

The widest range of
mission-critical interconnect
technologies in the world

SERIES
806
MIL-AERO



Series 806 Mil-Aero

Series 806 Mil-Aero



Next-generation high-density connector for demanding aerospace and defense applications

- Signal/sensor interconnect for both pressurized and non-pressurized airframe applications or suitable applications
- Meets 38999HD performance benchmarks (altitude immersion, vibration and shock, mating durability, temperature and voltage)
- Replaces legacy large form-factor connector series (38999, 5015, 26482)



806 Mil-Aero Key Application Area:



SWAMP

Severe Wind And Moisture-Problem

Engine areas

Nacelles

Wings

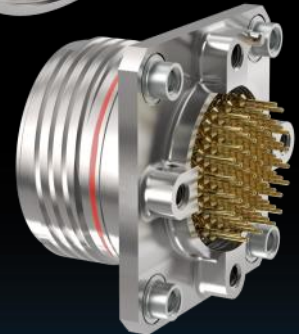
Wheel Wells

Series 806 Mil-Aero Advantages

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors

- Higher Temperature ✓
- Higher Vibration ✓
- Improved Moisture Resistance ✓
- Higher Voltage ✓
- Lightning Strike ✓



Series 806 Mil-Aero Higher Temperature Rating



Compared to other microminiature circular connectors

- +200°C continuous operating temperature
- Thermoset epoxy resin insulators
- Mechanical insert retention



Series 806 Mil-Aero Higher Vibration



Compared to other microminiature circular connectors

The Series 806 has passed MIL-DTL-38999 Series III vibration tests:

- Sine Vibration -55° and $+200^{\circ}$
- Random Vibration $+200^{\circ}$
- Random Vibration @ ambient temp.
49 Grms



Series 806 Mil-Aero Higher Vibration



Compared to MIL-DTL-38999 Series III

- Shallow ramp stub Acme thread resists loosening under vibration
- 1 ½ turns to full mate



38999 Series III



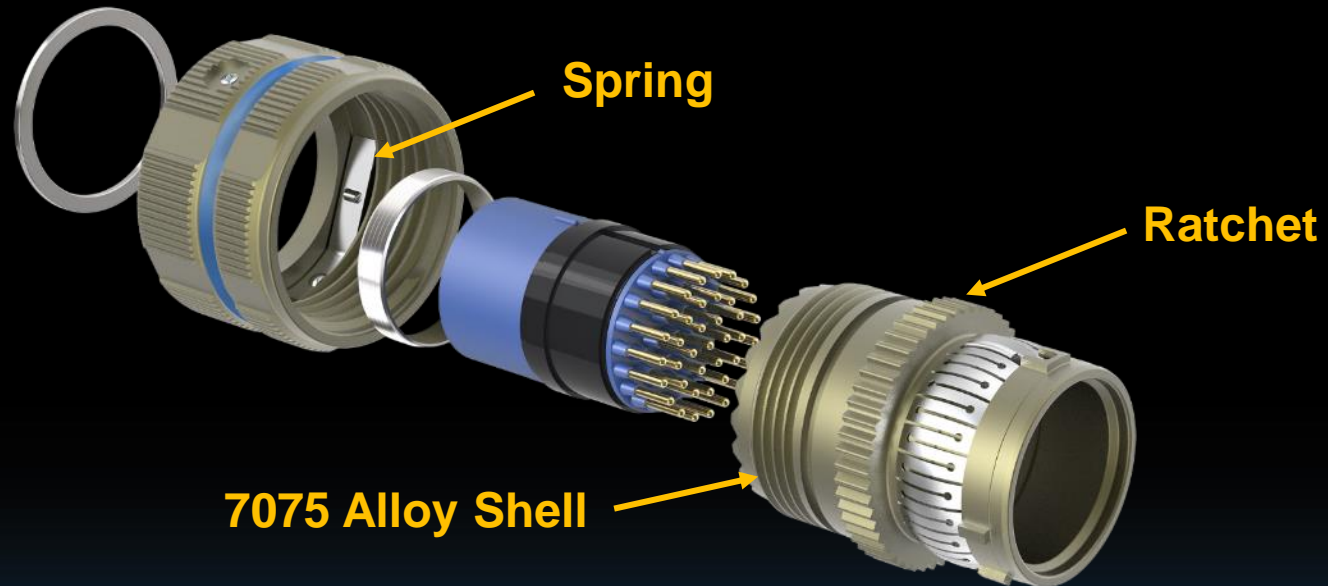
Series 806

Series 806 Mil-Aero Higher Vibration

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors

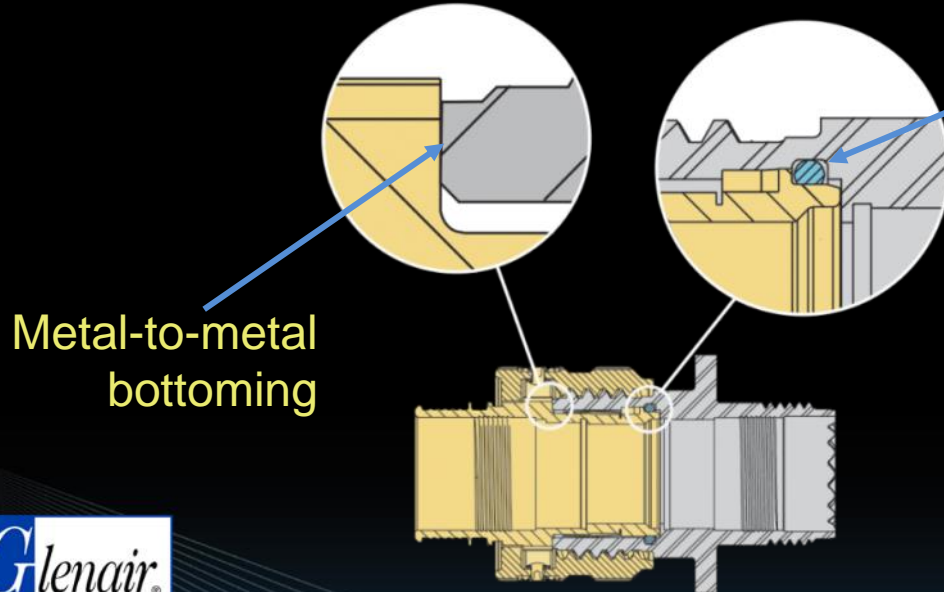
- Upgraded anti-decoupling mechanism



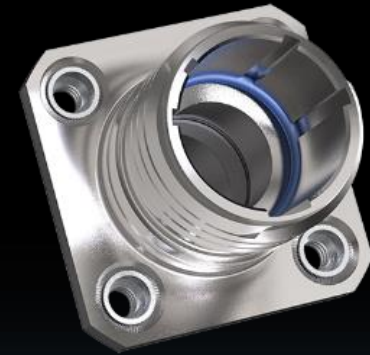
Series 806 Mil-Aero Higher Vibration

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors



O-ring peripheral seal allows easier metal-to-metal bottoming

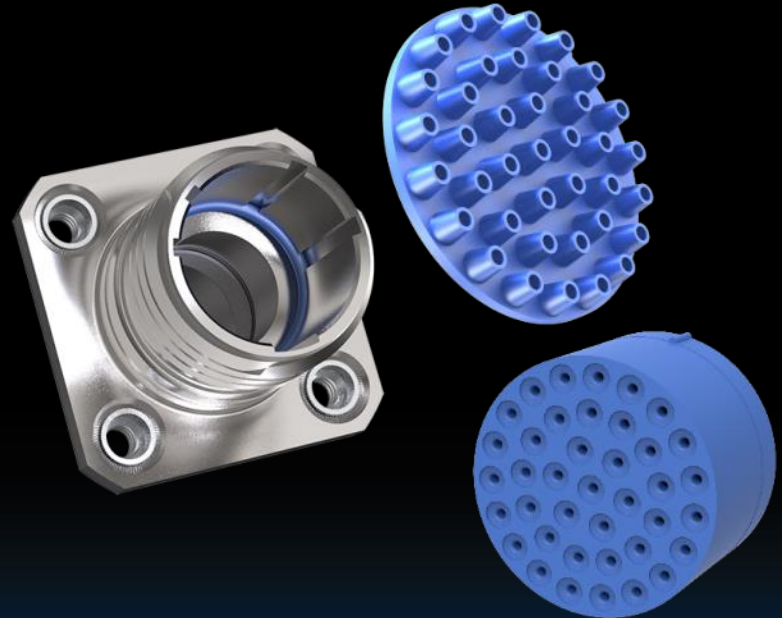


Series 806 Mil-Aero Improved Moisture Resistance

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors

- 75,000 feet altitude immersion
- “Triple ripple” grommet
- O-ring peripheral seal



Series 806 Mil-Aero Improved Moisture Resistance

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors



“Birdbath”



Series 806

Series 806 Mil-Aero Higher Voltage Rating



Compared to other microminiature circular connectors

Contact Size	DWV Rating @ Sea Level		DWV Rating @ 70,000 ft.	
	38999	Series 806	38999	Series 806
20	1800	↔ 1800	1000	↔ 1000
22	1300	↔ 1300	800	↔ 800
23	1000	-	600	-

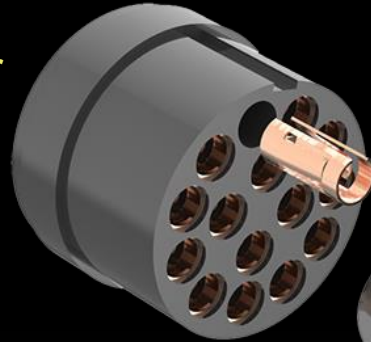
Series 806 Mil-Aero Higher Voltage Rating

SERIES
806
MIL-AERO

Compared to other microminiature circular connectors

- “Top hat” feature for longer creepage path

Front Insulator



Rear Insulator

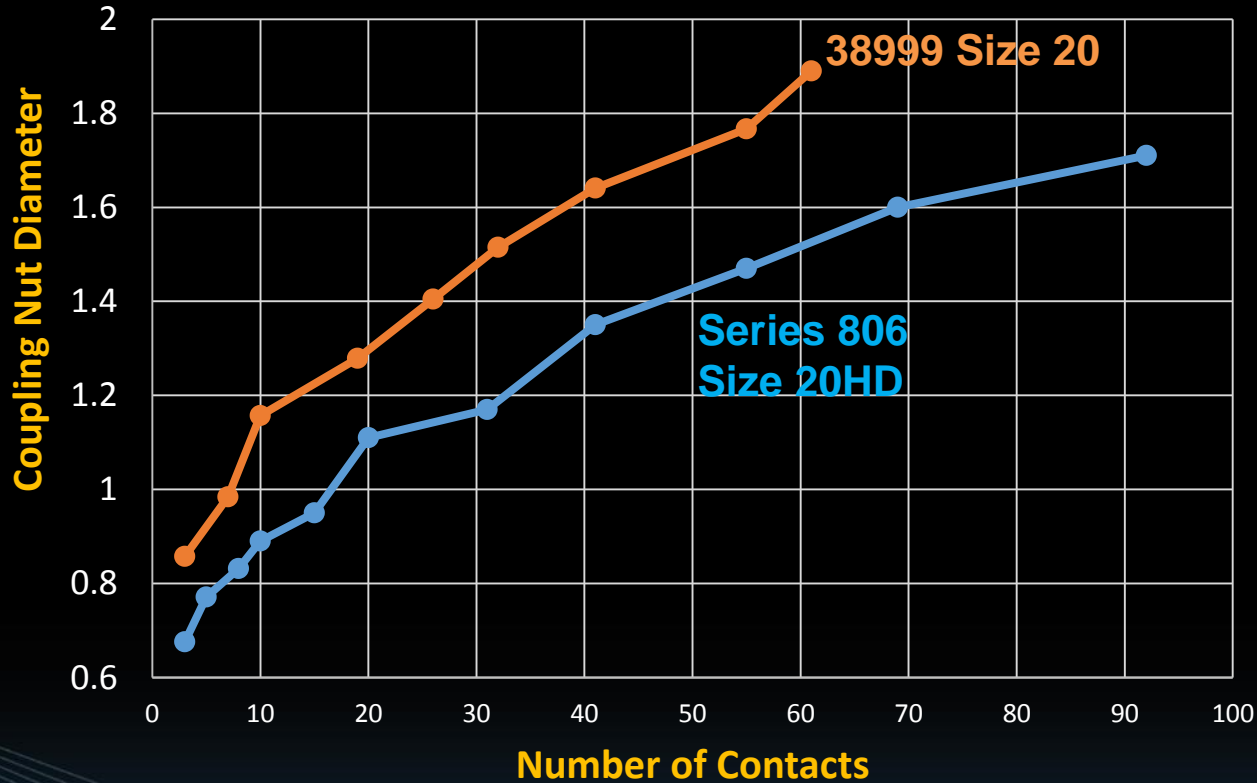


Series 806 Mil-Aero Lightning Strike Testing

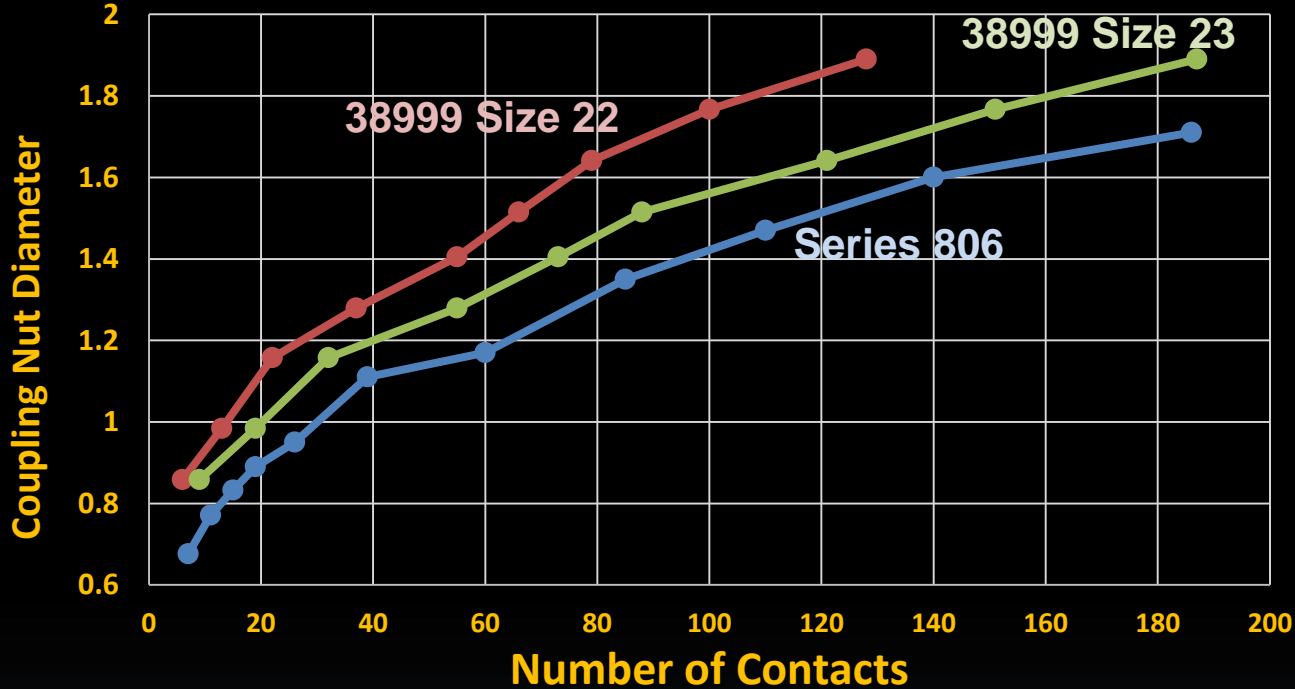


- The Series 806 meets 10,000 amp indirect lightning strike test specified in MIL-DTL-38999
- EIA-364-75 Type B Level 2

Series 806 Mil-Aero vs. MIL-DTL-38999 Size and Contact Density



Series 806 Mil-Aero vs. MIL-DTL-38999 Standard and High Density



Series 806 Mil-Aero vs. D38999 Size Comparison



D38999 Size 9

3 #20 Contacts
6 #22 Contacts
9 #23 Contacts
.858" Diameter



Sr. 806 Size 11

10 #20 Contacts
19 #22 Contacts
.890" Diameter



Series 806 Mil-Aero Contacts

SERIES
806
MIL-AERO

- Two sizes of signal contacts
 - #20HD
 - #22HD

- 20HD Fiber Optic Termini



Series 806 Mil-Aero Product Family



Plugs
806-012



**Square Flange
Receptacles**
806-013



Line Receptacles
806-019



Jam Nut Receptacles
806-020



**Jam Nut PCB
Receptacles**
806-021



**Square Flange
PCB Receptacles**
806-022



**Hermetic
Receptacles**
806-025



**Hermetic PCB
Receptacles**
806-026



Filtered Receptacles
240-806

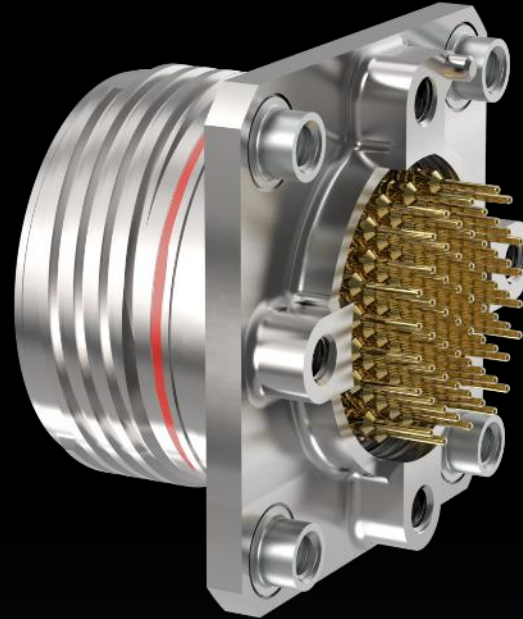


**Filtered PCB
Receptacles**
240-806-21

Series 806 Mil-Aero with Printed Circuit Board Tails

SERIES
806
MIL-AERO

- Low profile flange
- Threaded standoffs
- Alignment post



Series 806 Mil-Aero Accessories

SERIES
806
MIL-AERO

- The Series 806 accessory interface is a metric thread
- Interface code V
- 7 of 11 shell sizes are same as 38999 Series III/IV
- Full range of aerospace-grade accessories, including composites available



SWING ARM[®]
COMPOSITE THREE-IN-ONE BACKSHELL
FLEX

New Swing-Arm FLEX
composite thermoplastic strain
relief with drop-in banding adapter

Series 806 Mil-Aero Lightweight Hermetic

SERIES
806
MIL-AERO

- Lightweight aluminum
- CODE RED sealing
- -65° to +200° C
- 10^{-7} cm³/sec Helium leak rate
- Copper contacts with superior electrical performance compared to glass-to-metal seal hermetics



CODE RED

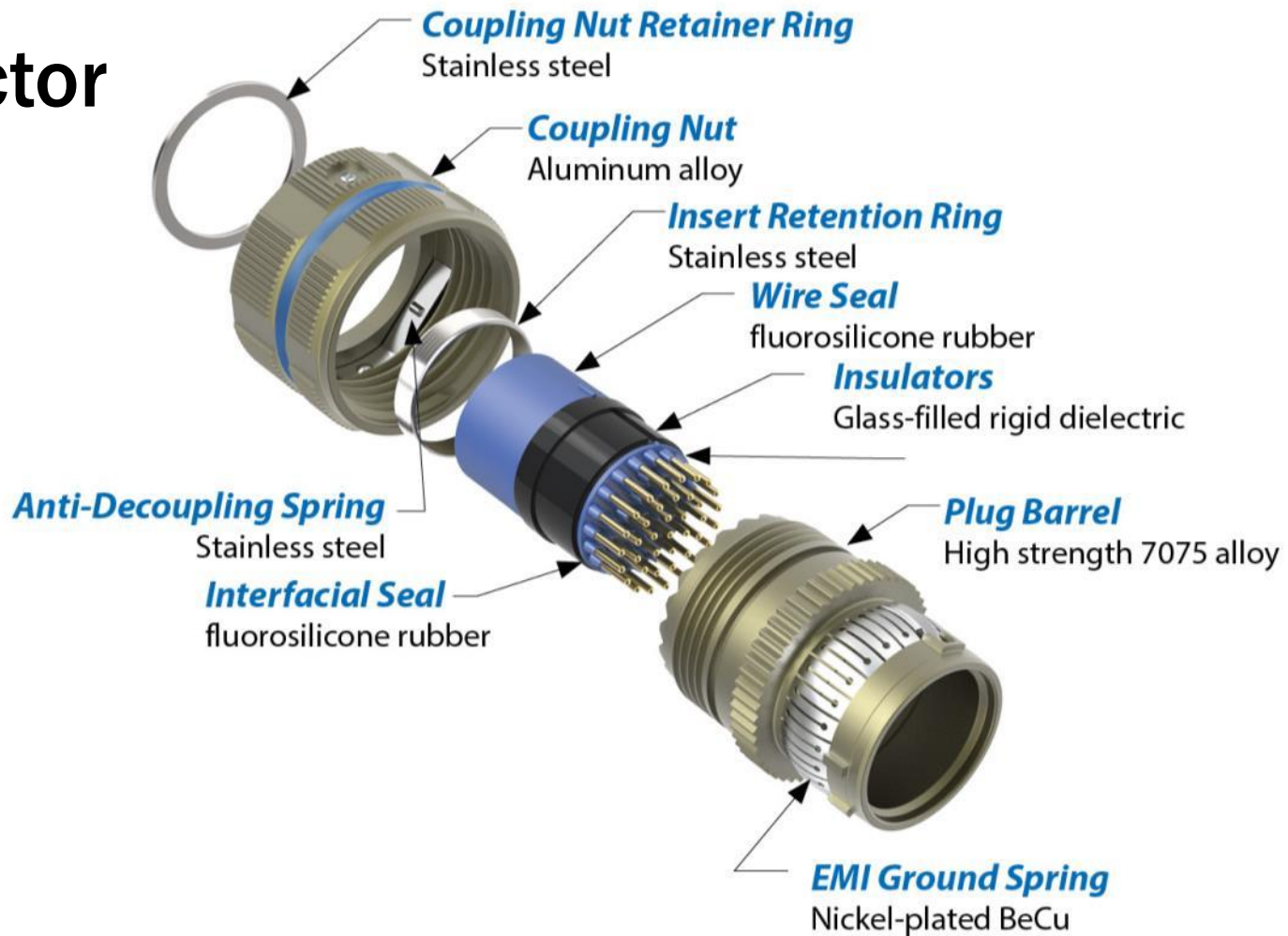
Series 806 Mil-Aero with Integral Banding Platform

SERIES
806
MIL-AERO

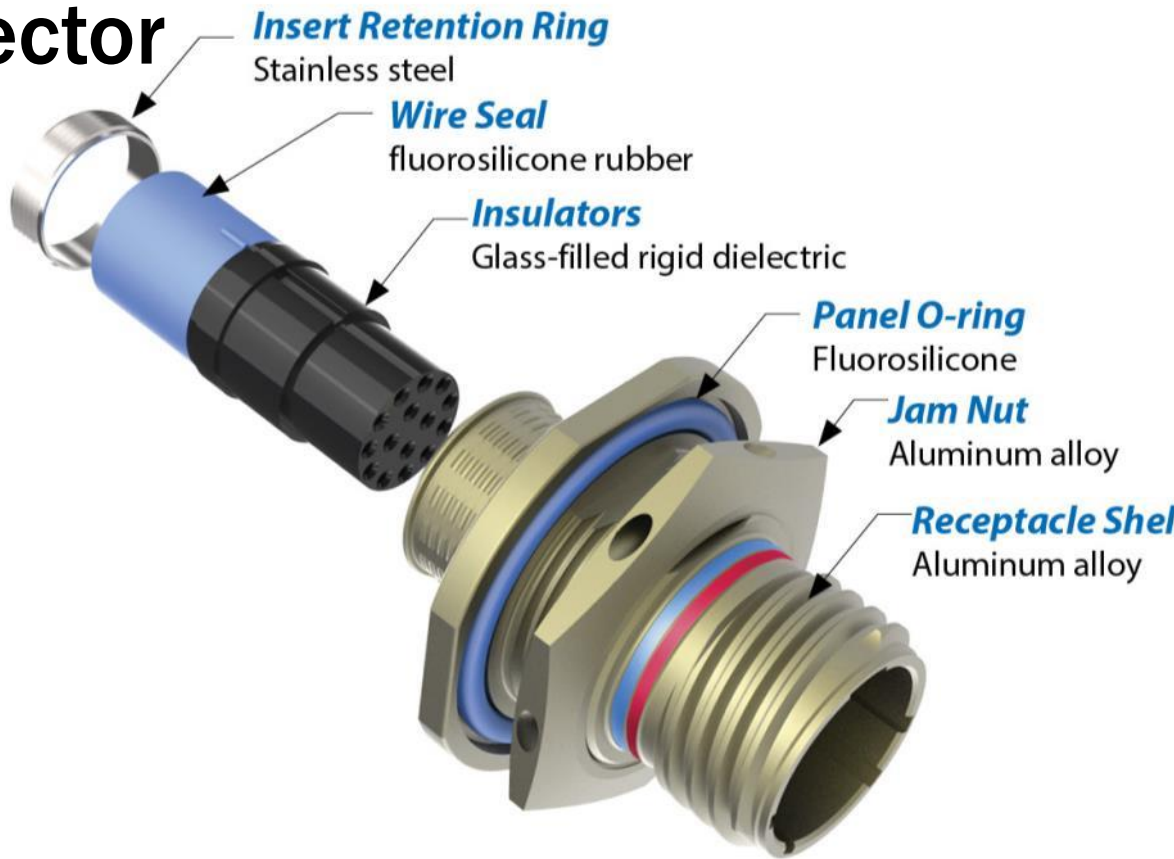
- The Series 806 Mil-Aero's low-profile, lightweight platform utilizes the Glenair Signature NanoBand



Plug Connector Series 806 Mil-Aero



Receptacle Connector Series 806 Mil-Aero



Series 806 Mil-Aero



Summary

- Significant size and weight savings
- Eliminates decoupling, particularly in small shell sizes
- Faster installation and routing of harness assemblies due to reduced form-factor
- Innovative mechanical design delivers enhanced corrosion protection and longer life for lower total installed cost



The widest range of
mission-critical interconnect
technologies in the world

SERIES
806
MIL-AERO



Series 806 Mil-Aero