

OPERACK POPERACK

RF Connectors Technical Data Sheet

PE45222

### Configuration

- Snap-On QN Male Connector
- •50 Ohms
- Straight Body Geometry

#### **Features**

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.2:1
- Silver Plated Brass Contact
- Operates to 6 GHz
- Quick Locking Snap On Connection

- LMR-240, PE-C240 Interface Type
- Crimp/Solder Attachment
- Reduced connector to connector spacing
- 100 mating cycles
- No torque wrench required
- 360 degree rotation capability

# **Applications**

- General Purpose Test
- Custom Cable Assemblies
- Telecommunication system
- Rack and Panel Mount Applications
- High connection density systems

#### Description

Pasternack's PE45222 QN male snap-on 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 QN male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.2:1. Pasternack's PE45222 Snap-On QN Male connector is part of our full line of RF connectors available for same-day shipping. Our Male QN connector operates to 6 GHz. The PE45222 provides excellent VSWR of 1.2:1 maximum to 6 GHz. The PE45222 Pasternack RF connector is designed for use with LMR-240 and PE-C240 and is attached to the body using a crimp connection and the center contact employs a solder connection.

QN connectors allow for an easy snap-on connection that securely locks in place for an easy mating reliable connection. In addition to the time savings offered by the Snap-On interface the QN interface allow for a tighter density than a Threaded N interface which requires the use of a torque wrench to properly complete the connection. The QN interface is operational to 6 GHz when used on LMR-240 Coaxial cable. This QN connector is QLF approved and insures intermateability with other QLF QN products.

Our QN male connector PE45222 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                                 |         |         | 1.2:1   |       |
| Insertion Loss                       |         |         | 0.12    | dB    |
| Operating Voltage (AC)               |         |         | 500     | Vrms  |
| Dielectric Withstanding Voltage (AC) |         |         | 1,500   | Vrms  |
| 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: QN Male Snap-On Connector Crimp/Solder Attachment for LMR-240, PE-C240 PE45222

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

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RF Connectors Technical Data Sheet

PE45222

**Electrical Specification Notes:** 

Insertion Loss Calculation: .048 vF(GHz) dB

### **Mechanical Specifications**

Size

 Length
 1.38 in [35.05 mm]

 Width/Dia.
 0.75 in [19.05 mm]

 Weight
 0.042 lbs [19.05 g]

 Mating Cycles
 100 Cycles

#### **Material Specifications**

| Description  | Material | Plating   |
|--------------|----------|-----------|
| Contact      | Brass    | Silver    |
| Insulation   | PTFE     |           |
| Body         | Brass    | Tri-Metal |
| Coupling Nut | Brass    | Tri-Metal |

#### **Environmental Specifications**

**Temperature** 

Operating Range -55 to +125 deg C Hermetic Seal ATM. cm3/s

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

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RF Connectors Technical Data Sheet

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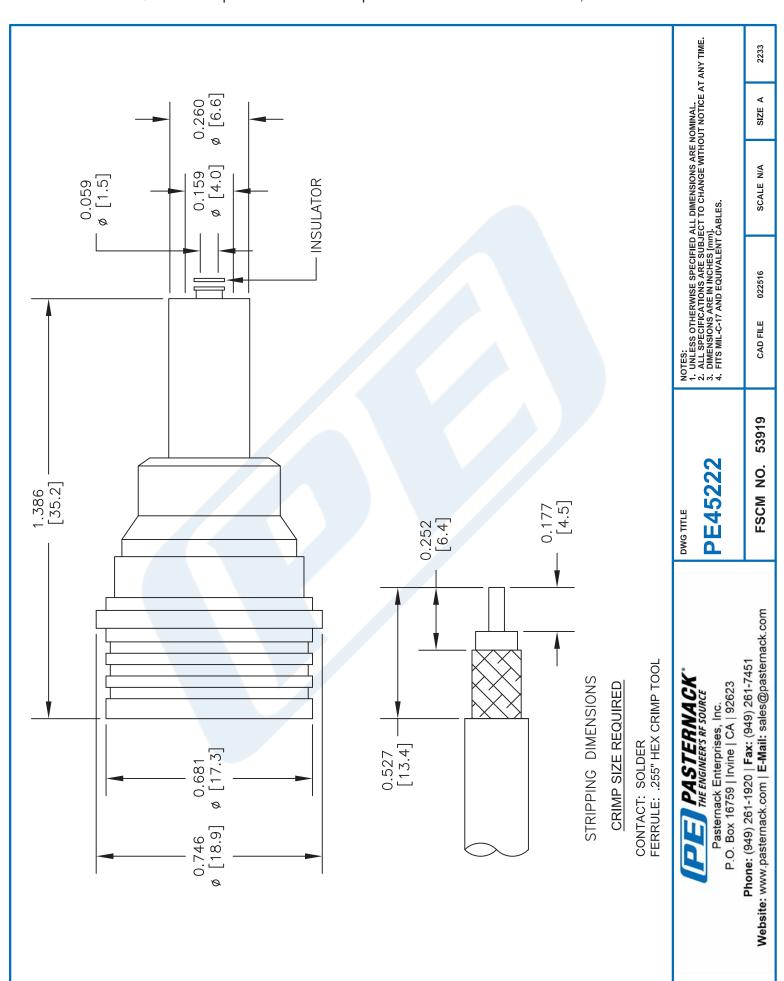
URL: https://www.pasternack.com/qn-male-snap-on-lmr-240-pe-c240-connector-pe45222-p.aspx

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# PE45222 CAD Drawing

QN Male Snap-On Connector Crimp/Solder Attachment for LMR-240, PE-C240





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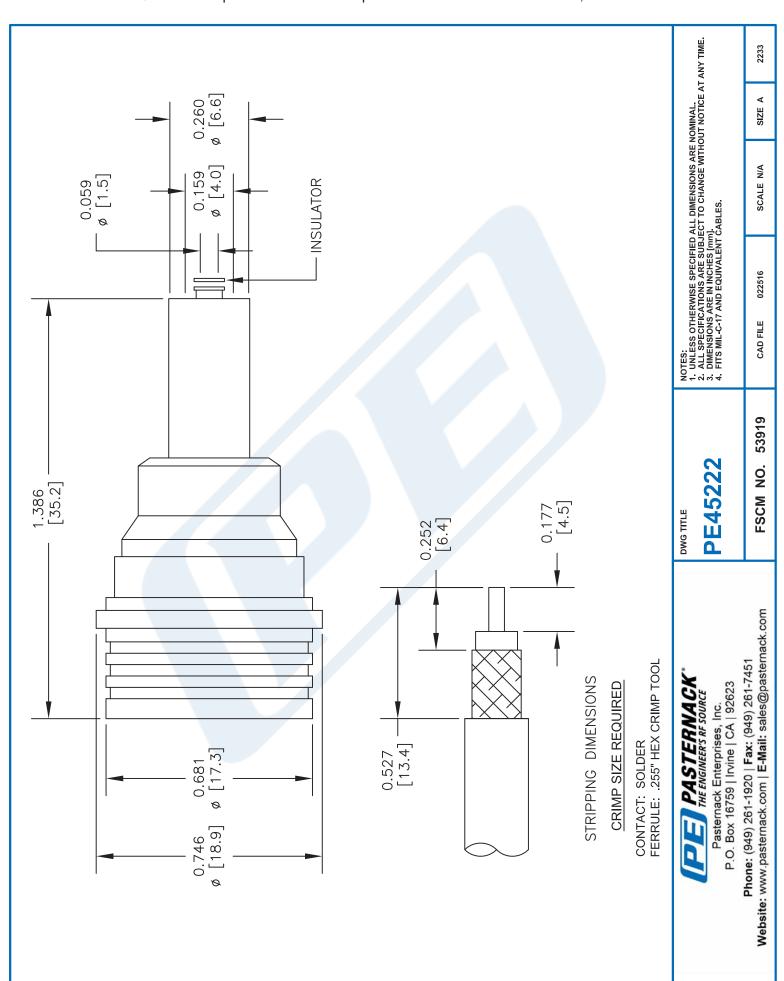
URL: https://www.pasternack.com/qn-male-snap-on-lmr-240-pe-c240-connector-pe45222-p.aspx

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# PE45222 CAD Drawing

QN Male Snap-On Connector Crimp/Solder Attachment for LMR-240, PE-C240





# Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



## **LMR-240-UF**



# **Times Microwave Systems Connector Specification**

#### Configuration

- · Low Loss, Indoor / Outdoor Flexible Cable
- 2 Shield(s)

#### **Features**

- · Highly Flexible
- · Low Loss Cable
- RF Shielding > 90dB
- **Applications**
- · Jumper Assemblies
- · Short Antenna Feeder Runs

- · Designed for Indoor/Outdoor Use
- Max Operating Frequency of 8 GHz
- · Wireless Communications

#### **Description**

Pasternack's LMR series RF cables from Times Microwave offer an ideal solution for applications where flexibility is essential. These flexible cables provide low loss with a minimum bend radius of 0.75 in. for installation. The stranded center conductor and rubber jacket also make this RF cable ideal for applications requiring periodic or repeated flexing. Pasternack's LMR-240-UF cable is designed for use in indoor and outdoor applications. The LMR-240-UF's thermoplastic elastomer (TPE) jacket gives this RF cable a life expectancy of 10 years. This low loss RF cable is also double shielded to provide greater than 90 dB RF shielding.

### **Electrical Specifications**

| Description                          | Minimum | Typical     | Maximum | Units        |
|--------------------------------------|---------|-------------|---------|--------------|
| Frequency Range                      | DC      |             | 8       | GHz          |
| Impedance                            |         | 50          |         | Ohms         |
| Velocity of Propagation              |         | 84          |         | %            |
| Time Delay                           |         | 1.21 [3.97] |         | ns/ft [ns/m] |
| Shielding Effectiveness              | 90      |             |         | dB           |
| Dielectric Withstanding Voltage (DC) |         |             | 1,500   | Vdc          |
| Jacket Spark                         |         |             | 5,000   | Vrms         |
| Inner Conductor DC Resistance        |         |             | 4.28    | Ohms/1000ft  |
| Outer Conductor DC Resistance        |         |             | 3.89    | Ohms/1000ft  |
| Nominal Capacitance                  |         | 24.2 [79.4] |         | pF/ft [pF/m] |
| Nominal Inductance                   |         | 0.06 [0.2]  |         | uH/ft [uH/m] |
| Input Power (Peak)                   |         |             | 5.6     | kWatts       |

#### **Performance by Frequency Band**

| Description | F1 | F2  | F3  | F4  | F5  | Units |
|-------------|----|-----|-----|-----|-----|-------|
| Frequency   | 50 | 150 | 220 | 450 | 900 | MHz   |



# Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



### **LMR-240-UF**

### Performance by Frequency Band

| Description           | F1   | F2    | F3    | F4    | F5    | Units    |
|-----------------------|------|-------|-------|-------|-------|----------|
| Attenuation, Typ      | 2.1  | 3.6   | 4.4   | 6.3   | 9.1   | dB/100ft |
|                       | 6.89 | 11.81 | 14.44 | 20.67 | 29.86 | dB/100m  |
| Input Power (CW), Max | 960  | 550   | 450   | 310   | 220   | Watts    |

| Description           | F6    | F7    | F8    | F9    | F10   | Units    |
|-----------------------|-------|-------|-------|-------|-------|----------|
| Frequency             | 1.5   | 1.8   | 2     | 2.5   | 8     | GHz      |
| Attenuation, Typ      | 11.8  | 13    | 13.8  | 15.5  | 24.4  | dB/100ft |
|                       | 38.71 | 42.65 | 45.28 | 50.85 | 80.05 | dB/100m  |
| Input Power (CW), Max | 170   | 150   | 140   | 130   | 80    | Watts    |

Electrical Specification Notes:

Values at 25°C, sea level.

Attenuation = 0.290501\*sqrt(FMHz) + 0.000396

#### **Mechanical Specifications**

Diameter Weight Min. Bend Radius (Installation)

Min. Bend Radius (Installation)
Min. Bend Radius (Repeated)
Rending Memort

Bending Moment Tensile Strength Flat Plate Crush 0.24 in [6.1 mm]

0.032 lbs/ft [0.05 kg/m] 0.75 in [19.05 mm]

2.5 in [63.5 mm]

0.13 lbs-ft [0.18 N-m] 80 lbs [36.29 kg]

13 lbs/in [0.23 kg/mm]

#### **Construction Specifications**

| Description     | Material and Plating | Diameter           |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper, Strand       | 0.056 in [1.42 mm] |
| Conductor Type  | Stranded             |                    |
| Dielectric      | PE (F)               | 0.15 in [3.81 mm]  |
| First Shield    | Aluminum Tape        | 0.155 in [3.94 mm] |
| Second Shield   | Tinned Copper Braid  | 0.178 in [4.52 mm] |
| Jacket          | TPE, Black           | 0.24 in [6.1 mm]   |

#### **Environmental Specifications**

Temperature

Operating Range -40 to +85 deg C Installation Range -40 to +85 deg C Storage Range -70 to +85 deg C

Environmental Specification Notes: Designed for indoor and outdoor use.



# Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



#### **LMR-240-UF**

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

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URL: https://www.pasternack.com/50-ohm-ultra-flexible-Imr-240-uf-pe-jacket-tinned-copper-over-aluminum-tape-outer-conductor-double-shielded-Imr-240-uf-p.aspx

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