



RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

RF Connectors Technical Data Sheet

Times Microwave Systems Connector Specification

Configuration

- TNC Jack Reverse Polarity Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Tri-Metal Plated Brass Contact
- 80 μ m minimum contact plating
- Reverse Polarity

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

EZ-240-TF-RP-X RP TNC jack coaxial connector has an interface type of TNC jack LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, and PE-C240 and a 50 Ohms impedance. Pasternack's TNC jack connector uses crimp/non-solder contact as an attachment method. Our jack TNC coaxial connector provides a maximum frequency of 6 GHz.

The Pasternack TNC jack coaxial connector has a PTFE dielectric type and a VSWR of 1.3:1. Pasternack's TNC coaxial connector has a brass body with tri-metal plating. Our EZ-240-TF-RP-X TNC connector uses a tri-metal plated brass contact. Additional RF connector specs and dimensions for this component can be found on its PDF specification datasheet and CAD drawings above.

The radio frequency connector is made from brass material and has a contact life of 500 cycles or more. Our high-quality EZ-240-TF-RP-X features an 80 μ m minimum body plating specification. The Pasternack EZ-240-TF-RP-X TNC connector operates at a temperature range of -40 to 125 deg C.

This Pasternack reverse polarity jack TNC connector will ship the same business day as purchased. Our TNC jack connector is part of over 40,000 RF, microwave, and millimeter wave components in stock for local, domestic, and international shipment. For further information on similar products, our expert technical support and trained sales team can get you the ideal RF connector as per your requirements.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.3:1 | |
| Insertion Loss | | | 0.24 | dB |
| Impedance | | 50 | | Ohms |
| Dielectric Withstanding Voltage (DC) | | | 1,500 | Vdc |
| Insulation Resistance | 5,000 | | | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-TF-RP-X](#)



RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

RF Connectors Technical Data Sheet

Electrical Specification Notes:
Insertion Loss is $0.1 \cdot \sqrt{f(\text{GHz})}$ dB

Mechanical Specifications

Size

| | |
|-----------------------|--------------------|
| Length | 1.20 in [30.48 mm] |
| Width | 0.43 in [10.92 mm] |
| Height | 0.43 in [10.92 mm] |
| Weight | 0.10 lbs [45.36 g] |
| Mating Cycles | 500 Cycles |
| Cable Retention Force | 250 lbs 113.4 kg |

Material Specifications

| Description | Material | Plating |
|--------------|----------|-----------------------------|
| Contact | Brass | Tri-Metal 80 µin minimum |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal 80 µin minimum |
| Crimp Sleeve | Brass | Tri-Metal 80 µin minimum |

Environmental Specifications

Temperature

| | |
|-----------------|--------------------------------|
| Operating Range | -40 to +125 deg C |
| Shock | MIL-STD 202G, Meth.213, Cond.G |
| 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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-TF-RP-X](#)



RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240


RF Connectors Technical Data Sheet

RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, 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.

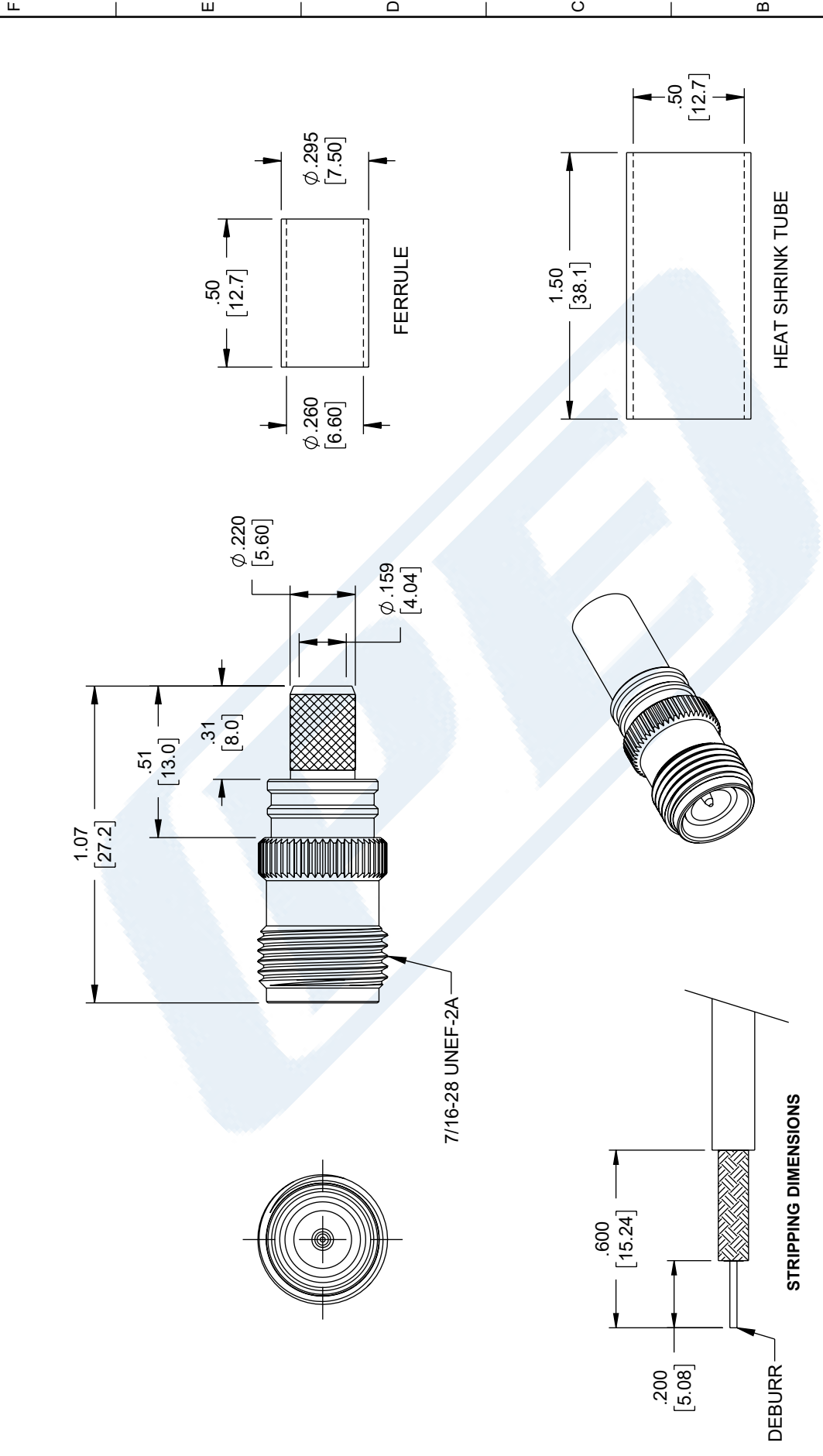
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-TF-RP-X](#)

URL: <https://www.pasternack.com/tnc-jack-reverse-polarity-lmr-240-connector-ez-240-tf-rp-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.


EZ-240-TF-RP-X CAD Drawing
 RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
|------|-----|-----------------|-----------|------------|----------|
| | A | INITIAL RELEASE | 5/19/2023 | KDANG | AGANWANI |



PE PASTERNAK
an INFINITI® brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: RP-TNC Jack Connector Crimp/Non-Solder Contact Attachment for LMR-240

| | | | |
|---------|------------------|-----------------|--------------------------|
| SIZE: A | CAGE CODE: 53919 | DRAWN BY: KDANG | ITEM NO.: EZ-240-TF-RP-X |
| REV: A | | | |

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

TOLERANCES:

| | | | |
|--------------|-------|--------------------------|--------|
| .X = ±.2 | [.5] | FRACTIONS | ±.1/32 |
| .XX = ±.02 | [.13] | ANGLES ± 1° | |
| .XXX = ±.005 | [.13] | CABLE LENGTH TOLERANCES: | |

≤12 [305] = +1 [25] / -0
 >12 [305] ≤ 60 [1524] = +2 [51] / -0
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

NOTES:

- CABLE ATTACHMENT: OUTER: CRIMP.
- CRIMP SIZE REQUIRED: FERRULE: .255 [6.48] HEX. CRIMP TOOL.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. 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.



N 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

PE44533

Configuration

- N Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-C240, RG8X, .240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A

Features

- Max. Operating Frequency 11 GHz
- Gold Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44533 type N female connector with crimp/solder attachment for PE-C240, RG8X, .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 type N female connector operates up to a maximum frequency of 11 GHz.

Our type N female connector PE44533 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 |
| Operating Voltage (AC) | | | 830 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 2,500 | Vrms |

Mechanical Specifications

| | |
|---------------|--------------------|
| Size | |
| Length | 1.45 in [36.83 mm] |
| Width/Dia. | 0.67 in [17.02 mm] |
| Height | 0.67 in [17.02 mm] |
| Weight | 0.069 lbs [31.3 g] |
| 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: [N Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A PE44533](#)



N 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

PE44533

Material Specifications

| Description | Material | Plating |
|-------------|------------------|-----------|
| Contact | Beryllium Copper | Gold |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal |

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

N 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 99.4% 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 Female Connector Crimp/Solder Attachment for PE-C240, RG8X, 0.240 inch, LMR-240, LMR-240-DB, LMR-240-UF, B7808A PE44533](#)

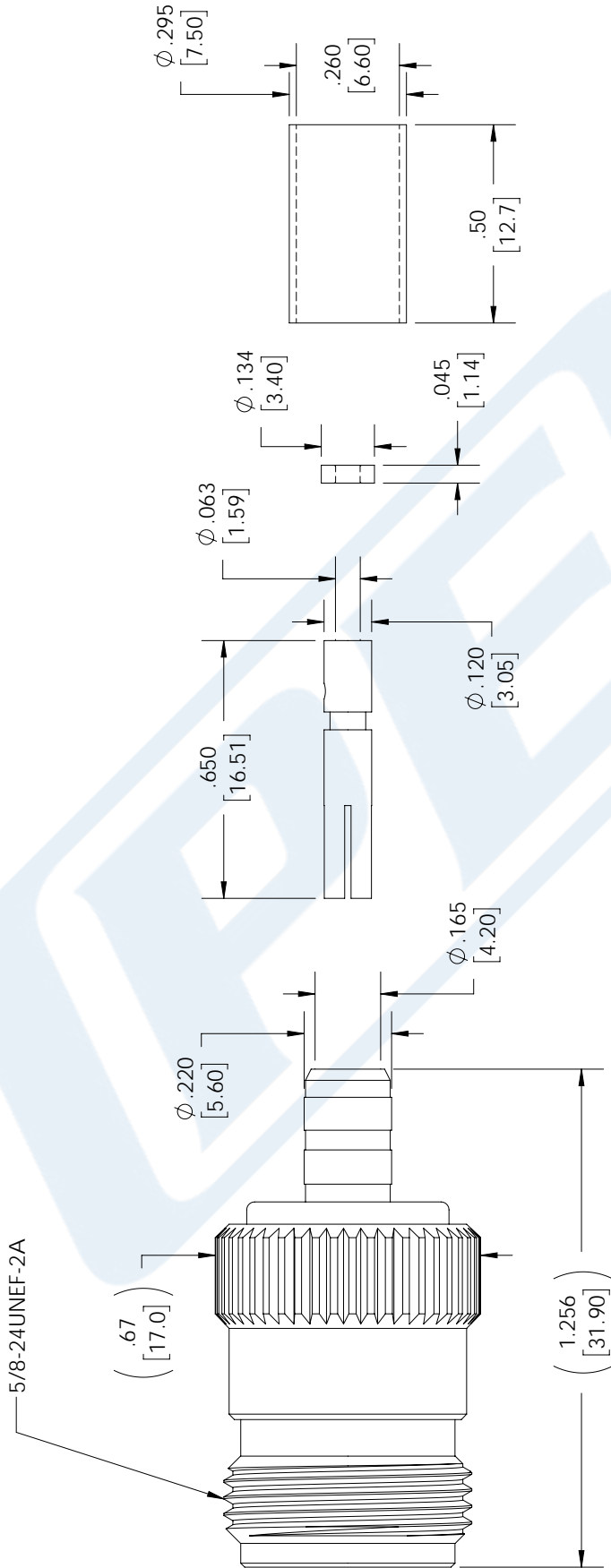
URL: <https://www.pasternack.com/n-female-standard-pe-c240-0.240-connector-pe44533-p.aspx>

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.

PE44533 CAD Drawing

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

| REVISIONS | | |
|-----------|-------------|------------|
| REV. | DESCRIPTION | DATE |
| B | PCR 44533 | 11/10/2021 |
| | | AGANWANI |



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

TOLERANCES:
.X = ±.2 [5.08] | FRACTIONS ± 1/32
.XX = ±.02 [.51] | ANGLES ± 1°
.XXX = ±.005 [.13] |
CABLE LENGTH (L) TOLERANCES:
L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0
ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND
DESIGN IN THIS DOCUMENT
IS THE PROPERTY OF
PASTERNAK CORPORATION
ALL RIGHTS RESERVED.

SHEET 1 OF 1
SCALE N/A

PE PASTERNAK
an INFINITI® 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

ITEM NO. PE 44533
REV B

SIZE A
CAGE CODE 53919
DRAWN BY BPUCHASKI

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.

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) |

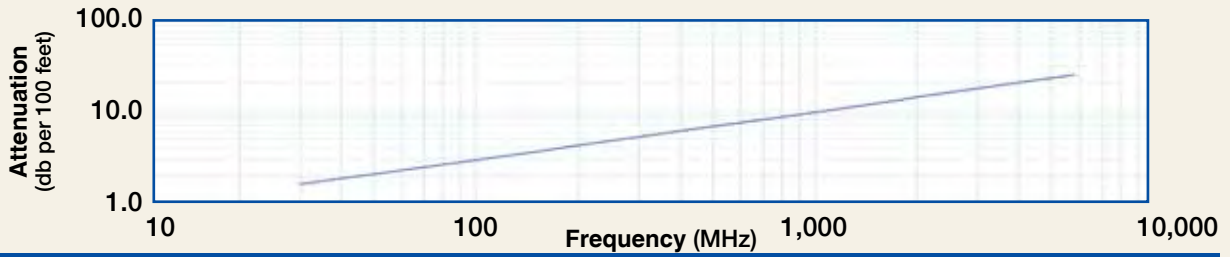
| Mechanical Specifications | | | |
|---------------------------|----------------|-------|----------|
| Performance Property | Units | US | (metric) |
| Bend Radius: installation | in. (mm) | 0.75 | (19.1) |
| Bend Radius: repeated | in. (mm) | 2.5 | (63.5) |
| Bending Moment | ft-lb (N-m) | 0.125 | (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)
 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 |

