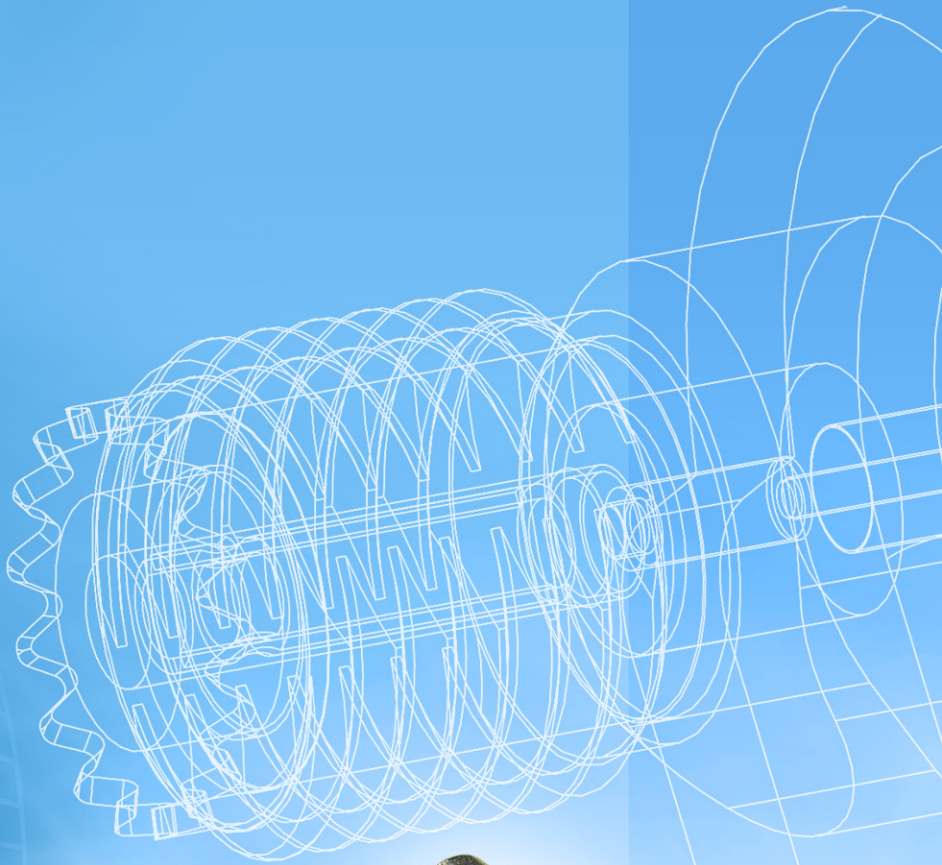


MINI-UHF



Mini-UHF Connectors

Mini-UHF Connectors

Description

Mini-UHF is a miniature version of the UHF connectors that were developed for use in the radio industry. Mini-UHF connectors are designed for use as coaxial interconnection in cell phones, automotive systems, and similar applications where size, weight, and cost factors are critical. Mini-UHF connectors terminate to RG-58, RG-58A, RG-58B, RG-58C, and Belden 9258 cables. Crimp-type cable plugs and jacks are available as well as panel and printed circuit board receptacles.

Features/Benefits

- Miniature 3/8-24 thread size provides excellent RF performance
- The small size and light weight provide excellent electrical characteristics
- Crimp-type cable terminations provide low installation cost
- Diecast bodies and molded insulators ensure low cost
- Teflon insulators provide higher temperature range

Applications

- Antennas
- Cable Assemblies
- Cellular

Mini-UHF

Mini-UHF Specifications

Electrical

| | |
|---------------------------------|---------------------------------|
| Impedance | 50 Ω |
| Frequency range | DC - 2.5 GHz |
| VSWR | 1.25 max. @ DC - 2.5 GHz |
| Voltage rating (at sea level) | ≤ 335 Vrms (depending on cable) |
| Insulation resistance | 5,000 MΩ minimum |
| Dielectric withstanding voltage | 1,000 Vrms (at sea level) |

Mechanical

| | |
|----------------------------------|--------------------------|
| Mating | 3/8-24 threaded coupling |
| Braid/Jacket cable affixment | Hex crimp |
| Center conductor cable affixment | Crimp |

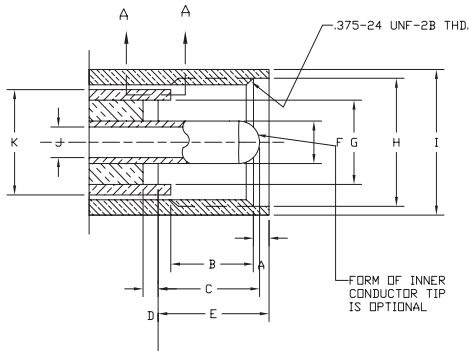
Environmental

| | |
|-------------------|----------------------------------|
| Temperature range | -55°C to +85°C |
| Thermal shock | MIL-STD-202, method 107, cond. A |
| Corrosion | MIL-STD-202, method 101, cond. B |
| Vibration | MIL-STD-202, method 204, cond. A |
| Mechanical shock | MIL-STD-202, method 213, cond. 1 |

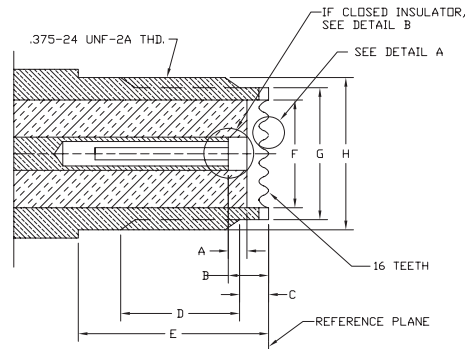
Material

| | |
|-------------------|------------------------------------|
| Other metal parts | Brass or zinc alloy, nickel plated |
| Insulator | PTFE |

Plug

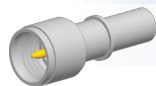


Jack



Cable Connectors

Straight Plugs



| Cable Group | Part Number | Body | Plating | | Termination | |
|-------------|---------------|----------------|---------|-------|-------------|--|
| | | | Contact | Body | Contact | |
| C | 81-115N-1000 | Nickel | Gold | Crimp | Crimp | |
| C | 81-115BK-1000 | Black Chromate | Gold | Crimp | Crimp | |
| E | 81-181-RFX | Nickel | Gold | Crimp | Solder | |
| G2 | 81-114-RFX | Nickel | Gold | Crimp | Solder | |

Angle Plugs



| Cable Group | Part Number | Body | Plating | | Termination | |
|-------------|-------------|--------|---------|-------|-------------|--|
| | | | Contact | Body | Contact | |
| C | 81-141-1002 | Nickel | Tin | Crimp | Solder | |

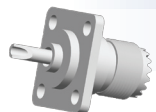
Straight Jacks



| Cable Group | Part Number | Body | Plating | | Termination | |
|-------------|-------------|--------|---------|-------|-------------|--|
| | | | Contact | Body | Contact | |
| C | 81-116 | Nickel | Tin | Crimp | Gold | |
| C | 81-183-RFX | Nickel | Gold | Crimp | Solder | |
| E | 81-182-RFX | Nickel | Gold | Crimp | Solder | |

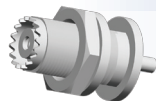
Receptacles

Straight Panel Jacks



| Part Number | Body | Plating | |
|-------------|--------|---------|------|
| | | Contact | Body |
| 81-118-1001 | Nickel | Tin | |

Straight Bulkhead Jacks



| Part Number | Body | Plating | |
|-------------|--------|---------|------|
| | | Contact | Body |
| 81-120 | Nickel | Tin | |

Notes

| Cable Group | Cable Type |
|-------------|--|
| A | RG-178, 196 |
| B | RG-174, 188A, 316, Belden 7805 |
| B1 | RG-179, 187, Belden 9221 |
| B2 | RD-188/U, RD-316/U |
| B3 | RD-179/U, AT&T 19224L2 |
| C | RG-58, 58A, 58C, 141, 303, LMR195, Belden 7806A, 9907 |
| C1 | RG-55, 142, 223, 400 |
| C2 | LMR200, Belden 7807A |
| D | RG-58/U Plenum, Thinnet, RG-122/U, Belden 88240, 89907 |
| E | RG-59, 62, 140, 210, Belden 8241, 8263, 8279, 9209 |
| E1 | RG-59/U 20 AWG center conductor, Belden 1426A, 1505A, 9100, 9278 |
| E2 | RD-59/U, Belden 8281, 9141, 9231 |
| E3 | RG-59/U Quad Shield, Belden 1152A |
| F | RG-59/U Plenum, Belden 1560A, 9259, 82259, 89259, 88241 |
| F1 | RG-59/U Plenum 20 AWG center conductor, Belden 82108 |
| G1 | RG-6, 143, 212 |
| G2 | 8X, LMR240, Belden 7808A, 9258 |
| G3 | LMR400, Belden 7810A, 8214, 9913 |
| G4 | RG-8, 8A, 9, 87A, 213, 214, 225, 393 |
| G5 | RD-6/U |
| H | RG-11 |
| H1 | Belden 1694A, 9248 |
| H2 | Belden 1859A, 7731, 8213, 9292 |
| H3 | RG-54A/U |
| I | AT&T 734A, Belden 1505A |
| I2 | AT&T 735A, Belden 735A1 |
| J | Quad 59 headend cable |
| K | LMR600 |
| K2 | Belden 1695A |
| K3 | RG-122, 180, 195, Belden 1855, 1865A, 8218 |
| L | .141 semi-rigid, RG-402/U |
| L2 | .085, .086, .087 semi-rigid, RG-405/U |
| L3 | .250 semi-rigid |
| L4 | .047 semi-rigid, Belden 1674 |
| M | 1/2 inch annular corrugated |
| M1 | 1 1/4 inch annular corrugated |
| M2 | 1 5/8 inch annular corrugated |
| M3 | 7/8 inch annular corrugated |
| N | 1/4 Helical |
| N1 | 3/8 Helical |
| N2 | 1/2 Helical |
| N3 | 7/8 inch SFC |
| P1 | .81 mm OD micro-cable |
| P2 | 1.13 mm OD micro-cable, TCB-068 |
| P3 | 1.32 mm OD micro-cable |
| P4 | 1.37 mm OD micro-cable |