

Series 806 Mil-Aero Connectors

806-052 ThermaRex HT Square Flange



High-temperature 806-052 ThermaRex PCB square flange 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. Available with integral Nano Band platform or metric accessory threads and 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 #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: contact factory
#12 contacts: contact factory
#8 contacts: 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 Square Flange Receptacle									
SAMPLE PART NUMBER		806-052	Z1	11-19	S	M	T	A	
Series / Basic Part No.	806-052 ThermaRex square-flange Rcptl.								
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						
Panel Mounting	T = Thru-hole								
Polarization	A, B, C, D, E, F								

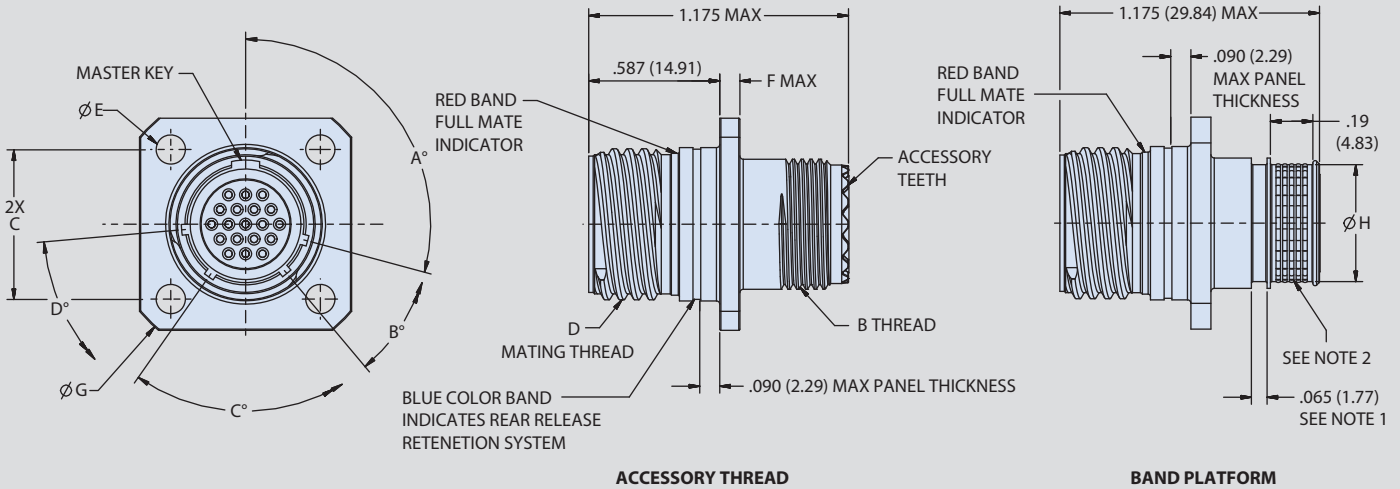
Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69	69				16-2					2	
8-4	4					24-92	92				18-3					3	
8-7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

HIGH-TEMPERATURE, MICRO MINIATURE CIRCULAR

Series 806

Mil-Aero Connectors

806-052 ThermoRex HT Square Flange



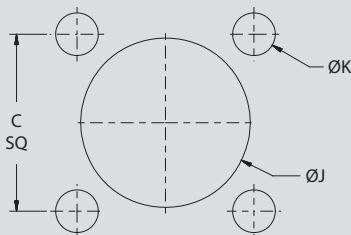
806-052 Receptacle Dimensions

Shell Size	A Max	B Thread	C	D Mating Thread	ØE	F Max	G Max	H Max
7	.750 (19.05)	M8x1.0-6g-0.100R	.469 (11.91)	.4375-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	.968 (24.59)	.265 (6.73)
8	.822 (20.88)	M10x1.0-6g-0.100R	.531 (13.49)	.5000-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.040 (26.42)	.327 (8.31)
9	.885 (22.48)	M12x1.0-6g-0.100R	.594 (15.09)	.5625-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.130 (28.70)	.406 (10.31)
10	.913 (23.19)	M14x1.0-6g-0.100R	.625 (15.88)	.6250-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.174 (29.82)	.484 (12.29)
11	.960 (24.38)	M15x1.0-6g-0.100R	.670 (17.02)	.6875-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.200 (30.48)	.524 (13.31)
12	1.040 (26.42)	M17x1.0-6g-0.100R	.765 (19.43)	.7500-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.354 (34.39)	.603 (15.32)
14	1.133 (28.78)	M19x1.0-6g-0.100R	.859 (21.82)	.8750-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.510 (38.35)	.681 (17.30)
16	1.227 (31.17)	M22x1.0-6g-0.100R	.938 (23.83)	1.0000-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.620 (41.15)	.782 (19.86)
18	1.320 (33.53)	M25x1.0-6g-0.100R	1.016 (25.81)	1.1250-.067P-.2L-TS-2A	.128 (3.25)	.100 (2.54)	1.784 (45.31)	.899 (22.83)
20	1.444 (36.68)	M28x1.0-6g-0.100R	1.109 (28.17)	1.2500-.067P-.2L-TS-2A	.154 (3.91)	.125 (3.18)	1.910 (48.51)	1.043 (26.49)
22	1.570 (39.88)	M31x1.0-6g-0.100R	1.203 (30.56)	1.3750-.067P-.2L-TS-2A	.154 (3.91)	.125 (3.18)	2.083 (52.91)	1.155 (29.34)
24	1.696 (43.08)	M34x1.0-6g-0.100R	1.312 (33.32)	1.5000-.067P-.2L-TS-2A	.154 (3.91)	.125 (3.18)	2.200 (55.88)	1.273 (32.33)

Panel Cut-Out Dimensions

Shell Size	J	K
7	.443 (11.25)	.128 (3.25)
8	.505 (12.83)	.128 (3.25)
9	.572 (14.53)	.128 (3.25)
10	.640 (16.26)	.128 (3.25)
11	.707 (17.96)	.128 (3.25)
12	.762 (19.35)	.128 (3.25)
14	.885 (22.48)	.128 (3.25)
16	1.010 (25.65)	.128 (3.25)
18	1.120 (28.45)	.128 (3.25)
20	1.270 (32.26)	.154 (3.91)
22	1.395 (35.43)	.154 (3.91)
24	1.520 (38.61)	.154 (3.91)

Square Flange Cutout



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