# Mini BNC Connectors, 75 Ohm

## Product Facts

- **Bayonet locking coupling mechanism**
- **40% more interconnects in the same area**
- **Compatible with TROMPETER tooling**
- **Ideal for telecommunications and broadband applications**

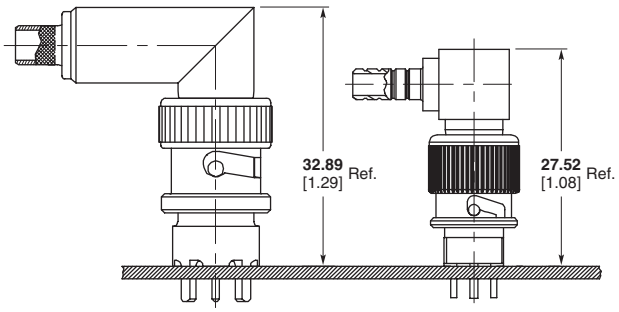


Tyco Electronics introduces the Mini BNC series of RF connectors to meet the growing demand for next generation telecommunications and broadband applications where higher connector densities are needed. Preserving the characteristics that have made the standard BNC so popular, the Mini BNC offers the same high performance currently found in standard Tyco Electronics BNC series, but offers 40% more interconnects in the same area.

The Mini BNC offering is an excellent fit for 75 Ohm systems, offering 500 mating cycles, electrical performance through 2 GHz, and is completely intermateable with competitive miniature BNC offerings. Tyco Electronics' Mini BNC product offers the same advantage of the bayonet locking mechanism as our standard BNC, allowing quicker connect and disconnects than standard threaded interfaces. It uses standard BNC installation tooling meaning there is no need for retraining of field telco installers, and it utilizes the same PCB footprint on the jack side, providing a drop in replacement for DS3 telco applications.

Mini BNC connector configurations currently available include PCB, panel mount, and flexible cable. Other options can be reviewed as well, including additional cable sizes, adapters, PCB surface mounting, and tape and reel packaging. Call your local sales office or authorized distributor for additional information or samples of the Mini BNC connector series.

Tyco Electronics is a leading supplier of RF and Microwave connectors and cable assemblies, and provides advanced technology products from well known and industry leading brands, including AMP and M/A-COM.




## Material and Finish

**Shells, Bodies, Mtg Nuts** — Brass, nickel plated

**Washers** — Stainless Steel, nickel plated

**Ferrule** — Copper or Brass, tin plated

**Center Contacts** — Phos Bronze and Brass, gold plated

**Dielectrics** — PTFE

## Electrical Characteristics

**Frequency** — DC – 2 GHz

**Nominal Impedance** — 75 ohms

**Voltage Rating** — 300 Volts (VRMS maximum) @ Sea Level

**VSWR** —
1.10 max to 500 MHz
(Return Loss -26.4 dB)
1.16 max to 1 GHz
(Return Loss -22.6 dB)

**Insulation Resistance** —
1,000 megohms minimum

**Dielectric Withstanding Voltage** —
1,000 Volts (VRMS maximum) @ Sea Level

**Contact Resistance** —
12 milliohms maximum

## Mechanical Characteristics

**Connector Durability** —
500 mating cycles

**Force to Engage** —
7 pounds maximum

**Force to Disengage** —
1 pound minimum

**Center Contact Retention** —
2 pounds minimum

**Cable Retention** —
20 pounds minimum

**Vibration** — EIA-364-28, Test Condition VII, Condition D

**Shock** — EIA-364-27, Method H

## Environmental Characteristics

**Temperature Rating** —
–40 to +85°C

**Moisture Resistance** — EIA-364-31, Method II, Condition C

**Thermal Shock** — EIA-364-32

**Note:** Performance specifications are typical, but may not apply to all connector types.

## Related Product Data

**Product Specification** — 108-2159

**Sample Kit** — 1773042

TROMPETER is a trademark of Trompeter Electronics, Inc.



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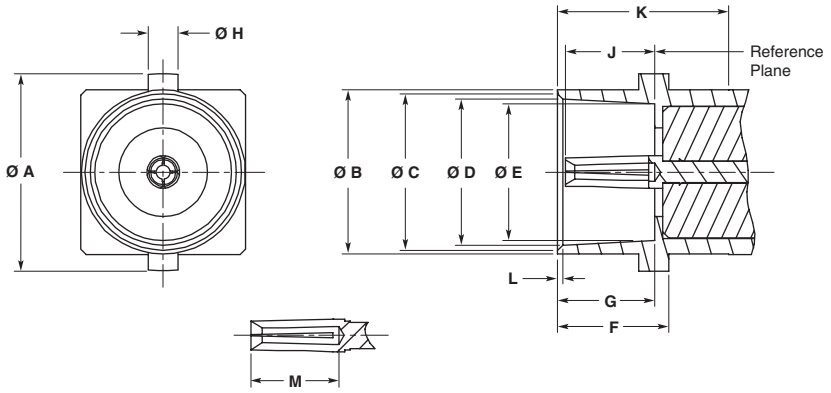
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## Mini BNC Connectors, 75 Ohm (Continued)

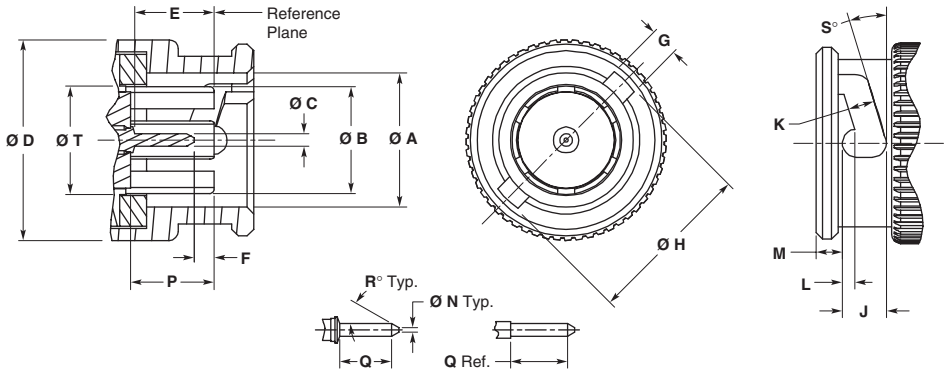
### Interface Dimensions

#### Mini BNC Jack




| Dimensions | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | J | K | L | M |
| **8.89–9.14**<br>.350–.360 | **7.37–7.62**<br>.290–.300 | **7.11–7.21**<br>.280–.284 | **6.63–6.73**<br>.261–.265 | **6.20–6.30**<br>.244–.248 | **5.03–5.13**<br>.198–.202 | **4.39–4.50**<br>.173–.177 | **1.32–1.42**<br>.052–.056 | **3.86–4.27**<br>.152–.168 | **7.70**<br>.303 Min. | **0.18–0.30**<br>.007–.012 | **4.01**<br>.158 Min. |

#### Mini BNC Plug




**Contact Types**

| Dimensions | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | J |
| **7.70–7.80**<br>.303–.307 | — | **0.71–0.76**<br>.028–.030 | **11.43–11.68**<br>.450–.460 | **4.27–4.93**<br>.168–.194 | **0.94–1.35**<br>.037–.053 | **1.57–1.68**<br>.062–.066 | **9.60–9.70**<br>.378–.382 | **2.50–2.59**<br>.098–.102 |

| Dimensions | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| K | L | M | N | P | Q | R | S | T |
| **1.57–1.68**<br>.062–.066 | **0.64–0.74**<br>.025–.029 | **1.47–1.57**<br>.058–.062 | **0.20–0.30**<br>.008–.012 | **4.62–4.93**<br>.182–.194 | **2.84–3.38**<br>.112–.133 | 29°–31° | 14°–16° | **6.20–6.30**<br>.244–.248 |



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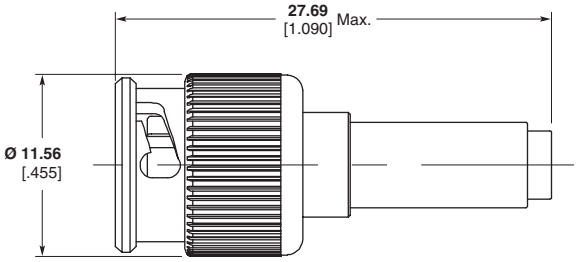
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## Mini BNC Connectors, 75 Ohm (Continued)

### Flexible Cable — Crimp Attachment

#### Straight Cable Plug

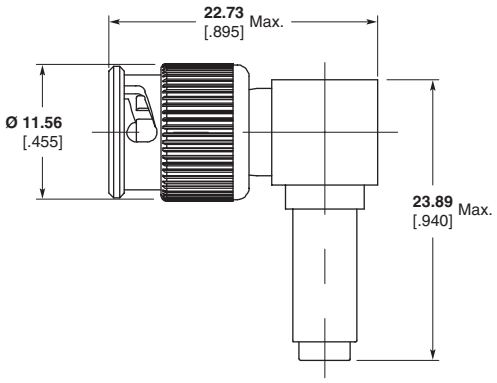





| Cable | Part Number |
|---|---|
| 735A | **1274563-1** |
| 734A | **1274563-2** |
| RG 179 | **1274563-3** |

#### Right-Angle Cable Plug

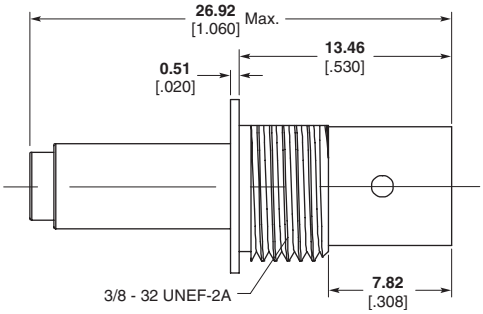


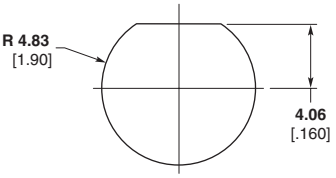



| Cable | Part Number |
|---|---|
| 735A | **1274566-1** |
| 734A | **1274566-2** |
| RG 179 | **1274566-3** |

#### Bulkhead Cable Jack






**Recommended Panel Cutout**
**Tolerance: ± 0.08 [.003]**

| Cable | Part Number |
|---|---|
| 735A | **1274568-1** |
| 734A | **1274568-2** |
| RG 179 | **1274568-3** |

**Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.



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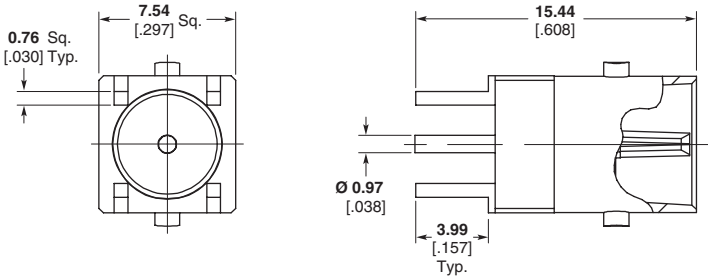
## Mini BNC Connectors, 75 Ohm (Continued)

### Printed Circuit Board

#### Straight Jack Receptacle



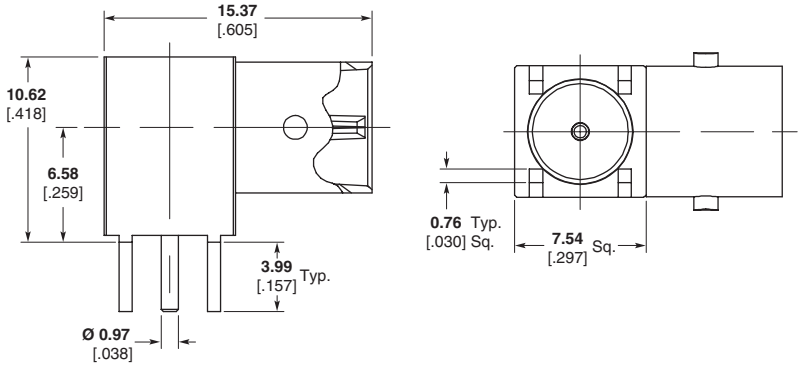
| Part Number |
|---|
| 1274571-1 |




#### Right-Angle Jack Receptacle



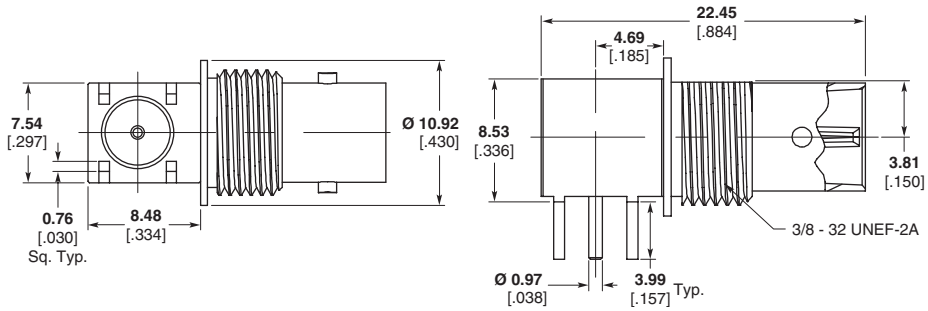
| Part Number |
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| 1274572-1 |




#### Right-Angle Bulkhead Jack Receptacle



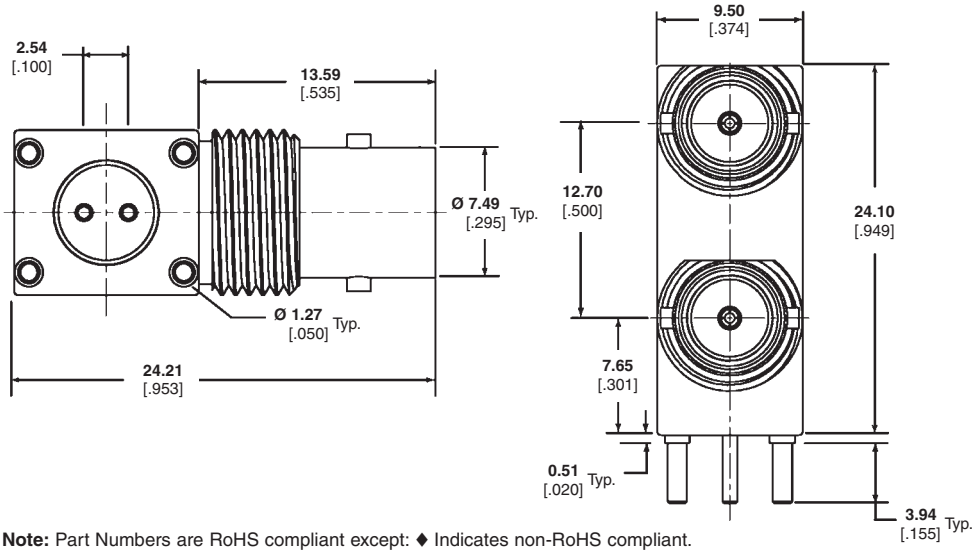
| Part Number |
|---|
| 1274584-1 |




#### 2 Position, Right-Angle, Bulkhead Jack Receptacle



| Description | Part Number |
|---|---|
| With Hardware | 1274663-2 |
| Without Hardware | 1274684-1 |




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