



## RP-SMA Female Connector Crimp/Crimp Attachment for LMR-400, PE-C400, PE-B400, PE-B405

### RF Connectors Technical Data Sheet

**PE45397**

#### Configuration

- SMA Female Reverse Polarity Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-400, PE-C400, PE-B400, PE-B405

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- Reverse Polarity

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45397 RP SMA female connector with crimp/crimp attachment for LMR-400, PE-C400, PE-B400 and PE-B405 is part of our full line of RF components available for same-day shipping. The female reverse polarity configuration uses a female connector body with a male inner contact pin. Our SMA female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1.

Our reverse polarity SMA female connector PE45397 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   |       |
| Dielectric Withstanding Voltage (AC) |         |         | 1,000   | Vrms  |

#### Mechanical Specifications

|               |                    |
|---------------|--------------------|
| <b>Size</b>   |                    |
| Length        | 1.47 in [37.34 mm] |
| Mating Cycles | 500 Cycles         |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-SMA Female Connector Crimp/Crimp Attachment for LMR-400, PE-C400, PE-B400, PE-B405 PE45397](#)



## RP-SMA Female Connector Crimp/Crimp Attachment for LMR-400, PE-C400, PE-B400, PE-B405

### RF Connectors Technical Data Sheet

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#### Material Specifications

| Description     | Material | Plating |
|-----------------|----------|---------|
| Contact         | Brass    | Gold    |
| Insulation      | PTFE     |         |
| Outer Conductor | Brass    | Nickel  |
| Body            | Brass    | Nickel  |
| Gasket          | Rubber   |         |
| Crimp Sleeve    | Brass    | Nickel  |

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

Humidity

MIL-Std. 202 Method 106 (Test Condition B)

Vibration

MIL-Std. 202 Method 204 (Test Condition D)

Altitude

MIL-Std. 202 Method 105 (Test Condition C)

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

#### Plotted and Other Data

Notes:

RP-SMA Female Connector Crimp/Crimp Attachment for LMR-400, PE-C400, PE-B400, PE-B405 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.

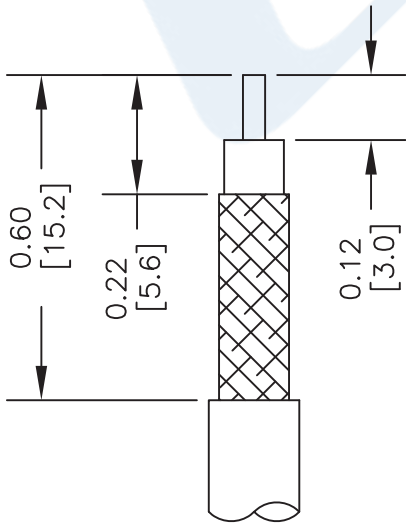
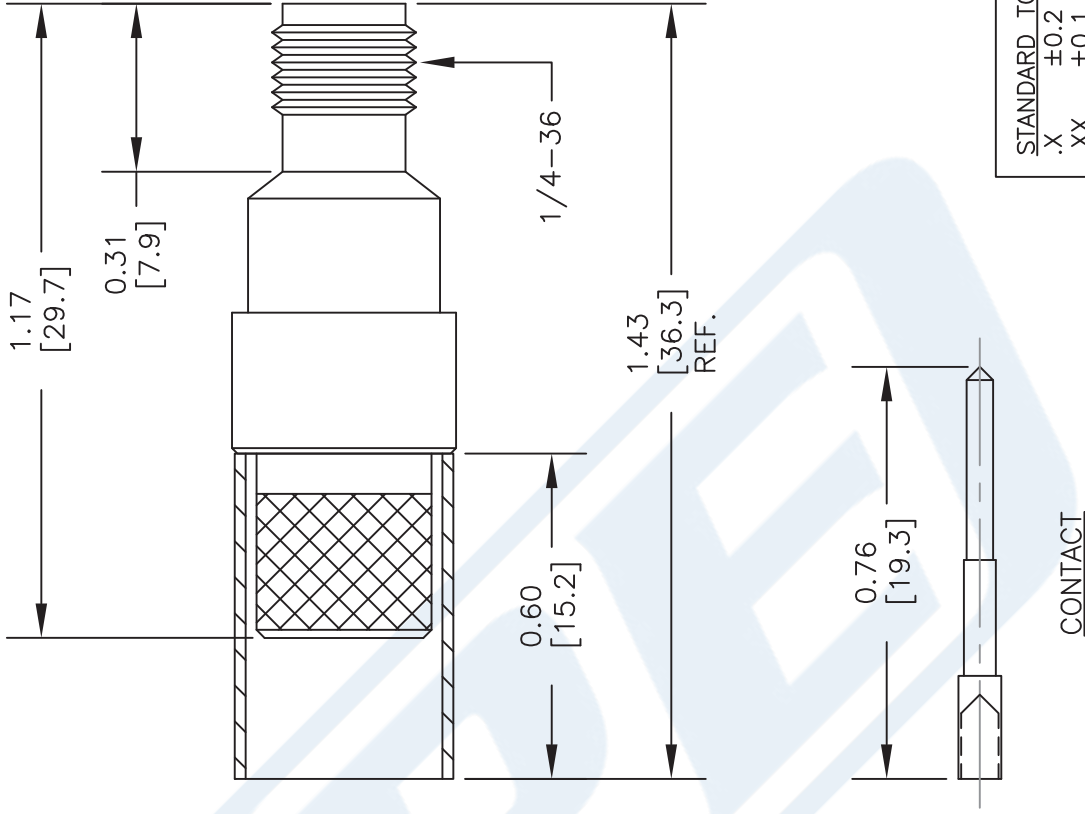
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-SMA Female Connector Crimp/Crimp Attachment for LMR-400, PE-C400, PE-B400, PE-B405 PE45397](#)

URL: <https://www.pasternack.com/sma-female-reverse-polarity-lmr-400-pe-c400-connector-pe45397-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.

# PE45397 CAD Drawing

RP-SMA Female Connector Crimp/Crimp Attachment for  
LMR-400, PE-C400, PE-B400, PE-B405



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SLIDE FERRULE OVER CABLE & CRIMP/SOLDER CONTACT TO CENTER CONDUCTOR.
2. INSTALL CABLE INTO BODY. PUSH CABLE FORWARD UNTIL CONTACT IS IN THE CORRECT POSITION.
3. SLIDE FERRULE OVER BRAID & CRIMP.

## CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .429" HEX CRIMP TOOL

DWG TITLE

PE45397

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].

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CAGE CODE 53919

CAD FILE 051017

SCALE N/A

SIZE A

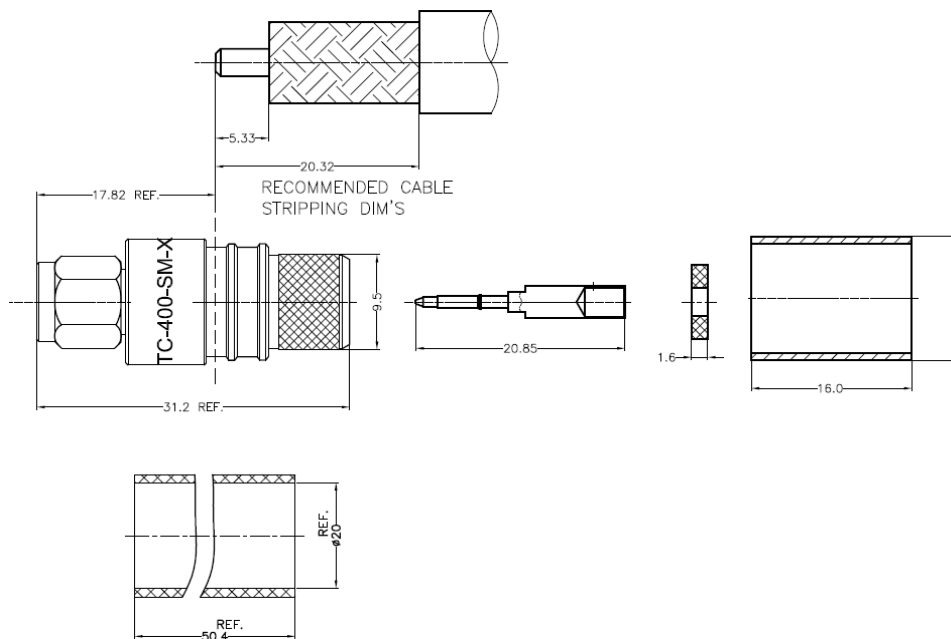
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| SYM | REVISION DESCRIPTION    | DFTM    | DATE    | APPD     | DATE    |
|-----|-------------------------|---------|---------|----------|---------|
| A   | RELEASED FOR PRODUCTION | N. N. N | 4/14/14 | J. D. B. | 4/16/14 |

**REMARKS:**

1. CENTER PIN IS SOLDERED.
2. CRIMP FERRULE HEX. CRIMP SIZE .429"



| MATERIALS AND PLATING |                    | UNIT: MICRO-INCHES        |
|-----------------------|--------------------|---------------------------|
| BODY                  | BRASS C3604        | ALBALOY PLATEING          |
| CONTACT PIN           | BRASS C3604        | GOLD 50µ" / NICKEL/COPPER |
| INSULATOR             | TEFLON MIL-P-19468 |                           |
| SHELL                 | BRASS C3604        | ALBALOY PLATEING          |
| FERRULE               | BRASS C3604        | ALBALOY PLATEING          |

| (MECHANICAL CHARACTERISTICS)   |              |
|--------------------------------|--------------|
| Force to engage and disengage  | N/A          |
| Center contact retention force | N/A          |
| Recommended coupling torque    | 7-10 in-lbs  |
| Coupling nut retention force   | 60 lbs MIN.  |
| Durability                     | ≥ 500 cycles |

| ELECTRICAL CHARACTERISTICS      |                                             |
|---------------------------------|---------------------------------------------|
| Impedance                       | 50 Ω                                        |
| Voltage rating                  | 335V(rms)                                   |
| Frequency range                 | 0~6GHz                                      |
| Dielectric withstanding voltage | 500V                                        |
| Contact resistance              | Center contact ≤ 3mΩ<br>Outer contact ≤ 2mΩ |
| Insulation resistance           | ≥ 5000MΩ                                    |
| Insertion loss                  | N/A                                         |
| RF-leakage                      | N/A                                         |
| VSWR                            | 1.22 max (0-6G)                             |
| (3rd Intermodulation)           | N/A                                         |

| ENVIRONMENTAL CHARACTERISTICS |                                 |
|-------------------------------|---------------------------------|
| Temperature range             | -55°C - +125°C                  |
| Relative Humidity             | MIL-STD-202, Method 106         |
| Vibration                     | MIL-STD-202, Method 204, Cond D |
| Shock                         | MIL-STD-202, Method 213, Cond I |
| Corrosion                     | MIL-STD-202, Method 101, Cond B |

|                           |                                                                                                                                                                                                     |                      |                  |                                               |                               |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|-----------------------------------------------|-------------------------------|
| MATL:<br><b>SEE ABOVE</b> | UNLESS OTHERWISE SPECIFIED                                                                                                                                                                          |                      | DFTM. N. N. N    | TIMES MICROWAVE SYSTEMS                       |                               |
|                           | ALL DIMENSIONS ARE IN mm                                                                                                                                                                            |                      | DATE 4/14/14     |                                               |                               |
| USED ON:                  | UNLESS OTHERWISE SPECIFIED:<br>1) EDGES C0.15 MAX;<br>2) REMOVE ALL BURRS;<br>3) SURFACE ROUGHNESS Ra1.6;<br>4) UNITS mm;<br>5) DIMENSIONS TOLERANCES<br>DECIMALS ANGLES<br>.x ±0.3 ±5°<br>.xx ±0.2 |                      | CHKD. J. D. B.   | <b>TC-400-SM-X</b><br>SMA Male<br>for LMR-400 |                               |
|                           |                                                                                                                                                                                                     |                      | DATE 4/16/14     |                                               |                               |
| SCALE: ~                  | DWG. SIZE A                                                                                                                                                                                         | DO NOT SCALE DRAWING | CODE IDENT 68999 | DATE 4/16/14                                  | SH T 1 of 1 SD3190-3046 REV A |

# LMR®-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®** 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®-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®-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®-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®-PVC** is designed for low loss general-purpose applications and is somewhat more flexible than the standard polyethylene jacketed LMR.

• **LMR®-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  |
| 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®-400 Flexible Low Loss Communications Coax



## Connectors

|                 |                  |                   |            |                       |                 |               | Inner   | Outer   | Finish* |            |             |               |  |        |  |
|-----------------|------------------|-------------------|------------|-----------------------|-----------------|---------------|---------|---------|---------|------------|-------------|---------------|--|--------|--|
| Interface       | Description      | Part Number       | Stock Code | VSWR**<br>Freq. (GHz) | Coupling<br>Nut | Contact       | Contact | Contact | Body    | Length     |             | Width         |  | Weight |  |
|                 |                  |                   |            |                       |                 | Attach        | Attach  | Attach  | /Pin    | in (mm)    |             | in (mm)       |  | lb(g)  |  |
| 7-16 DIN Female | Straight Jack    | TC-400-716-FC     | 3190-376   | <1.25:1 (2.5)         | NA              | Solder        | Clamp   | S/S     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | 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     | A/G     | 1.7 (43)   | 0.59 (15.0) | 0.074 (33.6)  |  |        |  |