



MIGHTY MOUSE Cobra

The ultra-low profile EMI/RFI plug and backshell assembly

Innovative shielded low profile right angle connector plug and backshell assemblies reduce clearance requirements without compromising ruggedness or shielding performance. Available in Series 801 double-start, Series 804 QDC push-pull, and Series 805 triple-start, Cobra assemblies provide optimal low-profile cable routing and legendary Mighty Mouse connector performance in a single package. Each Cobra assembly is equipped with a removable rear cover and gasket for easy crimp or solder contact termination of the connector. Integrated low-profile backshell is equipped with an EMI/RFI shield termination platform and a shrink boot lip. The ultra-lightweight assembly may be clocked in eight different angle orientations for additional flexibility in cable routing. Connectors are equipped with polarization keying to prevent mis-mating. Glenair Mighty Mouse Cobra mates with available square flange and jam nut receptacles from each respective connector series. Fourteen contact arrangements are available, all with Size #23 contacts from shell size 5 to shell size 21 with 3-130 contacts respectively. Connector shells are aluminum alloy or stainless steel.

SPECIFICATIONS

- Current Rating: #23 5 Amps
- Test Voltage (DWV) #23: 500 VAC Sea Level
- Insulation Resistance: 5000 megohms minimum
- Contact Resistance: 73 millivolt drop at 5 Amp test current
- Mating Cycles Series 801 and 804: 2000; Series 805: 500
- Operating Temperature: -55° C to +150° C
- Shielding Effectiveness: 50 dB min from 100MHz to 1000MHz.
- Magnetic Permeability: 2.0μ
- Vibration: 37g / Shock: 300g
- Immersion, mated: 1 meter water immersion for 1 hour



- **Space-saving design features one-piece machined and brazed connector shell and right angle backshell for minimum height and optimal EMI performance.**
- **Master key clocking enables easy cable entry/exit routing in eight angles**
- **Removable rear cover and gasket provides easy access to end of connector for crimp or solder contact termination**

MIGHTY MOUSE Low-Profile Plug Connectors



805-061 triple-start with self-locking coupling nut, exploded view

How To Order Mighty Mouse Cobra Plug Connector and Backshell Assemblies							
Sample Part Number	801-069-26	ZNU	8-13	P	A	1	05
Connector Series and Mighty Mouse Cobra Basic Part Number	801-069-26 Double-Start self-locking plug with ratchet mechanism (the clicker) 804-066-06 QDC Push-Pull plug 805-061-16 Triple-Start plug with ratcheting anti-decoupling mechanism						
Material/Finish	M = Aluminum / Electroless Nickel RoHS Compliant NF = Aluminum / Cadmium with Olive Drab Chromate ZNU = Aluminum / Zinc-Nickel with Black Chromate MT = Aluminum / Nickel-PTFE RoHS Compliant ZI = Stainless Steel / Passivated RoHS Compliant						
Shell Size - Contact Arrangement	See Table V - A: 801-069 B: 804-066 C: 805-061						
Contact Style	A = Pin, Solder B = Socket, Solder P = Pin, Crimp S = Socket, Crimp						
Polarization Key Position	A, B, C, D, E, F - See Table II						
Cable Exit Direction	1, 2, 3, 4, 5, 6, 7, 8 - See Table I						
Cable Entry Size	See Table VI						

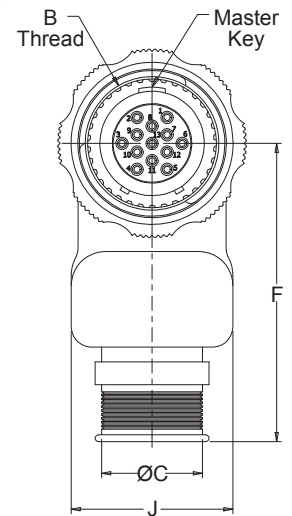


Table I: Cable Exit Direction	
Cable Exit Direction Code	C°
1	0°
2	45°
3	90°
4	135°
5	180°
6	225°
7	270°
8	315°

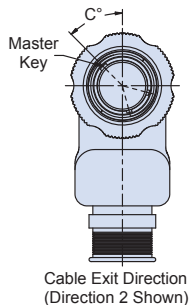


Table II: Key Positions		
	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

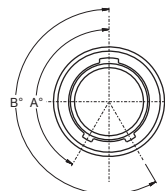


Table VI - Cable Entry			
Code	Entry Size	Code	Entry Size
02	.125	10	.625
03	.188	11	.688
04	.250	12	.750
05	.313	13*	.813
06	.375	14*	.875
07	.438	15*	.938
08	.500	16*	1.000
09	.563	17*	1.063

* Entry codes 13-17 not available for Series 804 Cobra

MATERIALS/FINISH

- Contacts: Copper alloy, gold plated
- Backshell Housing, Connector Shell, Coupling Nut and Lid: Aluminum or Stainless Steel
- Backshell Sealing Gasket and Interfacial Seal: Fluorosilicone
- Screws: 300 Series Stainless Steel
- Insulator: LCP

Table V - Shell Size/Contact Arrangements								
A: 801-069			B: 804-066			C: 805-061		
Shell Size	Contact Arr.	Max Entry	Shell Size	Contact Arr.	Max Entry	Shell Size	Contact Arr.	Max Entry
5	5-3	03	5	5-3	03	8	8-4, 8-6, 8-7	04
6	6-4, 6-6, 6-7	04	6	6-4, 6-6, 6-7	04	9	9-10	05
7	7-10	05	7	7-10	05	10	10-13	06
8	8-13	06	8	8-13	06	11	11-19	07
9	9-19	07	9	9-19	07	12	12-26	08
10	10-26	08	10	10-26	08	13	13-31	09
11	11-31	09	12	12-37	10	15	15-37	10
13	13-37	10	14	14-55	12	18	18-55	12
16	16-55	12				19	19-85	13
17	17-85	13				21	21-100	15
19	19-100	15				23	23-130	17
21	21-130	17						

NOTES

- Rear insulator grommet not supplied.
- Cobra plugs mate with respective series receptacles with same layout, polarization and opposite contact gender.
- Hand crimp tool: P/N 809-015.
Positioner for hand tool: P/N 809-005.
Insertion/extraction tool P/N 809-088.
- Crimp barrel accommodates 22, 24, 26 and 28 gage wire.
- All Cobra plugs equipped with Size #23 contacts.



SERIES 824

Locking Push-Pull

Tactical Mighty Mouse QDC connectors

Introducing the new Mighty Mouse Series 824 Locking Push-Pull Connector: all the familiar size, weight and performance advantages of the industry-standard Mighty Mouse 804 push-pull connector with a revolutionary low-profile locking coupling mechanism. Glenair's primary design goal in the development of the locking 824 was to bring mil-spec caliber connector performance to locking push-pull applications. The Series 824 Locking Push-Pull provides superior sealing, excellent EMI protection, low-profile ergonomic mating and demating, and easy crimp-contact termination. The locking push-pull mechanism delivers tactile and audible mating confirmation under even the most extreme field conditions. Built for long-term durability and reduced size and weight, the high-density Series 824 Locking Push-Pull connector far surpasses commercial caliber push-pull connectors in environmental sealing and EMC performance.



Specifications	
Current Rating	#23 5 AMPS, #16 13 AMPS, #12 23 AMPS
Dielectric Withstanding Voltage	#23 500 VAC RMS, #12 and #16 1800 VAC RMS
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C to +150° C
Shock / Vibration	100 g / 16 g
Shell-to-Shell Resistance, Nickel Plated	2 milliohms maximum
Durability	2000 mating cycles
Holding Force	50 pounds minimum

- Fast mating, quick-release coupling mechanism
- 31 insert arrangements
- Integrated cable shield termination platform
- Plug, in-line receptacle, and front- and rear-panel jam nut configurations
- Tactile and audible mating confirmation
- Tactical black zinc-nickel plating option
- Five alternate 3-key polarizations

SERIES 824 Mighty Mouse Tactical Locking Push-Pull Connectors

MIGHTY MOUSE



How To Order Series 824 Locking Push-Pull Plug

How To Order Series 824 Locking Push-Pull Plug						
Sample Part Number	824-001	-06	M	8-1	P	A
Product Series	824-001 Mighty Mouse Locking Push-Pull cable plug with integrated shield termination platform					
Shell Style	-06 - Plug					
Shell Material/Finish	See Table II					
Shell Size/Contact Arrangement	See Table I					
Contact Type	Connector supplied with contacts: P - Pin S - Socket		Connector supplied without contacts: A - Pin B - Socket			
Shell Key Position	Omit for single polarizing key. A (normal), B, C, D, E, F polarizing options per Table III					

How To Order Series 824 Locking Push-Pull Receptacle

How To Order Series 824 Locking Push-Pull Receptacle						
Sample Part Number	824-003	-01	M	8-1	P	A
Product Series	824-003 Mighty Mouse Locking Push-Pull cable receptacle with integrated shield termination platform					
Shell Style	-01 - In-Line -07 - Rear-Panel Jam Nut Mount -00 - Front-Panel Jam Nut Mount					
Shell Material/ Finish	See Table II					
Shell Size/Contact Arrangement	See Table I					
Contact Type	Connector supplied with contacts: P - Pin S - Socket	Connector supplied without contacts: A - Pin B - Socket				
Shell Key Position	Omit for single polarizing key. A (normal), B, C, D, E, F polarizing options per Table III					

Table III: Alternate Key Positions

Position	A°	B°
A	150°	210°
B	45°	210°
C	45°	230°
D	140°	315°
E	150°	315°

Table II: Material and Finish

M	Aluminum/Electroless Nickel RoHS Compliant
NF	Aluminum/Cadmium with Olive Drab Chromate
ZR	Aluminum/Zinc-Nickel with Non-Reflective Black Chromate RoHS Compliant
MT	Aluminum/Nickel-PTFE RoHS Compliant
Z1	Stainless Steel/Passivated RoHS Compliant

Table I: Contact Arrangements

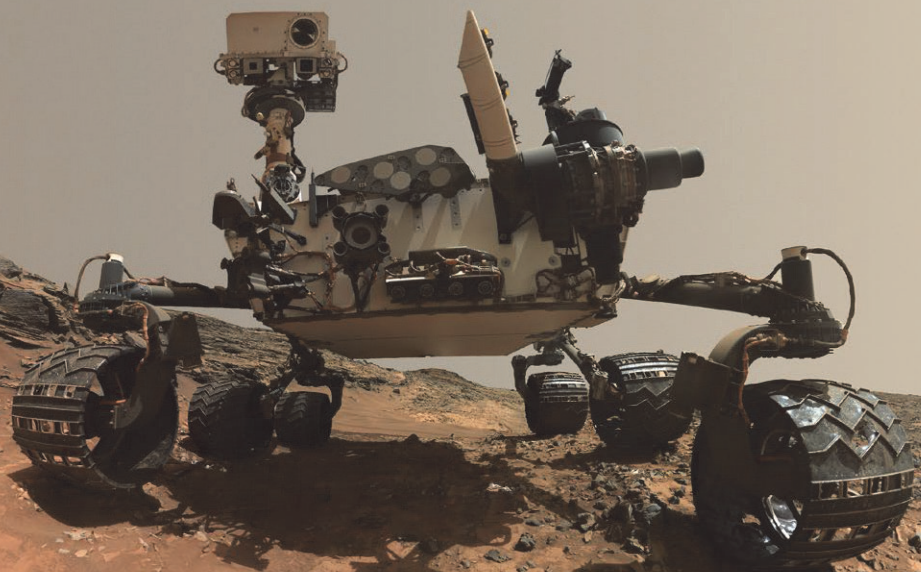
Contact Arr.	No. of Contacts				
	#23	#20	#20HD	#16	#12
5-3	3				
6-1				1	
6-23			3		
6-4	4				
6-6	6				
6-7	7				
7-1					1
7-25			5		
7-10	10				
8-2				2	
8-28			8		
8-13	13				
8-200	4	2			
9-4				4	
9-210			10		
9-19	19				
9-200	4			2	
9-201	8	2			
10-2					2
10-5				5	
10-26	26				
10-200	12				1
10-201	4				2
10-202	8			2	
12-2					2
12-3					3
12-7				7	
12-220			20		
12-37	37				
12-200	6				2
12-201	10				2

**Gold plated crimp contacts for
#12 to #30 AWG wire**



MATERIAL/FINISH

Barrel: Copper Alloy
Shell/Release Sleeve: Aluminum Alloy or CRES
Insulators: Liquid Crystal Polymer
Interfacial Seal, O-Ring, Grommet: Fluorosilicone
Contacts: Copper Alloy/Gold over Nickel Plating
Spring: CRES/Gold Plated



SERIES 80 MIGHTY MOUSE

Reducing the Size and Weight of Electrical Wire Interconnect Systems

The industry standard ultraminiature for
ground, sea, air, and space



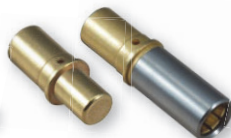
Mighty Mouse vs. 38999: less
than half the size and weight.

- 8 coupling styles and 67 contact arrangements from 1 – 130 contacts
- MIL-DTL-38999 caliber performance
- Size #23, #22, #20, #20HD, #16, #12, #8 signal, power, fiber optic and shielded contacts
- Discrete connectors and turnkey cable assemblies

FULL RANGE OF SUPPORTED CONTACTS, 67 CONTACT ARRANGEMENTS



Signal



Power



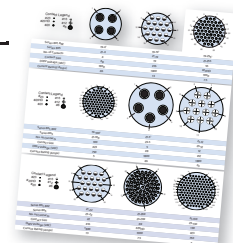
Shielded



Fiber Optic



Pneumatic



67 arrangements,
from 1–130 contacts

SERIES 80 ULTRAMINIATURE Mighty Mouse Connectors and Cables

Connector series overview



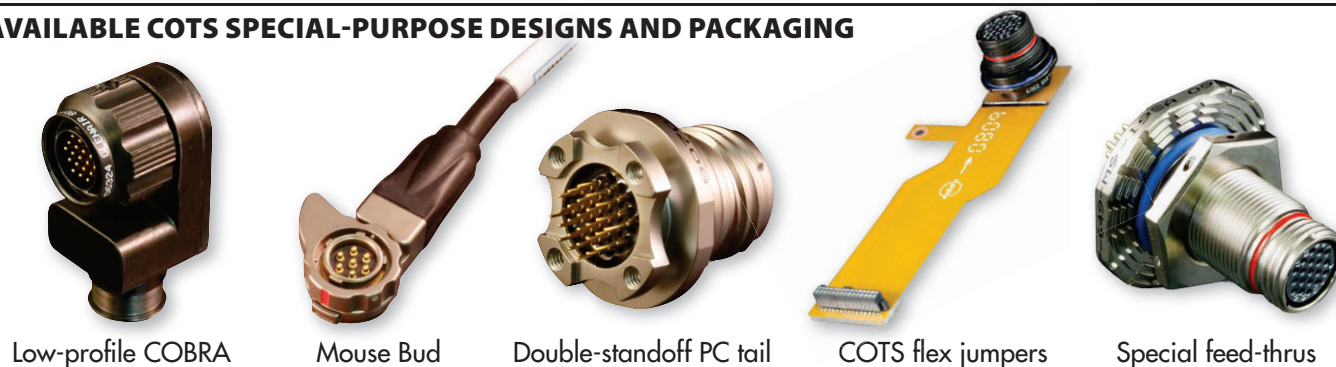
CHOOSE FROM 8 DIFFERENT COUPLING DESIGNS



AVAILABLE MIGHTY MOUSE CONNECTOR CLASSES



AVAILABLE COTS SPECIAL-PURPOSE DESIGNS AND PACKAGING





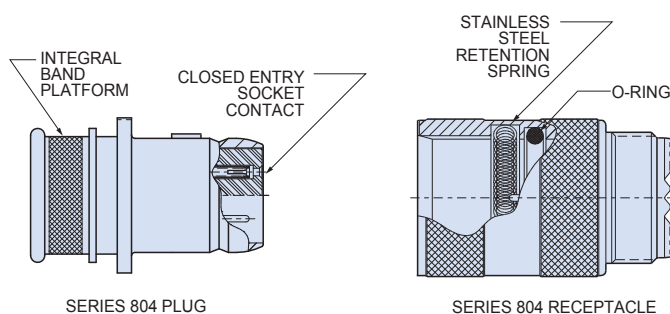
SERIES 804 MIGHTY MOUSE Tactical QDC

Worldwide quick-disconnect standard
for tactical soldier system C4ISR device
interconnection

Ideal for breakaway connections, the Series 804 QDC connector features a stainless steel spring in the receptacle and a detent on the plug body. Used for headsets, radios, end-user tablets and other C4ISR applications, the QDC Mighty Mouse meets field immersion requirements and provides superior durability. The gold-plated EMC spring provides low shell-to-shell resistance for excellent EMI shielding. A fluorosilicone O-ring provides a watertight seal when mated.



SERIES 804 CROSS-SECTIONAL DIAGRAM



- Push-to-mate, pull-to-unmate
- Gold-plated stainless steel spring
- Crimp rear release contacts
- Integral band platform
- Available with size #12, #16, #20, #20HD and #23 contacts
- Environmentally sealed

SERIES 804

Mighty Mouse Quick-Disconnect

Worldwide standard for tactical soldier system
C4ISR device interconnection



SERIES 804 MIGHTY MOUSE: THE WORLDWIDE STANDARD FOR TACTICAL SOLDIER DATA/POWER



STAR-PAN™ tactical soldier data/power system with Mighty Mouse 804 push-pull connectors shown here in a trickle-charge application to and from a Rifleman field radio



Ultralife lightweight wearable battery



STAR-PAN II hub with dedicated host and radio cables

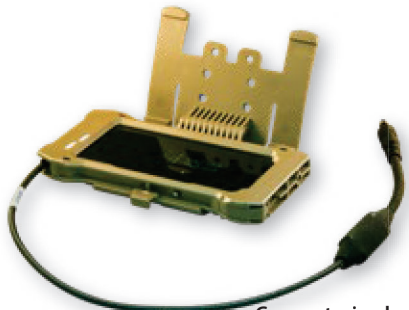


BB-2590 /BA-5590 battery adapter



Mighty Mouse 804 rugged flash drive

SERIES 804 MIGHTY MOUSE: THE UNIVERSAL STANDARD FOR ADVANCED SOLDIER EUDS



Connectorized Juggernaut.Case™



Connectorized Kägwerks EUD case



Getac MX50 tablet / smart phone

RUGGEDIZED SERIES 804 TACTICAL CABLE SETS FOR SOLDIER C4ISR TECHNOLOGIES



Turnkey overmolded GPS cable assembly with integrated switch



Overmolded breakout assembly featuring 100% Glenair content; a true turnkey solution



Non-environmental aircraft cable with integrated circuit breakout box

NEXT-GENERATION
ULTRAMINIATURE
CONNECTORS

SERIES
806
MIL-AERO

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



Innovative design meets key performance benchmarks for harsh vibration, shock, and environmental settings—as well as high-altitude, unpressurized aircraft zones with aggressive voltage ratings and altitude immersion standards.

SAVE SIZE AND WEIGHT WITH SERIES 806 CONNECTORS

Series 806 Mil-Aero
Smallest Size
.500 In. Mating Threads
3 #20 Contacts or 7 #22
contacts



MIL-DTL-38999
Smallest Size
.625 In. Mating Threads
3 #20 Contacts or 6 #22
contacts



- Next-generation small form factor aerospace-grade circular connector
- Designed for harsh application environments such as aircraft, industrial robotics and more
- Upgraded environmental, electrical and mechanical performance
- Integrated anti-decoupling technology
- Higher density 20HD and 22HD crimp contact arrangements
- Hermetic and filter versions
- +200°C temperature rating

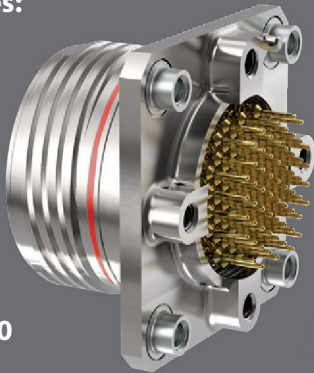
Series 806 Mil-Aero Ultraminiature Circular Connectors



for harsh mil-aero applications IAW MIL-DTL-38999

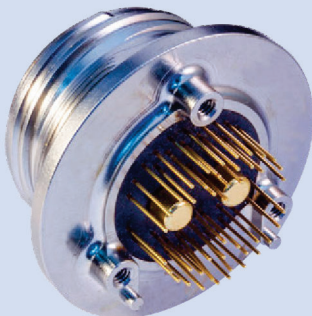
SERIES 806 MIL-AERO: FEATURES / SPECIFICATIONS

- **Supported wire sizes:**
#20HD contacts
20–24 AWG
#22HD contacts
22–28AWG
- **Dielectric withstanding voltage**
#20HD layouts:
1800 Vac
#22HD layouts: 1300 Vac
- **Reduced pitch triple-start modified anti-decoupling stub ACME mating threads**
- **“Triple ripple” wire sealing grommet (75,000 ft. rated)**
- **Integral Nano-Band shield termination platform**
- **EMI shielding effectiveness per D38999M para. 4.5.28 (65 dB min. leakage attenuation @ 10GHz)**
- **10,000 amp indirect lightning strike**
- **MIL-S-901 Grade A high impact shock**



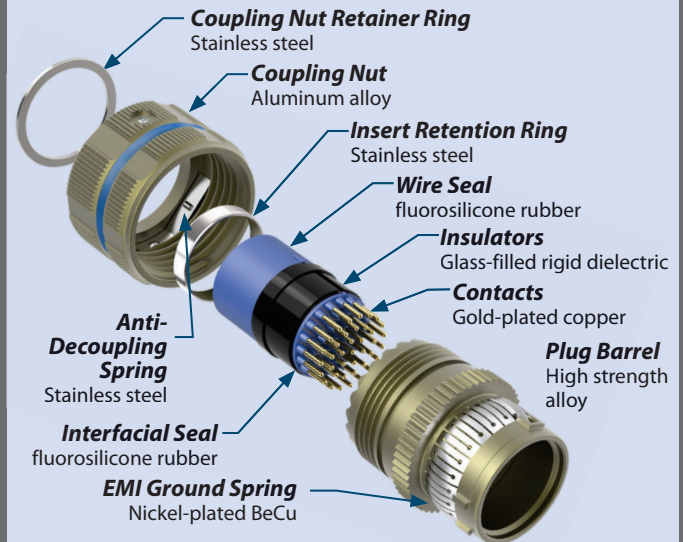
AVAILABLE LIGHTWEIGHT ALUMINUM “CODE RED” HERMETICS

CODE RED is a lightweight encapsulant sealing and assembly process with 50% package-weight savings compared to glass-to-metal seal Kovar/stainless steel solutions. Non-outgassing CODE RED (IAW NASA/ESA) provides durable hermetic sealing with 1×10^{-7} leak rate performance. Gold-plated copper contacts deliver outstanding low-resistance current carrying capacity.

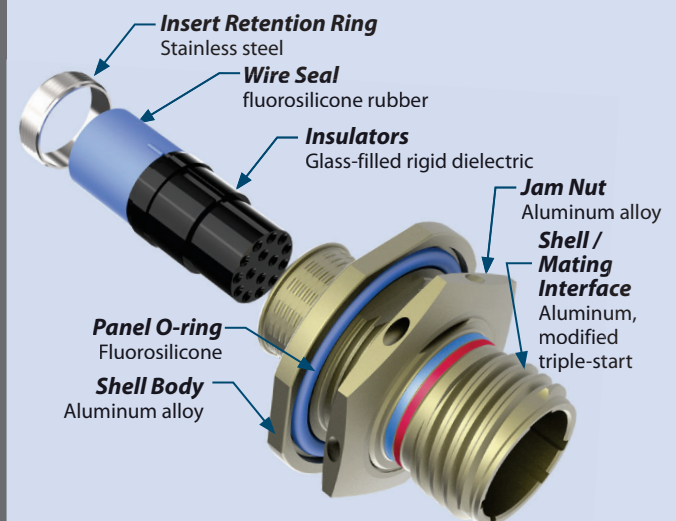


CODE RED

SERIES 806 MIL-AERO PLUG



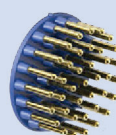
SERIES 806 MIL-AERO RECEPTACLE



SMALLER AND LIGHTER WITH EQUAL D38999 PERFORMANCE?

High-Density Layouts

Twice as many contacts in a smaller package



“Top Hat” Insulator

High voltage rating, foolproof alignment



Triple Ripple Wire Seal

Reliable 75,000 ft. altitude immersion





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

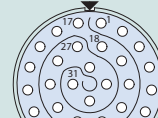
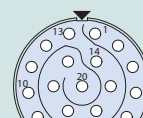
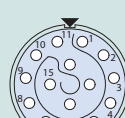
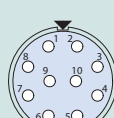
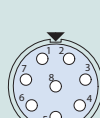
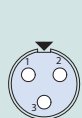


Signature fiber optic connection system Insert arrangements, how to order termini

Series 806 Arrangements compatible with #20HD Fiber Optic Termini

Mating face of
pin connector.
Socket
numbering is
reversed.

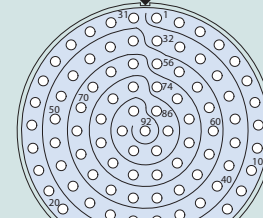
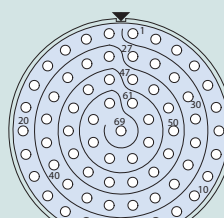
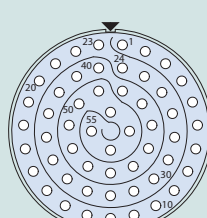
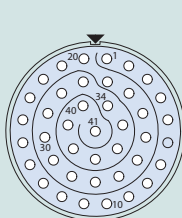
Symbol ▼
indicates
master key
location.



Arrangement No.	8-3	9-5	10-8	11-10	12-15	14-20	16-31
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.	18-41	20-55	22-69	24-92
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	181-134-1255	125.5 microns	9/125
Pin	Multimode	181-134-126	126.0 microns	50/125, 62.5/125
Socket	Singlemode	181-135-1255	125.5 microns	9/125
Socket	Multimode	181-135-126	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					
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