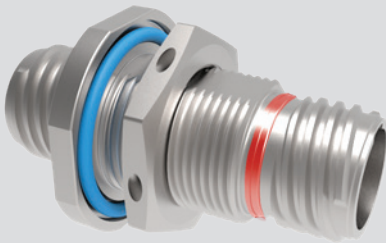


HERMETIC CODE RED, MICRO MINIATURE CIRCULAR Series 806 Mil-Aero Connectors



806-077 Lightweight Hermetic Feed-Through

CODE RED



Features

- Triple-start stub ACME mating thread
- High density #22HD / El Ochito arrangements for reduced size and weight
- Aerospace-grade materials, construction

Specifications

- Operating temperature: -65°C to +175°C
- Dielectric withstanding voltage
#22HD: 1300 VAC
#20HD, #16HD, #12HD: 1800 VAC
#8HD: 1000 VAC
- Mating durability: 500 cycles (El Ochito)
- 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, jam-nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Potting compound: Code Red
- Interfacial seal and peripheral seal: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Panel O-ring: fluorosilicone

Lightweight aluminum hermetic. 806-077 aluminum hermetic receptacles with high-speed El Ochito contacts are lighter than stainless steel glass-to-metal hermetic connectors. A signature sealing process delivers reliable hermetic performance. Copper alloy contacts have lower resistance and higher current rating than iron alloy contacts used in conventional hermetics. Hermeticity is $1E^{-7}$ cm³/sec at 1 ATM pressure differential. Series 806 connectors are ideal for high-speed aerospace data link applications.

How To Order									
SAMPLE PART NUMBER		806-077	-07	Z1	10	E	-1	P	A
Product	806-077 = El Ochito Feed-Through								
Mounting Type	02 = Box Mount 07 = Jam-Nut Mount 13 = Weld Mount								
Finish	See Table II								
Shell Size	10, 11, 12, 14, 16, 18, 20, 22, 24								
El Ochito Type	See Table IV								
Contact Arrangement	See 806-015 for Contact Arrangement								
Contact Style	P = Pin on Panel Side, Socket Opposite S = Socket on Panel Side, Pin Opposite								
Polarization	A B C D E F								

Table II - Material/Finish		
SYM	Material	Finish
AB	Aluminum Alloy	None (Clean Only)
MA		Electroless Nickel, Matte Finish
ME		Electroless Nickel
MT		Teflon Nickel
NF		Cad/O.d. Over Electroless Nickel
ZN		Zinc Ni, Olive Drab
ZR		Zinc Ni, Black (Tri-Valent Cr)
Z1	Stainless Steel	Passivated
ZL		Electrolytic Nickel

Table III - Panel Mounting Cut-Outs				
Shell Sizes	"Ø N" +.005/- .000 Mounting Hole	"P" +.005/- .000 Mounting Flat	"Ø R" ±.002 Mtg Hole	"Ø S" Thru
10	0.719 (18.26)	0.318 (8.08)	0.980 (24.89)	0.645 (16.38)
11	0.759 (19.28)	0.350 (8.89)	1.043 (26.49)	0.712 (18.08)
12	0.837 (21.26)	0.381 (9.68)	1.105 (28.07)	0.768 (19.51)
14	0.955 (24.26)	0.443 (11.25)	1.230 (31.24)	0.890 (22.61)
16	1.073 (27.25)	0.505 (12.83)	1.355 (34.42)	1.015 (25.78)
18	1.192 (30.28)	0.568 (14.43)	1.480 (37.59)	1.125 (28.58)
20	1.349 (34.26)	0.630 (16.00)	1.605 (40.77)	1.275 (32.39)
22	1.467 (37.26)	0.693 (17.60)	1.730 (43.94)	1.400 (35.56)
24	1.624 (41.25)	0.755 (19.18)	1.855 (47.12)	1.525 (38.74)

Series 806 Mil-Aero Connectors

806-077 Lightweight Hermetic Feed-Through

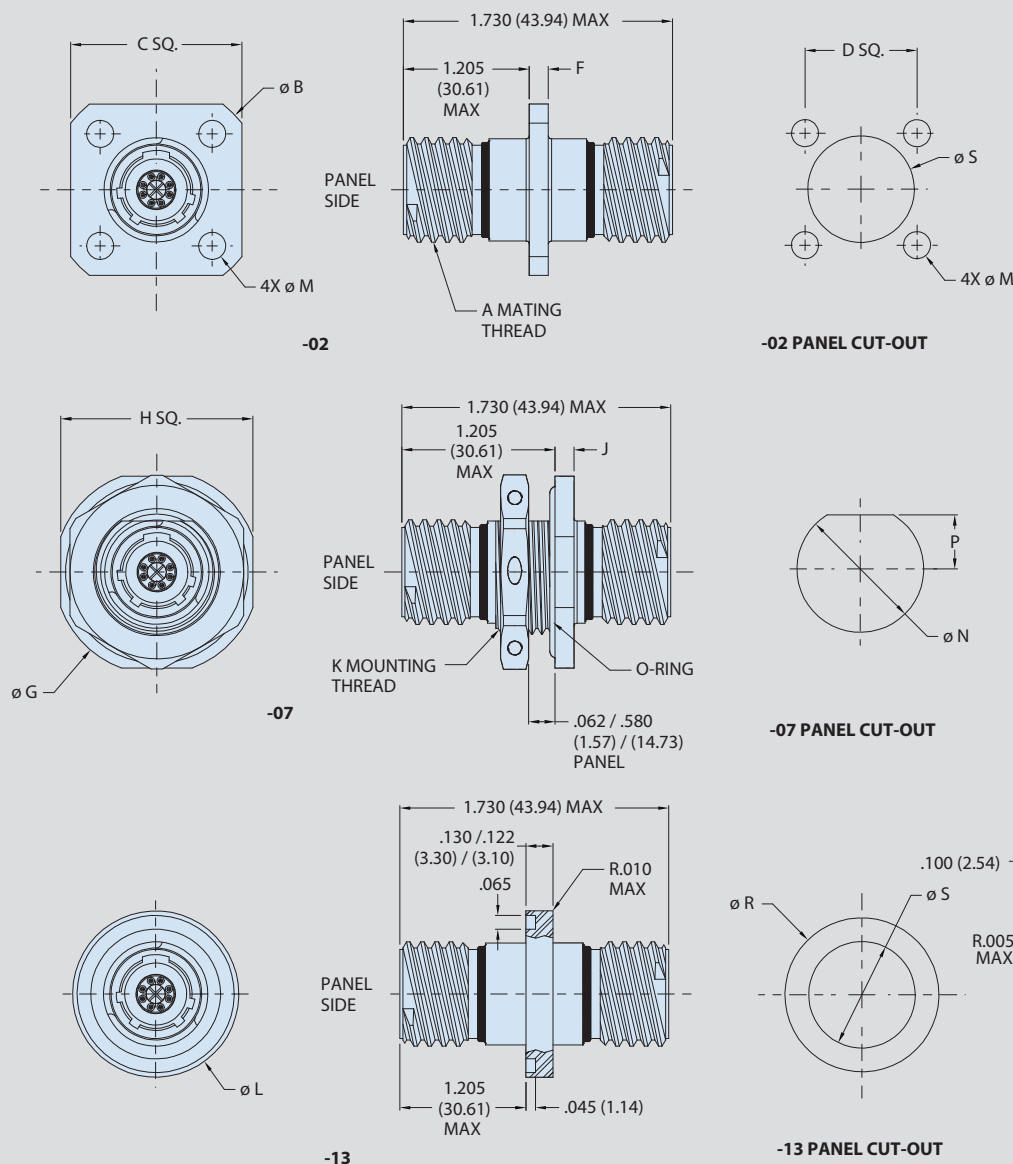


Table I - Connector Dimensions

Shell Sizes	"A" Thread Mating	"Ø B" Max Flange	"C" Square Max Flange Flats	"D" Square Bsc Mounting Holes	"F" Max Flange	"Ø G" Max Flange	"H" Square Max Flange Flats	"J" Max Flange	"K" Thread Mounting	"Ø L" ±.002 Flange	"Ø M" Thru Mtg Holes
10	.6250-.067P-.2L-TS-2A	1.174 (29.82)	0.913 (23.19)	0.625 (15.88)	0.100 (2.54)	1.110 (28.19)	1.050 (26.67)	0.100 (2.54)	M18 X 1-6g, 100R	0.975 (24.77)	0.128 (3.25)
11	.6875-.067P-.2L-TS-2A	1.240 (31.50)	0.960 (24.38)	0.670 (17.02)		1.160 (29.46)	1.110 (28.19)		M19 X 1-6g, 100R	1.038 (26.37)	
12	.7500-.067P-.2L-TS-2A	1.354 (34.39)	1.040 (26.42)	0.765 (19.43)		1.230 (31.24)	1.170 (29.72)		M21 X 1-6g, 100R	1.100 (27.94)	
14	.8750-.067P-.2L-TS-2A	1.510 (38.35)	1.133 (28.78)	0.859 (21.82)		1.360 (34.54)	1.320 (33.53)		M24 X 1-6g, 100R	1.225 (31.12)	
16	1.0000-.067P-.2L-TS-2A	1.620 (41.15)	1.227 (31.17)	0.938 (23.83)	0.125 (3.18)	1.515 (38.48)	1.444 (36.68)	0.128 (3.25)	M27 X 1-6g, 100R	1.350 (34.29)	0.154 (3.91)
18	1.1250-.067P-.2L-TS-2A	1.784 (45.31)	1.320 (33.53)	1.016 (25.81)		1.610 (40.89)	1.570 (39.88)		M30 X 1-6g, 100R	1.475 (37.47)	
20	1.2500-.067P-.2L-TS-2A	1.910 (48.51)	1.444 (36.68)	1.109 (28.17)		1.850 (46.99)	1.760 (44.70)		M34 X 1-6g, 100R	1.600 (40.64)	
22	1.3750-.067P-.2L-TS-2A	2.083 (52.91)	1.570 (39.88)	1.203 (30.56)		2.010 (51.05)	1.913 (48.59)		M37 X 1-6g, 100R	1.725 (43.82)	
24	1.5000-.067P-.2L-TS-2A	2.200 (55.88)	1.696 (43.08)	1.312 (33.32)		2.195 (55.75)	2.070 (52.58)		M41 X 1-6g, 100R	1.850 (46.99)	

El Ochito Mating Contact		
PART NUMBER	PROTOCOLS	
WHITE - PIN	858-045 Type I	10GBASE-T ETHERNET, CAT 6A 40GBASE-T ETHERNET, CAT 8
	858-051 Type II	10GBASE-T ETHERNET, CAT 6A 40GBASE-T ETHERNET, CAT 8
WHITE - SKT	858-046 Type I	10GBASE-T ETHERNET, CAT 6A 40GBASE-T ETHERNET, CAT 8
	858-052 Type II	10GBASE-T ETHERNET, CAT 6A 40GBASE-T ETHERNET, CAT 8
BLUE - PIN	858-047	USB 3.0, OTHER 90 OHM SIGNALS
BLUE - SKT	858-048	USB 3.0, OTHER 90 OHM SIGNALS
RED - PIN	858-049	HDMI, DISPLAYPORT, SATA, OTHER 100 OHM SIGNALS
RED - SKT	858-050	HDMI, DISPLAYPORT, SATA, OTHER 100 OHM SIGNALS

El Ochito Protocols		
		
WHITE	BLUE	RED
10GBASE-T	USB 3.0	HDMI, SATA, DisplayPort

The Ochito octaxial contact has a color-coded insulator signifying the data protocol. White is used for 10 Gb Ethernet, blue is used for USB 3.0, and red is used for multi gigabit 100 ohm protocols including HDMI, DisplayPort and SATA. The connector part number includes a protocol code from Table III. This code determines specific contact position for every combination of protocol.



Example
Code E7



Example
Code E5

Table IV: Protocol Code for El Ochito Contact Positions B = Blue, R = Red, W = White								
SYMBOL	Contact							
	A	B	C	D	E	F	G	H
E	W	W	W	W	W	W	W	W
E2	B	W	W	W	W	W	W	W
E3	R	W	W	W	W	W	W	W
E4	B	B	W	W	W	W	W	W
E5	R	B	W	W	W	W	W	W
E6	R	R	W	W	W	W	W	W
E7	B	B	B	W	W	W	W	W
E8	R	B	B	W	W	W	W	W
E9	R	R	B	W	W	W	W	W
E10	R	R	R	W	W	W	W	W
E11	B	B	B	B	W	W	W	W
E12	R	B	B	B	W	W	W	W
E13	R	R	B	B	W	W	W	W
E14	R	R	R	B	W	W	W	W
E15	R	R	R	R	W	W	W	W
E16	B	B	B	B	B	W	W	W
E17	R	B	B	B	B	W	W	W
E18	R	R	B	B	B	W	W	W
E19	R	R	R	B	B	W	W	W
E20	R	R	R	R	B	W	W	W
E21	R	R	R	R	R	W	W	W
E22	B	B	B	B	B	B	W	W
E23	R	B	B	B	B	B	W	W
E24	R	R	B	B	B	B	W	W
E25	R	R	R	B	B	B	W	W
E26	R	R	R	R	B	B	W	W
E27	R	R	R	R	R	B	W	W
E28	R	R	R	R	R	R	W	W
E29	B	B	B	B	B	B	B	W
E30	R	B	B	B	B	B	B	W
E31	R	R	B	B	B	B	B	W
E32	R	R	R	B	B	B	B	W
E33	R	R	R	R	B	B	B	W
E34	R	R	R	R	R	B	B	W
E35	R	R	R	R	R	R	B	W
E36	R	R	R	R	R	R	R	W
E37	B	B	B	B	B	B	B	B
E38	R	B	B	B	B	B	B	B
E39	R	R	B	B	B	B	B	B
E40	R	R	R	B	B	B	B	B
E41	R	R	R	R	B	B	B	B
E42	R	R	R	R	R	B	B	B
E43	R	R	R	R	R	R	B	B
E44	R	R	R	R	R	R	R	B
E45	R	R	R	R	R	R	R	R