

**Series 806 Mil-Aero:**  
Advanced fiber optic  
performance, reduced  
size and weight



Innovative fiber optic / electrical  
connector design meets key performance  
benchmarks for harsh vibration, shock, and  
environmental settings in rigid conformance  
with MIL-DTL-38999 Series III – but at nearly  
half the size and weight

**SAVE SIZE AND WEIGHT WITH SERIES 806 CONNECTORS**

Series 806 Mil-Aero  
smallest shell (size 8)  
.500 in. mating threads  
3 #20 electrical or optical  
contacts / termini



MIL-DTL-38999  
smallest shell (size 11)  
.750 in. mating threads  
2 #16 electrical or optical  
contacts / termini

- Next-generation small form factor aerospace-grade circular connector
- Designed for harsh application environments such as military and commercial aircraft
- Outstanding environmental, electrical, optical, and mechanical performance
- Integrated anti-decoupling technology
- High density 20HD fiber termini arrangements

# ADVANCED-PERFORMANCE MICRO MINIATURE Series 806 Mil-Aero

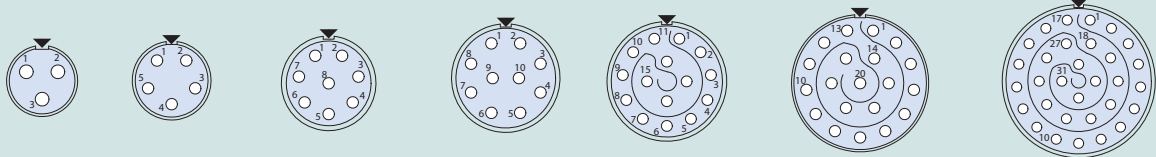


## Signature fiber optic connection system Insert arrangements, how to order termini

### Series 806 Arrangements compatible with #20HD Fiber Optic Termini

Mating face of pin connector. Socket numbering is reversed.

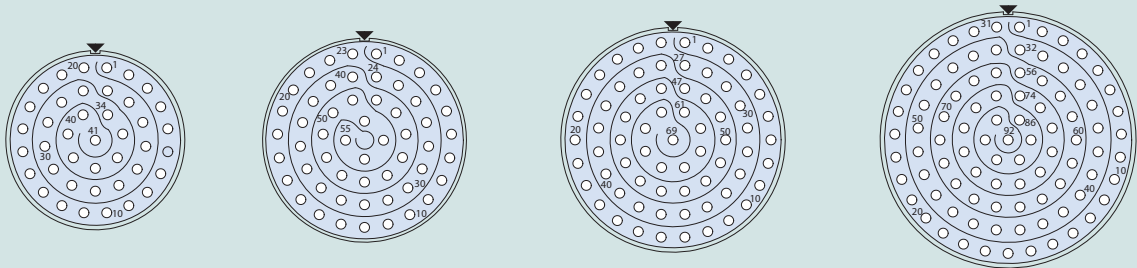
Symbol ▼ indicates master key location.



Arrangement No.	<b>8-3</b>	<b>9-5</b>	<b>10-8</b>	<b>11-10</b>	<b>12-15</b>	<b>14-20</b>	<b>16-31</b>
No. of Termini	3	5	8	10	15	20	31

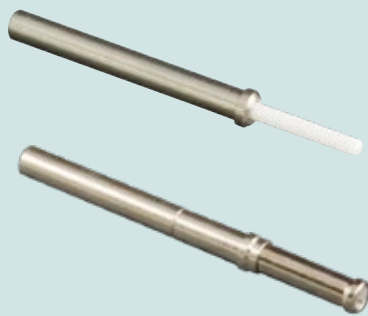
Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.



Arrangement No.	<b>18-41</b>	<b>20-55</b>	<b>22-69</b>	<b>24-92</b>
No. of Termini	41	55	69	92

### #20HD FIBER OPTIC TERMINI FOR SERIES 806 MIL-AERO CONNECTORS



*Single or multimode. Ceramic ferrule. 0.5 dB loss.* Size 20HD fiber optic termini are compatible with Series 806 connectors with size 20HD contact arrangements. These snap-in, rear release termini feature precision ceramic ferrules and alignment sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multimode and 9/125 singlemode fiber.

#### How-To-Order #20HD Fiber Optic Termini for Series 806 Connectors

Termini Type	Optical Fiber Type	Part Number	ØA Ferrule Hole	Fiber Size Core/Cladding
Pin	Singlemode	<a href="#">181-134-1255</a>	125.5 microns	9/125
Pin	Multimode	<a href="#">181-134-126</a>	126.0 microns	50/125, 62.5/125
Socket	Singlemode	<a href="#">181-135-1255</a>	125.5 microns	9/125
Socket	Multimode	<a href="#">181-135-126</a>	126.0 microns	50/125, 62.5/125

#### SPECIFICATIONS

- Operating temperature: -55°C to +125°C. Temperature rating depends on the cable and epoxy used.
- Termination method: epoxy/polish
- Mating durability: 500 cycles
- Random vibration: 49.5 Grms, EIA-364-28 Test Condition V. Maximum optical discontinuity 0.5 dB, 50 microseconds.
- Mechanical shock: 300 G, TIA-455-14 Test Condition D. Maximum optical discontinuity 0.5 dB, 50 microseconds.

#### MATERIAL/FINISH

- Ferrule, alignment sleeve: zirconia ceramic
- Body, shroud: copper/nickel/zinc alloy
- Spring (socket, not shown): stainless steel, passivated
- Protective cover (socket): copper alloy, nickel plated

# ADVANCED-PERFORMANCE MICRO MINIATURE

## Series 806 Mil-Aero

### Signature fiber optic connection system

### How to order connectors



How To Order Series 806 Plugs						
SAMPLE PART NUMBER	806-012	-ME	8-3	S	M	A
Product	806-012 = Cable Plug					
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated					
Arrangement Number (Shell Size - Insert Arr.)	8-3, 9-5, 10-8, 11-10, 12-15, 14-20, 16-31, 18-41, 20-55, 22-69, 24-92 (see table on previous page)					
Contact Type	Connector supplied without termini A = Pin B = Socket order fiber optic termini separately					
Shell Style	M = Metric accessory threads B = Nano Band platform					
Polarizing Position (Table 2)	A B C D E F					



How To Order Series 806 Square-Flange Receptacles							
SAMPLE PART NUMBER	806-013	-ME	12-26	P	B	C	A
Product	806-013 = Panel Receptacle, Square Flange						
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated						
Arrangement Number (Shell Size - Insert Arr.)	8-3, 9-5, 10-8, 11-10, 12-15, 14-20, 16-31, 18-41, 20-55, 22-69, 24-92 (see table on previous page)						
Contact Type	Connector supplied without termini A = Pin B = Socket order fiber optic termini separately						
Shell Style	M = Metric accessory threads B = Nano Band platform						
Mounting Hole Style	T = Thru holes C = Clinch nut, #4-40 (rear panel mounting)						
Polarizing Position (Table 2)	A B C D E F						

# ADVANCED-PERFORMANCE MICRO MINIATURE Series 806 Mil-Aero



## Signature fiber optic connection system How to order connectors



How To Order Series 806 In-Line Receptacles						
SAMPLE PART NUMBER	806-019	-ME	14-20	P	B	A
Product	806-019 = Line Receptacle					
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated					
Arrangement Number (Shell Size - Insert Arr.)	8-3, 9-5, 10-8, 11-10, 12-15, 14-20, 16-31, 18-41, 20-55, 22-69, 24-92 (see table on previous page)					
Contact Type	Connector supplied without termini A = Pin B = Socket order fiber optic termini separately					
Shell Style	M = Metric accessory threads B = Nano Band platform					
Polarizing Position (Table 2)	A B C D E F					



How To Order Series 806 Jam Nut Receptacles						
SAMPLE PART NUMBER	806-020	-ME	10-15	S	M	A
Product	806-020 = Jam Nut Receptacle					
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated					
Arrangement Number (Shell Size - Insert Arr.)	8-3, 9-5, 10-8, 11-10, 12-15, 14-20, 16-31, 18-41, 20-55, 22-69, 24-92 (see table on previous page)					
Contact Type	Connector supplied without termini A = Pin B = Socket order fiber optic termini separately					
Shell Style	M = Metric accessory threads B = Nano Band platform					
Polarizing Position (Table 2)	A B C D E F					