



# TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240

## RF Connectors Technical Data Sheet



TC-240-TM-X

### Times Microwave Systems Connector Specification

#### Configuration

- TNC Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-240, PE-C240

#### Features

- Max. Operating Frequency 8 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 μinch contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's TC-240-TM-X TNC male connector with crimp/solder attachment for LMR-240 and PE-C240 is part of our full line of RF components available for same-day shipping. Our TNC male connector operates up to a maximum frequency of 8 GHz and offers good VSWR of 1.3:1.

Our TNC male connector TC-240-TM-X 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      |         | 8       | GHz   |
| VSWR                                 |         |         | 1.3:1   |       |
| Insertion Loss                       |         |         | 0.3     | dB    |
| Operating Voltage (AC)               |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 1,500   | Vrms  |
| Insulation Resistance                | 5,000   |         |         | MOhms |

#### Mechanical Specifications

##### Size

|            |                     |
|------------|---------------------|
| Length     | 1.22 in [30.99 mm]  |
| Width/Dia. | 0.59 in [14.99 mm]  |
| Weight     | 0.051 lbs [23.13 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240 TC-240-TM-X](#)



# TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240

## RF Connectors Technical Data Sheet



TC-240-TM-X

Mating Cycles 500 Cycles  
Mating Torque 8 to 12 in-lbs [0.90 to 1.36 Nm]

### Material Specifications

| Description  | Material | Plating               |
|--------------|----------|-----------------------|
| Contact      | Brass    | Gold<br>50 μinch      |
| Insulation   | Teflon   |                       |
| Body         | Brass    | Tri-Metal<br>80 μinch |
| Coupling Nut | Brass    | Tri-Metal<br>80 μinch |

### Environmental Specifications

#### Temperature

Operating Range -40 to +125 deg C  
Shock MIL-STD 202G, Meth. 213, Cond. I  
Vibration MIL-STD 202G, Meth. 204, Cond. B  
Thermal Shock MIL-STD 202G, Meth. 107, Cond. B

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

### Plotted and Other Data

Notes:

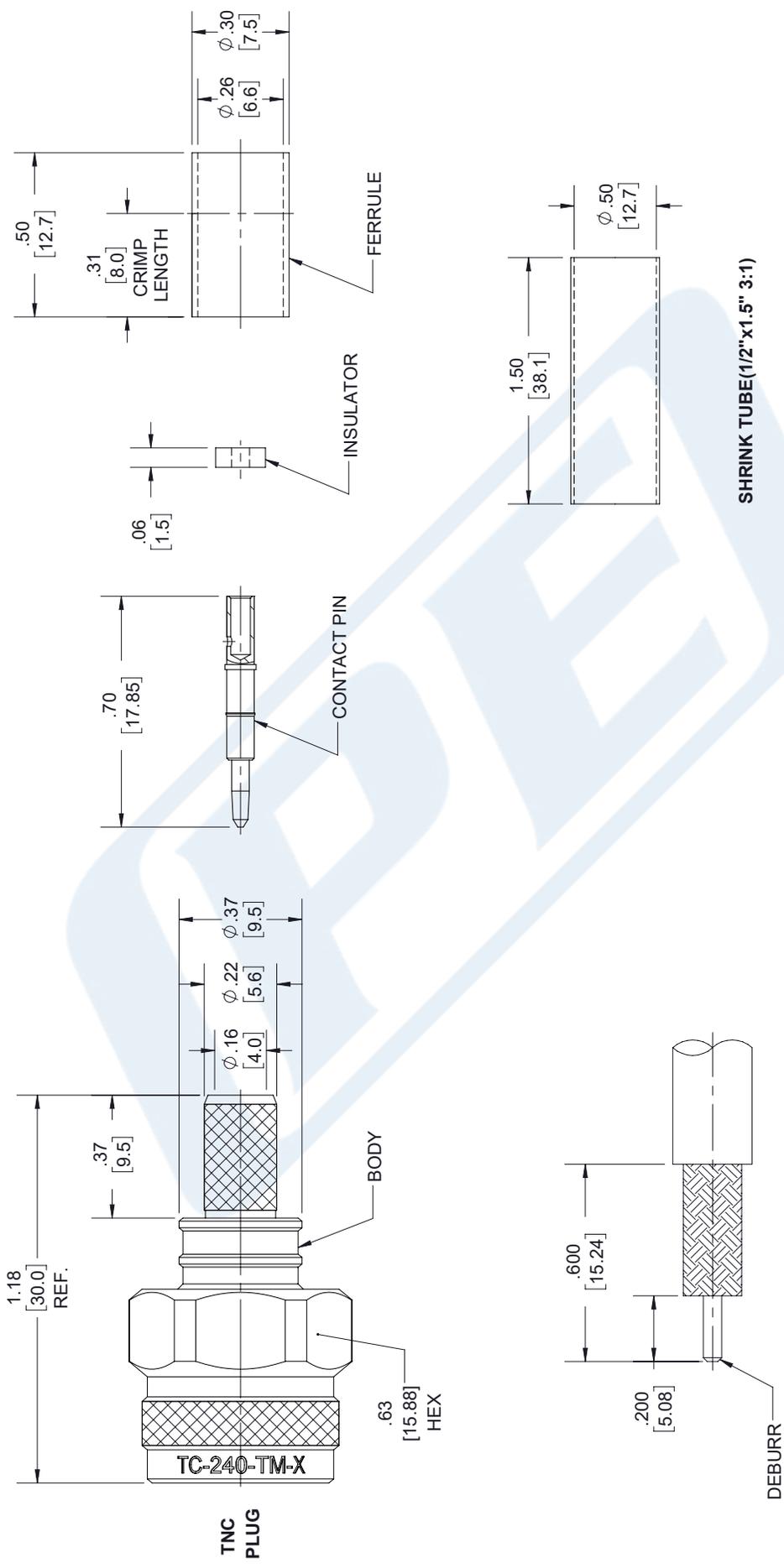
TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male Connector Crimp/Solder Attachment for LMR-240, PE-C240 TC-240-TM-X](#)

URL: <https://www.pasternack.com/tnc-male-lmr-240-pe-c240-connector-tc-240-tm-x-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.

| REVISIONS |                          |          |          |
|-----------|--------------------------|----------|----------|
| REV.      | DESCRIPTION              | DATE     | APPROVED |
| A         | PCR TC-240-TM-X 20200622 | 06/30/20 | SRAUTUS  |



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

**PE PASTERNAK** an INFINITE brand

Pasternack Enterprises, Inc.  
 P.O. Box 16759, Irvine, CA 92623.  
 Phone: 1.949.261.1920 | 1.866.727.8376  
 Fax: 1.949.261.7451  
 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN ARE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

ITEM NO. TC-240-TM-X

SIZE A

CAGE CODE 53919

DRAWN BY SLI

REV A

CABLE ATTACHMENT:  
 INNER: SOLDER.  
 OUTER: CRIMP.

DEBURR

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



TNC Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A

## RF Connectors Technical Data Sheet

PE44636

### Configuration

- TNC Female Connector
- 50 Ohms
- Straight Body Geometry
- PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A Interface Type
- Crimp/Solder Attachment

### Features

- Max. Operating Frequency 11 GHz
- Gold Plated Phosphor Bronze Contact

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE44636 TNC female connector with crimp/solder attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF and B7808A is part of our full line of RF components available for same-day shipping. Our TNC female connector operates up to a maximum frequency of 11 GHz.

Our TNC female connector PE44636 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      |         | 11      | GHz   |

### Mechanical Specifications

|             |                     |
|-------------|---------------------|
| <b>Size</b> |                     |
| Length      | 1.325 in [33.66 mm] |
| Width/Dia.  | 0.452 in [11.48 mm] |
| Weight      | 0.042 lbs [19.05 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A PE44636](#)



TNC Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A

## RF Connectors Technical Data Sheet

PE44636

### Material Specifications

| Description | Material        | Plating |
|-------------|-----------------|---------|
| Contact     | Phosphor Bronze | Gold    |
| Insulation  | PTFE            |         |
| Body        | Brass           | Nickel  |

### Environmental Specifications

#### Temperature

Operating Range

-40 to +85 deg C

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

### Plotted and Other Data

Notes:

TNC Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: [TNC Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A PE44636](#)

URL: <https://www.pasternack.com/tnc-female-standard-rg8x-pe-c240-0.240-connector-pe44636-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.



## LMR®-240-UF UltraFlex Communications Coax

### Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs (e.g. WLL, GPS, LMR, Mobile Antennas)
- Any application that requires periodic/repeated flexing



• **LMR®- UltraFlex** has a stranded center conductor and rubber outer jacket designed for multiple bending/flexing cycles. It is used for both indoor and outdoor applications.

• **Flexibility** and bendability are hallmarks of the LMR-240-UF 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-240-UF. 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-240-UF cables are designed for outdoor exposure and have a life expectancy in excess of 10 years.

• **Connectors:** A wide variety of connectors are available for LMR-240-UF cable, including all common interface types, reverse polarity, and solder-on center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

• **Cable Assemblies:** All LMR-240-UF cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Construction Specifications |                               |       |        |
|-----------------------------|-------------------------------|-------|--------|
| Description                 | Material                      | In.   | (mm)   |
| Inner Conductor             | Stranded BC                   | 0.056 | (1.42) |
| Dielectric                  | Foam Polyethylene             | 0.150 | (3.81) |
| Outer Conductor             | Aluminum Tape                 | 0.155 | (3.94) |
| Overall Braid               | Tinned Copper                 | 0.178 | (4.52) |
| Jacket                      | Black Thermoplastic Elastomer | 0.240 | (6.10) |

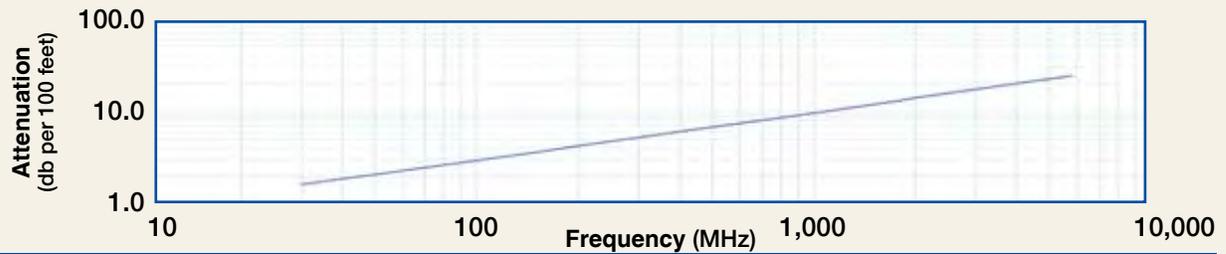
| Mechanical Specifications |                |       |          |
|---------------------------|----------------|-------|----------|
| Performance Property      | Units          | US    | (metric) |
| Bend Radius: installation | in. (mm)       | 0.75  | (19.1)   |
| Bend Radius: repeated     | in. (mm)       | 2.5   | (63.5)   |
| Bending Moment            | ft-lb (N-m)    | 0.125 | (0.17)   |
| Weight                    | lb/ft (kg/m)   | 0.034 | (0.05)   |
| Tensile Strength          | lb (kg)        | 80    | (36.3)   |
| Flat Plate Crush          | lb/in. (kg/mm) | 13    | (0.23)   |

| Environmental Specifications   |          |         |
|--------------------------------|----------|---------|
| Performance Property           | °F       | °C      |
| Installation Temperature Range | -40/+185 | -40/+85 |
| Storage Temperature Range      | -94/+185 | -70/+85 |
| Operating Temperature Range    | -40/+185 | -40/+85 |

| Electrical Specifications |                   |       |          |
|---------------------------|-------------------|-------|----------|
| Performance Property      | Units             | US    | (metric) |
| Velocity of Propagation   | %                 | 84    |          |
| Dielectric Constant       | NA                | 1.42  |          |
| Time Delay                | nS/ft (nS/m)      | 1.21  | (3.97)   |
| Impedance                 | ohms              | 50    |          |
| Capacitance               | pF/ft (pF/m)      | 24.2  | (79.4)   |
| Inductance                | uH/ft (uH/m)      | 0.060 | (0.20)   |
| Shielding Effectiveness   | dB                | >90   |          |
| DC Resistance             |                   |       |          |
| Inner Conductor           | ohms/1000ft (/km) | 4.28  | (14.1)   |
| Outer Conductor           | ohms/1000ft (/km) | 3.89  | (12.8)   |
| Voltage Withstand         | Volts DC          | 1500  |          |
| Jacket Spark              | Volts RMS         | 5000  |          |
| Peak Power                | kW                | 5.6   |          |

| Part Description |                |        |       |            |
|------------------|----------------|--------|-------|------------|
| Part Number      | Application    | Jacket | Color | Stock Code |
| LMR-240-UF       | Indoor/Outdoor | TPE    | Black | 54041      |

Attenuation vs. Frequency (typical)



| Frequency (MHz)       | 30   | 50   | 150  | 220  | 450  | 900  | 1500 | 1800 | 2000 | 2500 | 5800 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation dB/100 ft | 1.6  | 2.1  | 3.6  | 4.4  | 6.3  | 9.1  | 11.8 | 13.0 | 13.8 | 15.5 | 24.4 |
| Attenuation dB/100 m  | 5.3  | 6.8  | 11.9 | 14.4 | 20.8 | 29.8 | 38.9 | 42.8 | 45.2 | 50.9 | 80.1 |
| Avg. Power kW         | 1.24 | 0.96 | 0.55 | 0.45 | 0.31 | 0.22 | 0.17 | 0.15 | 0.14 | 0.13 | 0.08 |

Calculate Attenuation = (0.290501) • √FMHz + (0.000396) • FMHz (interactive calculator available at [http://www.timesmicrowave.com/cable\\_calculators](http://www.timesmicrowave.com/cable_calculators))  
 Attenuation: VSWR=1.0; Ambient = +25°C (77°F) Power: VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F);  
 Sea Level; dry air; atmospheric pressure; no solar loading



**Connectors**

| Interface   | Description      | Part Number     | Stock Code | VSWR** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|-------------|------------------|-----------------|------------|--------------------|--------------|----------------------|----------------------|--------------|----------------|---------------|---------------|
| 1. BNC Male | Straight Plug    | TC-240-BMC      | 3190-242   | <1.25:1 (2.5)      | Knurl        | Solder               | Clamp                | S/G          | 1.7 (43)       | 0.56(14.2)    | 0.040 (18.1)  |
| 2. Mini-UHF | Straight Plug    | TC-240-MUHF     | 3190-445   | <1.25:1 (2.5)      | Knurl        | Solder               | Crimp                | N/G          | 1.1 (28)       | 0.45(11.4)    | 0.014 (6.4)   |
| 3. N Female | Bulkhead Jack    | TC-240-NF-BH    | 3190-419   | <1.25:1 (2.5)      | NA           | Solder               | Crimp                | A/G          | 1.7 (44)       | 0.88(22.2)    | 0.115 (52.2)  |
| 4. N Male   | Straight Plug    | TC-240-NMH-D    | 3190-382   | <1.25:1 (2.5)      | Hex          | Solder               | Crimp                | N/S          | 1.5 (38)       | 0.75(19.1)    | 0.086 (39.0)  |
| 5. N Male   | Straight Plug    | TC-240-NMC      | 3190-244   | <1.25:1 (2.5)      | Knurl        | Solder               | Clamp                | S/G          | 1.5 (38)       | 0.75(19.1)    | 0.082 (37.2)  |
| 6. SMA Male | Straight Plug    | TC-240-SM       | 3190-380   | <1.25:1 (10)       | Hex          | Solder               | Crimp                | SS/G         | 1.0 (25)       | 0.32(8.1)     | 0.016 (7.3)   |
| 7. SMA Male | Reverse Polarity | TC-240-SM-RP    | 3190-326   | <1.25:1 (2.5)      | Hex          | Solder               | Crimp                | SS/G         | 1.0 (25)       | 0.32(8.1)     | 0.016 (7.3)   |
| 8. TNC Male | Straight Plug    | TC-240-TM       | 3190-275   | <1.25:1 (2.5)      | Knurl        | Solder               | Crimp                | N/S          | 1.7 (43)       | 0.59(15.0)    | 0.043 (19.5)  |
| 9. N Male   | Right Angle      | TC-240-NMH-RA-D | 3190-2426  | <1.35:1 (6)        | Hex/Knurl    | Solder               | Crimp                | A/G          | 1.2 (32.4)     | 1.22 (31.0)   | 0.091 (41.7)  |

\* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy \*\*VSWR spec based on 3 foot cable with a connector pair

**Hardware Accessories**

| Type       | Part Number | Stock Code | Description                |
|------------|-------------|------------|----------------------------|
| Ground Kit | GK-S240TT   | GK-S240TT  | Standard Ground Kit (each) |

**Install Tools**

| Type              | Part Number        | Stock Code | Description   |
|-------------------|--------------------|------------|---|
| Crimp Tool        | CT-240/200/195/100 | 3190-667   | Crimp tool for LMR-100, 195, 200 and 240 connectors |
| Cutting Tool      | CCT-01             | 3190-1544  | Cable end flush cut tool                            |
| Replacement Blade | RB-01              | 3190-1609  | Replacement blade for cutting tool                  |

