket contacts required to meet higher operating temps