

# tyco

Electronics

## Mini BNC

09/05 1773041

### DESCRIPTION

#### 75 Ohm Miniature BNC Series

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

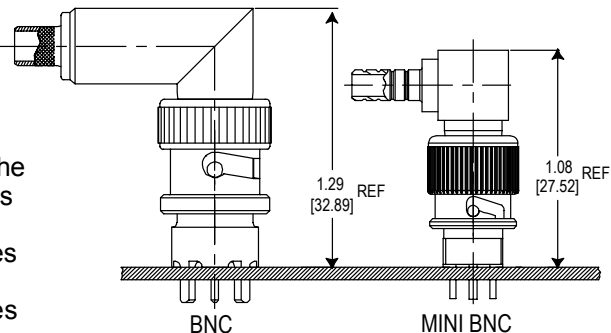


Tyco Electronics introduces the Mini-BNC series of RF connectors to meet the growing demand for next generation telecommunications and broadband applications where higher connector densities are needed. Preserving the characteristics that have made the standard BNC so popular, the Mini-BNC offers the 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 interchangeable 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.



New product

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# Mini BNC Specifications

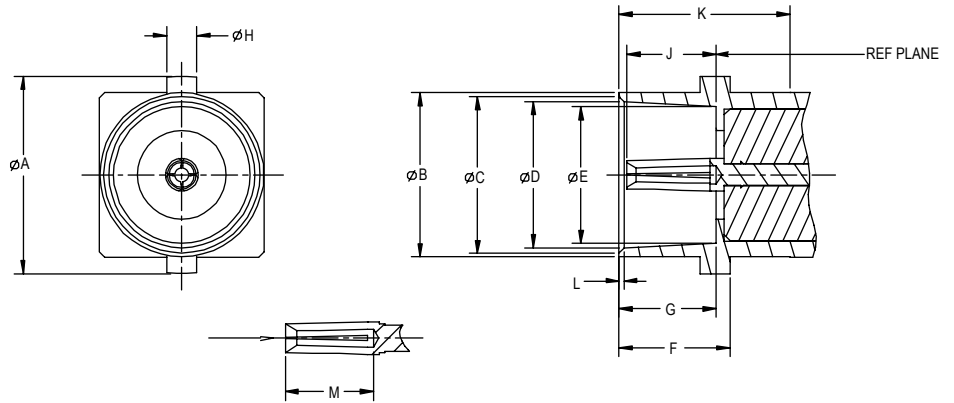
| Requirement                     | Detail                                      |                       |
|---------------------------------|---|-----------------------|
| <b>General</b>                  |   |                       |
| Materials                       | Shells, Bodies, Mtg Nuts:                   | Brass                 |
|                                 | Washers:                                    | Stainless Steel       |
|                                 | Ferrule:                                    | Copper or Brass       |
|                                 | Center Contacts:                            | Phos Bronze and Brass |
|                                 | Dielectrics:                                | PTFE                  |
| Finish                          | Shells, Bodies, Washers, Mtg Nuts:          | Nickel                |
|                                 | Ferrule:                                    | Tin                   |
|                                 | Center Contacts:                            | Gold                  |
| <b>Electrical</b>               |   |                       |
| 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                        |                       |
| <b>Mechanical</b>               |   |                       |
| 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                        |                       |
| <b>Environmental</b>            |   |                       |
| 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

# Mini BNC Interface Dimensions

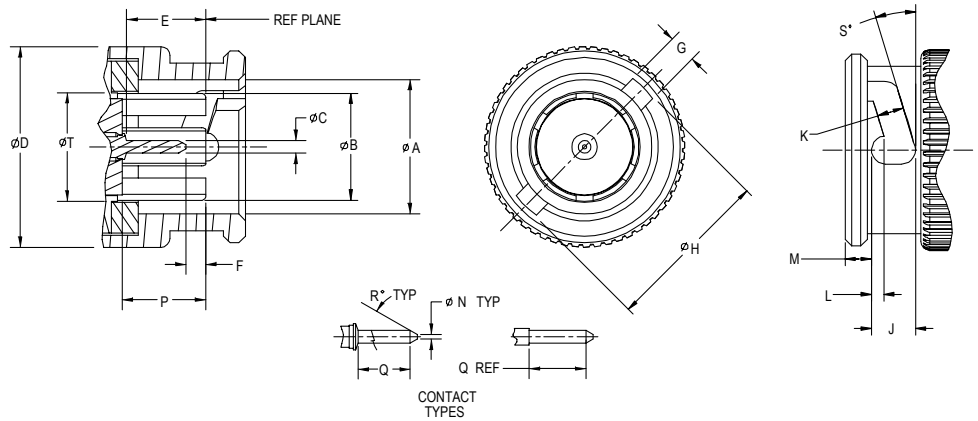
## MINI BNC JACK

| DIM | MINIMUM | MAXIMUM |
|-----|---------|---------|
| A   | .350    | .360    |
| B   | .290    | .300    |
| C   | .280    | .284    |
| D   | .261    | .265    |
| E   | .244    | .248    |
| F   | .198    | .202    |
| G   | .173    | .177    |
| H   | .052    | .056    |
| J   | .152    | .168    |
| K   | .303    | -       |
| L   | .007    | .012    |
| M   | .158    | -       |



## MINI BNC PLUG

| DIM | MINIMUM | MAXIMUM |
|-----|---------|---------|
| A   | .303    | .307    |
| B   | -       | -       |
| C   | .028    | .030    |
| D   | .450    | .460    |
| E   | .168    | .194    |
| F   | .037    | .053    |
| G   | .062    | .066    |
| H   | .378    | .382    |
| J   | .098    | .102    |
| K   | .062    | .066    |
| L   | .025    | .029    |
| M   | .058    | .062    |
| N   | .008    | .012    |
| P   | .182    | .194    |
| Q   | .112    | .133    |
| R   | .29     | .31     |
| S   | 14      | 16      |
| T   | .244    | .248    |



Dimensions shown are inches unless otherwise specified

## TECHNICAL DOCUMENTS

- Product Spec 108-2159
- Sample Kit 1773042

## FOR MORE INFORMATION

Internet

<http://tycoelectronics.com>

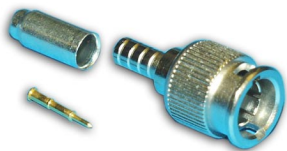
Technical Support Center

1-800-522-6752

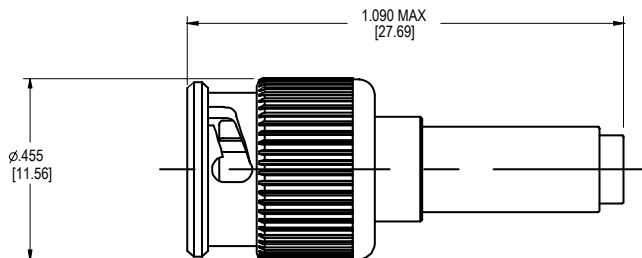
# Mini BNC Product Offering

## Flexible Cable – Crimp Attachment

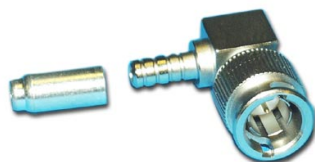
### Straight Cable Plug



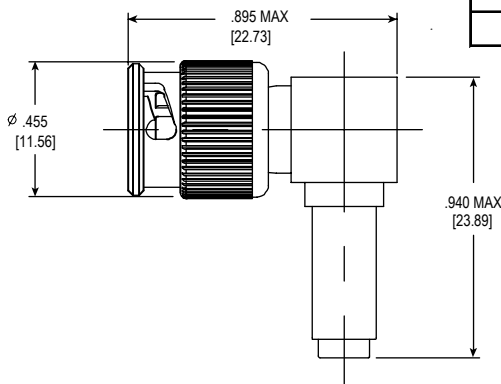
| Part Number | Cable  |
|-------------|--------|
| 1274563-1   | 735A   |
| 1274563-2   | 734A   |
| 1274563-3   | RG 179 |



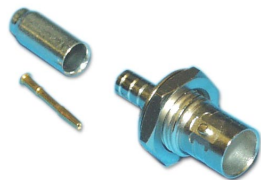
### Right Angle Cable Plug



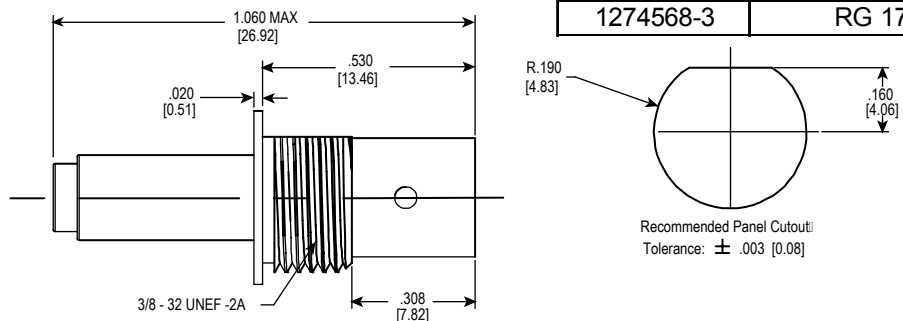
| Part Number | Cable  |
|-------------|--------|
| 1274566-1   | 735A   |
| 1274566-2   | 734A   |
| 1274566-3   | RG 179 |



### Bulkhead Cable Jack



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

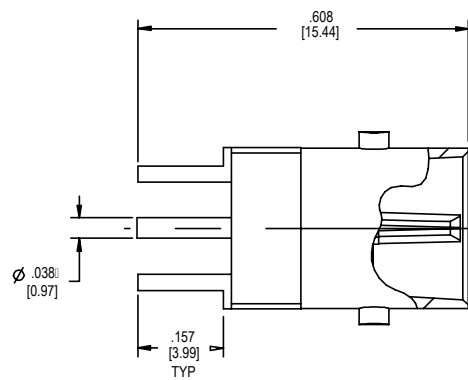
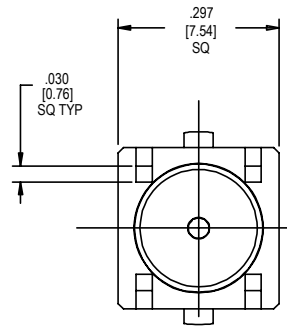
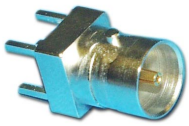


Dimensions are inches over millimeters unless otherwise specified

# Mini BNC Product Offering

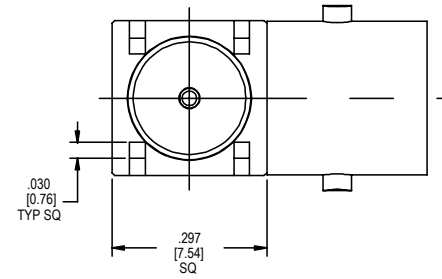
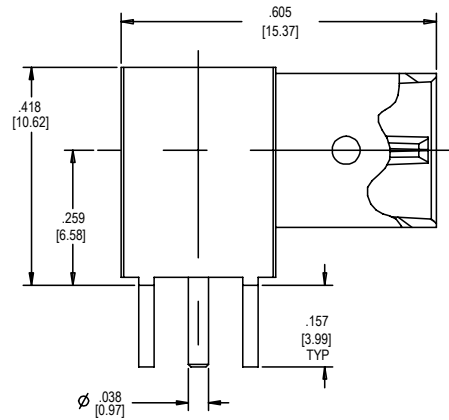
## Printed Circuit Board

### Straight Jack Receptacle



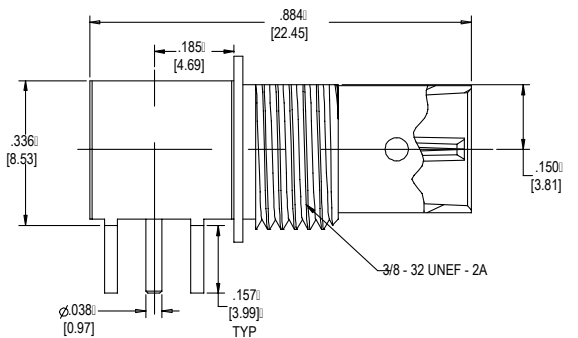
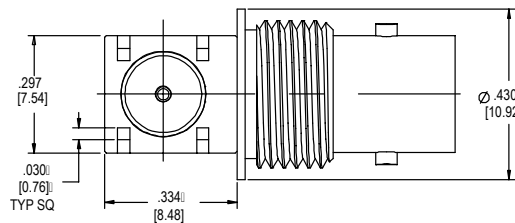
Part Number  
1274571-1

### Right Angle Jack Receptacle



Part Number  
1274572-1

### Right Angle Bulkhead Jack Receptacle



Part Number  
1274584-1

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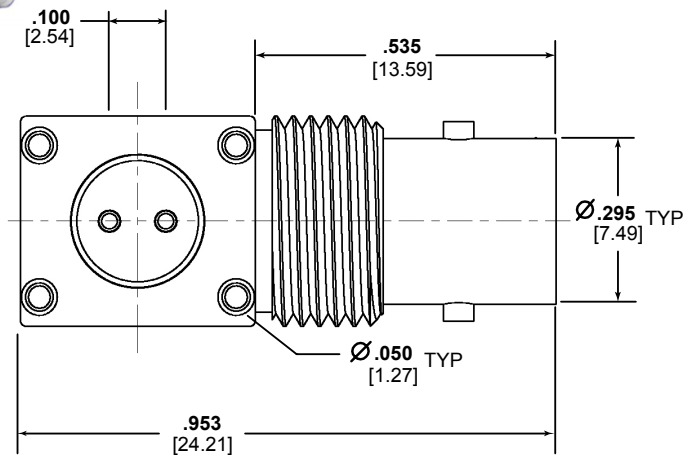
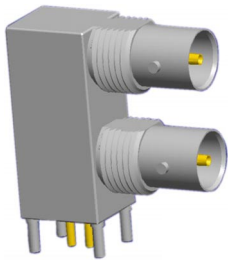
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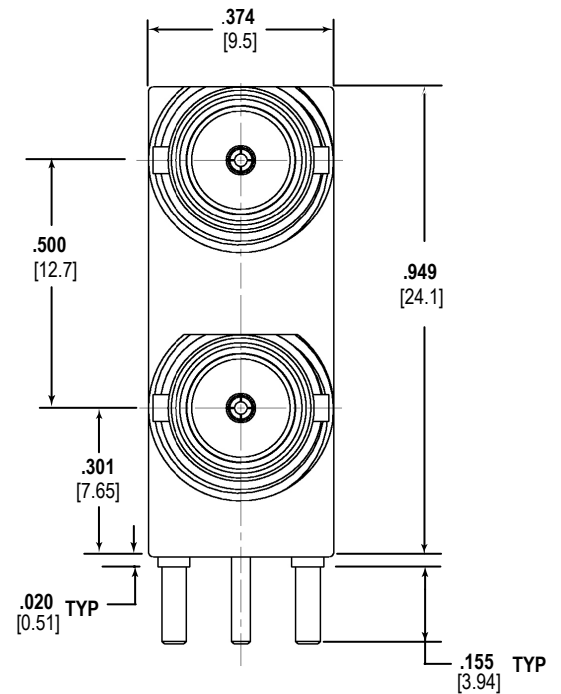
# Mini BNC Product Offering

## Printed Circuit Board

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



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



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