



N Male Connector Crimp/Solder Attachment for PE-B400, PE-B405, PE-C400, LMR-400, 0.400 inch

## RF Connectors Technical Data Sheet

PE4550

### Configuration

- N Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- PE-B400, PE-B405, PE-C400, LMR-400, .400 inch Interface Type
- Crimp/Solder Attachment

### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Silver Plated Brass Contact
- 70 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4550 type N male connector with crimp/solder attachment for PE-B400, PE-B405, PE-C400, LMR-400 and .400 inch is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1.

Our type N male connector PE4550 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

### Electrical Specifications

| Description            | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Frequency Range        | DC      |         | 6       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 600     | Vrms  |

### Mechanical Specifications

#### Size

|            |                     |
|------------|---------------------|
| Length     | 1.505 in [38.23 mm] |
| Width/Dia. | 0.827 in [21.01 mm] |
| Weight     | 0.072 lbs [32.66 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Crimp/Solder Attachment for PE-B400, PE-B405, PE-C400, LMR-400, 0.400 inch PE4550](#)



N Male Connector Crimp/Solder Attachment for PE-B400, PE-B405, PE-C400, LMR-400, 0.400 inch

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### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Silver<br>70 µin minimum  |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |
| Crimp Sleeve | Brass    | Nickel                    |

### Environmental Specifications

#### Temperature

Operating Range -65 to +165 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

N Male Connector Crimp/Solder Attachment for PE-B400, PE-B405, PE-C400, LMR-400, 0.400 inch from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

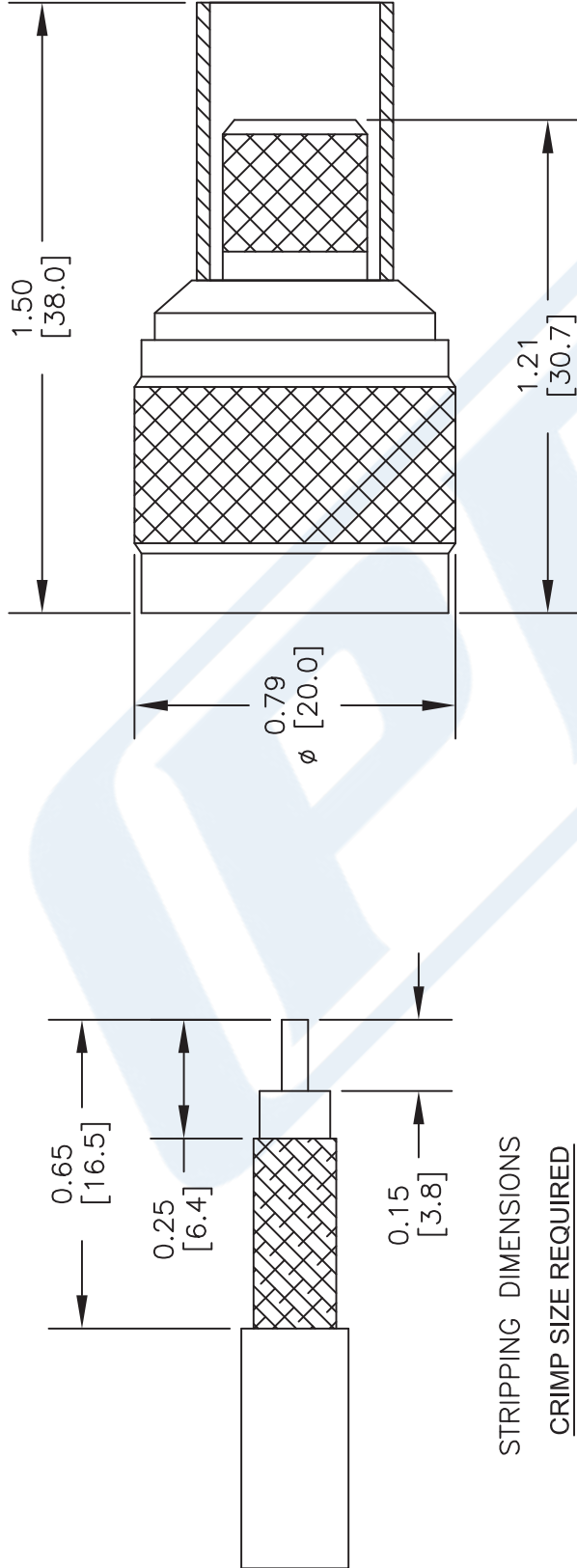
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Crimp/Solder Attachment for PE-B400, PE-B405, PE-C400, LMR-400, 0.400 inch PE4550](#)

URL: <https://www.pasternack.com/n-male-standard-pe-b400-pe-b405-pe-c400-connector-pe4550-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE4550 CAD Drawing

N Male Connector Crimp/Solder Attachment for PE-B400,  
PE-B405, PE-C400, LMR-400, 0.400 inch



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER

FERRULE: .429" HEX CRIMP TOOL

DWG TITLE

**PE4550**

- NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
  3. DIMENSIONS ARE IN INCHES [mm].
  4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE

052714

SCALE N/A

SIZE A

2233

**(PE) PASTERNAK®**  
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.

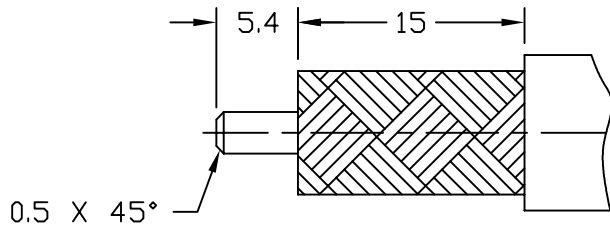
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

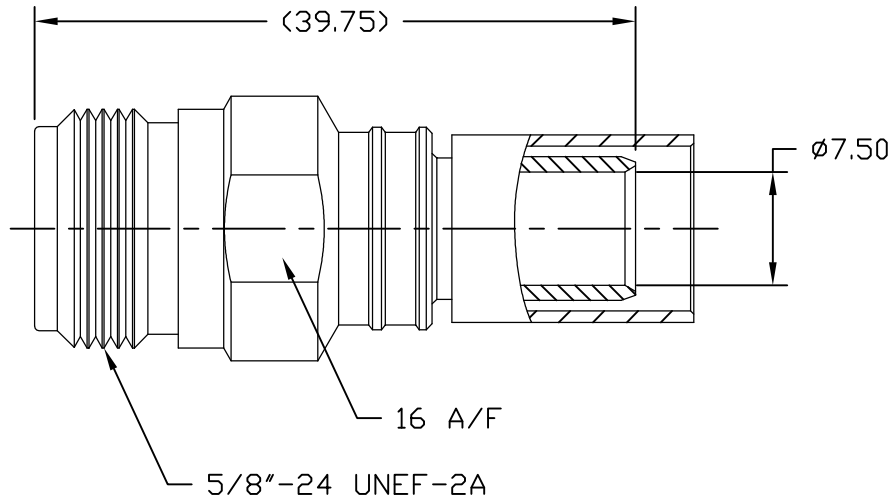
Website: www.pasternack.com | E-Mail: sales@pasternack.com

**NOTICE OF PROPRIETARY RIGHTS** THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

| SYM | REVISION DESCRIPTION    | DFTM     | DATE     | APPD     | DATE     |
|-----|-------------------------|----------|----------|----------|----------|
| A   | RELEASED FOR PRODUCTION | D. J. H. | 12/11/12 | J. D. B. | 12/12/12 |



CABLE PREP.  
USE CST-400  
(3192-004)  
.429" HEX.



Reference Standard IEC60169-16

I. Electric Performance

Nominal Impedance( $\Omega$ ): 50  
 Frequency Range: DC-6GHz  
 VSWR:  $\leq 1.3(0-6\text{GHz})$   
 Insert Loss(dB):  $\leq 0.10$   
 Insulation resistance(M $\Omega$ ): >5000  
 Proof Voltage(V): 1500  
 Conductor resistance(m $\Omega$ ):  
 outer conductor <0.4  
 inner conductor <0.8

II. Mechanical Performance

Tensile force(cable-connect) 400N  
 Torsion(cable-connect) 2N.m

III. Material and plating

| Component       | Material      | Plating                           |
|-----------------|---------------|-----------------------------------|
| Inner conductor | Spring Copper | Au >1.27 $\mu\text{m}$            |
| Outer conductor | Brass         | Copper-tin-zinc > 2 $\mu\text{m}$ |
| Insulator       | PTFE          |                                   |

IV. Environment

Temp. range -55°C~+155°C  
 Weather standard IEC 60068 55 / 155/ 56  
 Thermal shock US MIL-STD 202, Meth.107, Cond.B  
 Vibration US MIL-STD 202, Meth.204, Cond.B  
 Shock US MIL-STD 202, Meth.213, Cond.I  
 ROHS Compliant

V. Assembly: inner conductor soldered and outer conductor crimped

|                      |  |                |  |
|----------------------|--|----------------|--|
| MATERIAL:            | UNLESS OTHERWISE SPECIFIED<br>ALL DIMENSIONS ARE IN mm<br>MACHINED SURFACES FINISH N/A RMS MAX.<br>REMOVE ALL BURRS N/A MAX. BREAK<br>MACHINE CORNERS N/A MAX. FILLET R.<br>TOLERANCES ON DECIMALS<br>.XX $\pm$ N/A .XXX $\pm$ N/A<br>ANGLES $\pm 1^\circ$ FRACTIONS $\pm$ N/A | DFTM. D. J. H. | TIMES MICROWAVE SYSTEMS  |
|                      |  | DATE 12/11/12  |  |
| USED ON: O-1         |  | CHKD. J. D. B. | <b>TC-400-NF-X</b><br>N FEMALE FOR LMR-400 CABLE<br>SOLDER/CRIMP/NO BRAID TRIM |
|                      |  | DATE 12/12/12  |  |
| SCALE: N/A           | DWG. SIZE A  | APPD. J. D. B. | SHEET 1 of 1   SD3190-2815   REV A   |
|                      |  | DATE 12/12/12  |  |
| DO NOT SCALE DRAWING | CODE IDENT 68999   |                |  |

# LMR<sup>®</sup>-400 Flexible Low Loss Communications Coax

## Ideal for...

- Drop-in replacement for RG-8/9913 Air-Dielectric type Cable
- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable



- **LMR<sup>®</sup>** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than air-dielectric and corrugated hard-line cables.
- **LMR<sup>®</sup>-DB** is identical to standard LMR plus has the advantage of being watertight. The addition of waterproofing compound in and around the foil/braid insures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.
- **LMR<sup>®</sup>-FR** is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA rated 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P for mining applications.
- **LMR<sup>®</sup>-FR-PVC** is a general-purpose indoor cable and has a UL/NEC & CSA rating of 'CMR' and 'FT4' respectively. It is less expensive than LMR-FR, however it emits toxic fumes (HCL) and greater smoke density when burned.
- **LMR<sup>®</sup>-PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.
- **LMR<sup>®</sup>-PVC-W** is a white-jacketed version of LMR-PVC for marine and other applications where color compatibility is desired.

- **Flexibility** and bendability are hallmarks of the LMR-400 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.
- **Low Loss** is another hallmark feature of LMR-400.

Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

- **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).
- **Weatherability:** LMR-400 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.
- **Connectors:** A wide variety of connectors are available for LMR-400 cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.
- **Cable Assemblies:** All LMR-400 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Part Description |                      |           |       |       | Stock |
|------------------|----------------------|-----------|-------|-------|-------|
| Part Number      | Application          | Jacket    | Color | Code  | Code  |
| LMR-400          | Outdoor              | PE        | Black | 54001 |       |
| LMR-400-DB       | Outdoor/Watertight   | PE        | Black | 54091 |       |
| LMR-400-FR       | Indoor/Outdoor Riser | CMR FRPE  | Black | 54030 |       |
| LMR-400-FR-PVC   | Indoor/Outdoor Riser | CMR FRPVC | Black | 54073 |       |
| LMR-400-PVC      | General Purpose      | PVC       | Black | 54218 |       |
| LMR-400-PVC-W    | General Purpose      | PVC       | White | 54204 |       |

| Construction Specifications |                   |       |         |
|-----------------------------|-------------------|-------|---------|
| Description                 | Material          | In.   | (mm)    |
| Inner Conductor             | Solid BCCAI       | 0.108 | (2.74)  |
| Dielectric                  | Foam PE           | 0.285 | (7.24)  |
| Outer Conductor             | Aluminum Tape     | 0.291 | (7.39)  |
| Overall Braid               | Tinned Copper     | 0.320 | (8.13)  |
| Jacket                      | (see table above) | 0.405 | (10.29) |

# LMR<sup>®</sup>-400 Flexible Low Loss Communications Coax



## Connectors

| Interface       | Description      | Part Number       | Stock Code | VSWR**<br>Freq. (GHz) | Coupling<br>Nut | Inner<br>Contact<br>Attach | Outer<br>Contact<br>Attach | Finish*<br>Body<br>/Pin | Length<br>in<br>(mm) | Width<br>in<br>(mm) | Weight<br>lb(g) |
|-----------------|------------------|-------------------|------------|-----------------------|-----------------|----------------------------|----------------------------|-------------------------|----------------------|---------------------|-----------------|
| 7-16 DIN Female | Straight Jack    | TC-400-716-FC     | 3190-376   | <1.25:1 (2.5)         | NA              | Solder                     | Clamp                      | S/S                     | 1.6 (41)             | 1.13 (28.7)         | 0.281 (127.5)   |
| 7-16 DIN Male   | Straight Plug    | EZ-400-716M-X     | 3190-2524  | <1.25:1 (6)           | Hex             | Spring Finger Crimp        |                            | A/G                     | 1.6 (39.5)           | 1.38 (35)           | 0.277 (126.0)   |
| 7-16 DIN Male   | Straight Plug    | TC-400-716-MC     | 3190-279   | <1.25:1 (2.5)         | Hex             | Solder                     | Clamp                      | S/S                     | 1.4 (36)             | 1.40 (35.6)         | 0.268 (121.6)   |
| 7-16 DIN Male   | Right Angle      | TC-400-716MC-RA   | 3190-1671  | <1.25:1 (<3)          | Hex             | Solder                     | Clamp                      | A/S                     | 2.4 (61.5)           | 1.88 (47.8)         | 0.35 (159)      |
| 7-16DIN Male    | Right Angle      | EZ-400-716M-RA-X  | 3190-2545  | <1.35:1 (6)           | Hex             | Spring Finger Crimp        |                            | A/G                     | 1.6 (41.7)           | 1.75 (44.3)         | 0.374 (0.17)    |
| BNC Male        | Straight Plug    | TC-400-BM         | 3190-318   | <1.25:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/S                     | 1.7 (43)             | 0.56 (14.2)         | 0.063 (28.6)    |
| HN Male         | Straight Plug    | TC-400-HNM        | 3190-923   | <1.25:1 (<1)          | Knurl           | Solder                     | Clamp                      | S/G                     | 2.3 (59.2)           | 0.88 (22.4)         | 0.25 (113.4)    |
| HN Male         | Right Angle      | TC-400-HNM-RA     | 3190-2541  | <1.25:1 (2.5)         | Hex             | Solder                     | Crimp                      | A/G                     | 1.6 (41.4)           | 1.56 (39.6)         | 0.198 (90.0)    |
| QDS Male        | Straight Plug    | TC-400-QDSM       | 3190-620   | <1.25:1 (<3)          | Knurl           | Solder                     | Clamp                      | A/G                     | 1.8 (46.6)           | 1.00 (25.4)         | 0.25 (113.4)    |
| Mini-UHF        | Straight Plug    | TC-400-MUHF       | 3190-520   | <1.25:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/G                     | 1.1 (28)             | 0.50 (12.7)         | 0.020 (9.1)     |
| N Female        | Straight Jack    | TC-400-NFC        | 3190-299   | <1.25:1 (2.5)         | NA              | Solder                     | Clamp                      | N/S                     | 1.6 (41)             | 0.75 (19.1)         | 0.119 (54.0)    |
|                 | Straight Jack    | EZ-400-NF         | 3190-956   | <1.25:1 (2.5)         | NA              | Spring Finger Crimp        |                            | N/G                     | 1.8 (45)             | 0.66 (16.8)         | 0.105 (47.6)    |
|                 | Straight Jack    | TC-400-NF         | 3190-2255  | <1.25:1 (2.5)         | NA              | Solder                     | Crimp                      | N/G                     | 1.8 (45)             | 0.66 (16.8)         | 0.105 (47.6)    |
|                 | Bulkhead Jack    | EZ-400-NF-BH      | 3190-518*  | <1.25:1 (2.5)         | NA              | Spring Finger Crimp        |                            | N/G                     | 1.8 (46)             | 0.88 (22.4)         | 0.102 (46.3)    |
|                 | Bulkhead Jack    | TC-400-NFC-BH (A) | 3190-872   | <1.25:1 (2.5)         | NA              | Solder                     | Clamp                      | A/G                     | 1.8 (46)             | 0.88 (22.4)         | 0.145 (65.8)    |
| N Male          | Straight Plug    | SC-400-NM         | 3190-1454  | <1.25:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/G                     | 1.5 (38)             | 0.75 (19.1)         | 0.090 (40.8)    |
|                 | Straight Plug    | TC-400-NMC        | 3190-277   | <1.25:1 (2.5)         | Knurl           | Solder                     | Clamp                      | N/G                     | 1.5 (38)             | 0.70 (17.8)         | 0.121 (54.9)    |
|                 | Straight Plug    | EZ-400-NMC-2      | 3190-2640  | <1.25:1 (2.5)         | Hex/Knurl       | Spring Finger Crimp        |                            | N/G                     | 1.5 (38)             | 0.75 (19.1)         | 0.121 (54.9)    |
|                 | Straight Plug    | EZ-400-NMH-X      | 3190-2590  | <1.25:1 (10)          | Hex/Knurl       | Spring Finger Crimp        |                            | A/G                     | 1.5 (38)             | 0.89 (22.6)         | 0.103 (46.8)    |
|                 | Straight Plug    | TC-400-NMH-X      | 3190-2626  | <1.25:1 (10)          | Hex/Knurl       | Solder                     | Crimp                      | A/G                     | 1.5 (38)             | 0.89 (22.6)         | 0.113 (51.3)    |
|                 | Straight Plug    | EZ-400-NMK        | 3190-661   | <1.25:1 (10)          | Knurl           | Spring Finger Crimp        |                            | S/G                     | 1.5 (38)             | 0.75 (22.6)         | 0.113 (51.3)    |
|                 | Right Angle      | EZ-400-NMH-RA-X   | 3190-2638  | <1.35:1 (6)           | Hex/Knurl       | Spring Finger Crimp        |                            | A/G                     | 1.87 (47)            | 1.42 (36.0)         | 0.177 (80.2)    |
|                 | Right Angle      | TC-400-NMH-RA-D   | 3190-2293* | <1.35:1 (6)           | Hex/Knurl       | Solder                     | Crimp                      | A/G                     | 1.8 (46)             | 1.25 (31.8)         | 0.130 (59.0)    |
|                 | Right Angle      | TC-400-NMC-RA (A) | 3190-870   | <1.35:1 (2.5)         | Hex             | Solder                     | Clamp                      | A/G                     | 1.8 (46)             | 1.25 (31.8)         | 0.150 (68.0)    |
|                 | Reverse Polarity | TC-400-NM-RP      | 3190-960   | <1.25:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/G                     | 1.5 (38)             | 0.75 (19.1)         | 0.090 (40.8)    |
| SMA Male        | Straight Plug    | TC-400-SM         | 3190-439   | <1.25:1 (8)           | Hex             | Solder                     | Crimp                      | N/G                     | 1.2 (29)             | 0.50 (12.7)         | 0.032 (14.5)    |
| TNC Female      | Reverse Polarity | TC-400-TF-RP      | 3190-1063  | <1.25:1 (2.5)         | NA              | Solder                     | Crimp                      | N/G                     | 1.8 (46)             | 0.55 (14.0)         | 0.074 (33.6)    |
|                 | Reverse Polarity | EZ-400-TF-RP      | 3190-795   | <1.25:1 (2.5)         | NA              | Spring Finger Crimp        |                            | A/G                     | 1.8 (46)             | 0.55 (14.0)         | 0.074 (33.6)    |
| TNC Male        | Straight Plug    | TC-400-TM-X       | 3190-2532  | <1.25:1 (6)           | Hex/Knurl       | Solder                     | Crimp                      | A/G                     | 1.9 (48)             | 0.67 (17.5)         | 0.075 (34.3)    |
|                 | Straight Plug    | EZ-400-TM-X       | 3190-2533  | <1.25:1 (6)           | Hex/Knurl       | Spring Finger Crimp        |                            | A/G                     | 1.9 (48)             | 0.67 (17.5)         | 0.075 (34.3)    |
|                 | Right Angle      | TC-400-TM-RA      | 3190-442*  | <1.35:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/G                     | 1.7 (43)             | 0.59 (15.0)         | 0.085 (38.6)    |
|                 | Reverse Polarity | TC-400-TM-RP      | 3190-1062  | <1.25:1 (2.5)         | Knurl           | Solder                     | Crimp                      | N/G                     | 1.7 (43)             | 0.59 (15.0)         | 0.074 (33.6)    |
|                 | Reverse Polarity | EZ-400-TM-RP      | 3190-794   | <1.25:1 (2.5)         | Knurl           | Spring Finger Crimp        |                            | A/G                     | 1.7 (43)             | 0.59 (15.0)         | 0.074 (33.6)    |