

QMA Male QD 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

- QD QMA Male 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 8 GHz
- Good VSWR of 1.3:1
- Gold Plated Beryllium Copper Contact
- 50 µm minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

EZ-240-QM-X QMA male coaxial connector has an interface type of QMA male LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, and PE-C240 and a 50 Ohms impedance. Pasternack's QMA male connector uses crimp/non-solder contact as an attachment method. Our male QMA coaxial connector provides a maximum frequency of 8 GHz.

The Pasternack QMA male coaxial connector has a PTFE dielectric type and a VSWR of 1.3:1. Pasternack's QMA coaxial connector has a brass body with tri-metal plating. Our EZ-240-QM-X QMA connector uses a gold plated beryllium copper 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 100 cycles or more. Our high-quality EZ-240-QM-X features an 80 µm minimum body plating specification. The Pasternack EZ-240-QM-X QMA connector operates at a temperature range of -40 to 125 deg C.

This Pasternack male QMA connector will ship the same business day as purchased. Our QMA male 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		8	GHz
VSWR			1.3:1	
Insertion Loss			0.28	dB
Impedance		50		Ohms
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:  
Insertion Loss is  $0.1 \cdot \sqrt{\text{fGHz}}$  dB

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

QMA Male QD 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

#### Mechanical Specifications

##### Size

Length	1.07 in [27.28 mm]
Width	0.41 in [10.49 mm]
Height	0.41 in [10.49 mm]
Weight	0.10 lbs [45.36 g]
Mating Cycles	100 Cycles
Cable Retention Force	250 lbs 113.4 kg

#### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin minimum
Coupling Nut	Brass	Tri-Metal 80 µin minimum
Gasket	Silicone	
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 I
Vibration	MIL-STD 202G, Meth.204, Cond.D
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: [QMA Male QD Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-QM-X](#)



QMA Male QD Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

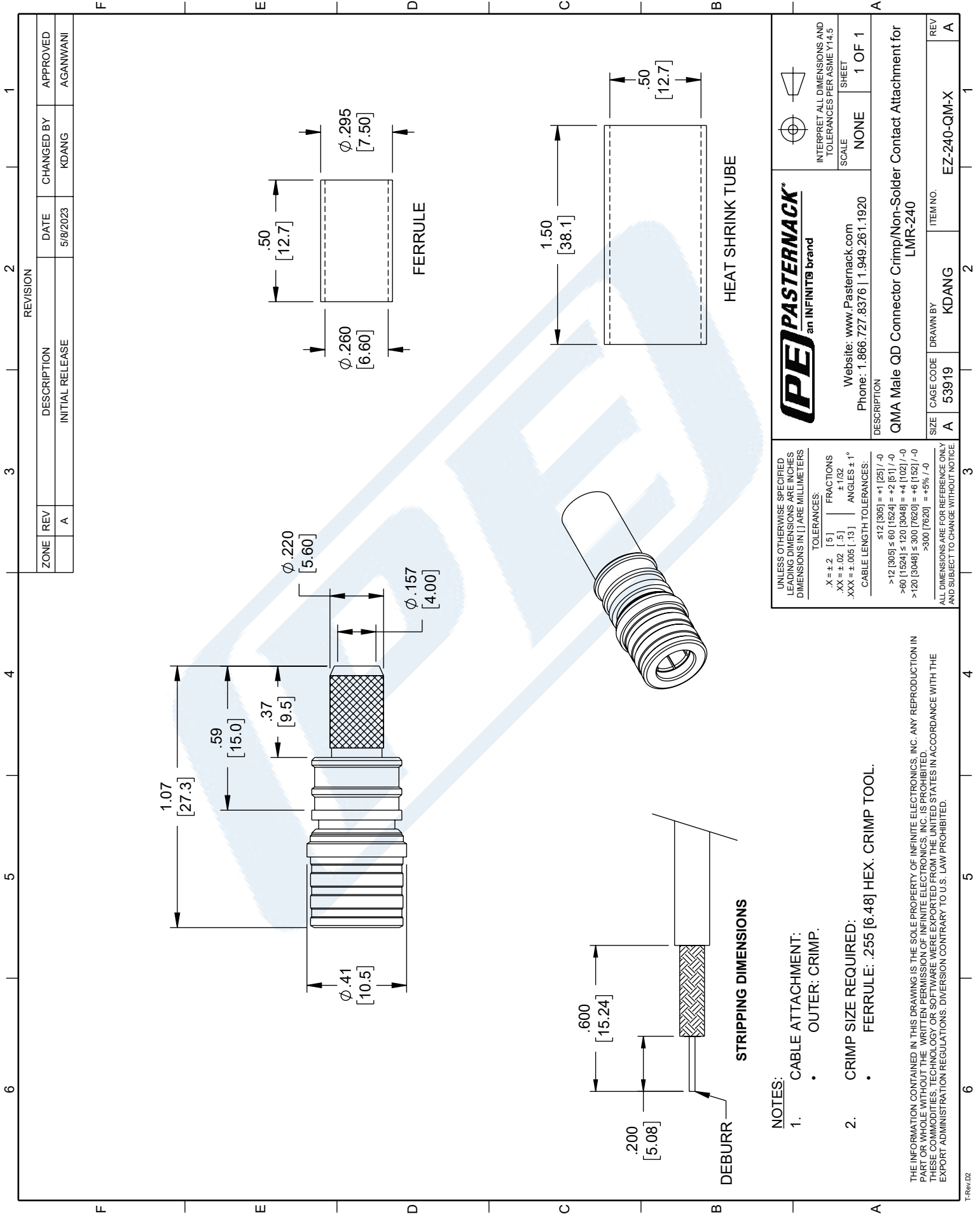
## RF Connectors Technical Data Sheet

QMA Male QD 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: [QMA Male QD Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-QM-X](https://www.pasternack.com/qma-male-qd-connector-crimp-non-solder-contact-attachment-for-lmr-240-lmr-240-db-lmr-240-uf-lmr-240-fr-rg8x-pe-c240-ez-240-qm-x)

URL: <https://www.pasternack.com/qma-male-qd-lmr-240-lmr-240-db-connector-ez-240-qm-x-p.aspx>

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  
SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION:  
QMA Male QD Connector Crimp/Non-Solder Contact Attachment for LMR-240

SIZE: A  
CAGE CODE: 53919  
DRAWN BY: KDANG  
ITEM NO.: EZ-240-QM-X

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

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

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.
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N Male Right Angle 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



**EZ-240-NMH-RA-X**

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Right Angle 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 1.35:1
- Gold Plated Beryllium Bronze Contact
- 50  $\mu$ m minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

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

The Pasternack right angle N male coaxial connector has a PTFE dielectric type and a VSWR of 1.35:1. Pasternack's N coaxial connector has a brass body with tri-metal plating. Our EZ-240-NMH-RA-X N right angle connector uses a gold plated beryllium bronze 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-NMH-RA-X features an 80  $\mu$ m minimum body plating specification. The Pasternack EZ-240-NMH-RA-X N connector operates at a temperature range of -55 to 125 deg C.

This Pasternack right angle male N connector will ship the same business day as purchased. Our N right angle male 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			1.35:1	
Insertion Loss			0.24	dB
Impedance		50		Ohms
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:  
Insertion Loss is  $0.1 * \sqrt{\text{fGHz}}$  dB

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



N Male Right Angle 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

#### Mechanical Specifications

##### Size

Length	1.12 in [28.52 mm]
Width	0.81 in [20.57 mm]
Height	1.23 in [31.32 mm]
Weight	0.10 lbs [45.36 g]
Mating Cycles	500 Cycles
Mating Torque	1.7 in-lbs [0.19 Nm]
Cable Retention Force	300 lbs 136.08 kg

#### Material Specifications

Description	Material	Plating
Contact	Beryllium Bronze	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin minimum
Coupling Nut	Brass	Tri-Metal 80 µin minimum
Gasket	Silicone	
Crimp Sleeve	Brass	Tri-Metal 80 µin minimum

#### Environmental Specifications

##### Temperature

Operating Range	-55 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:

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



N Male Right Angle 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



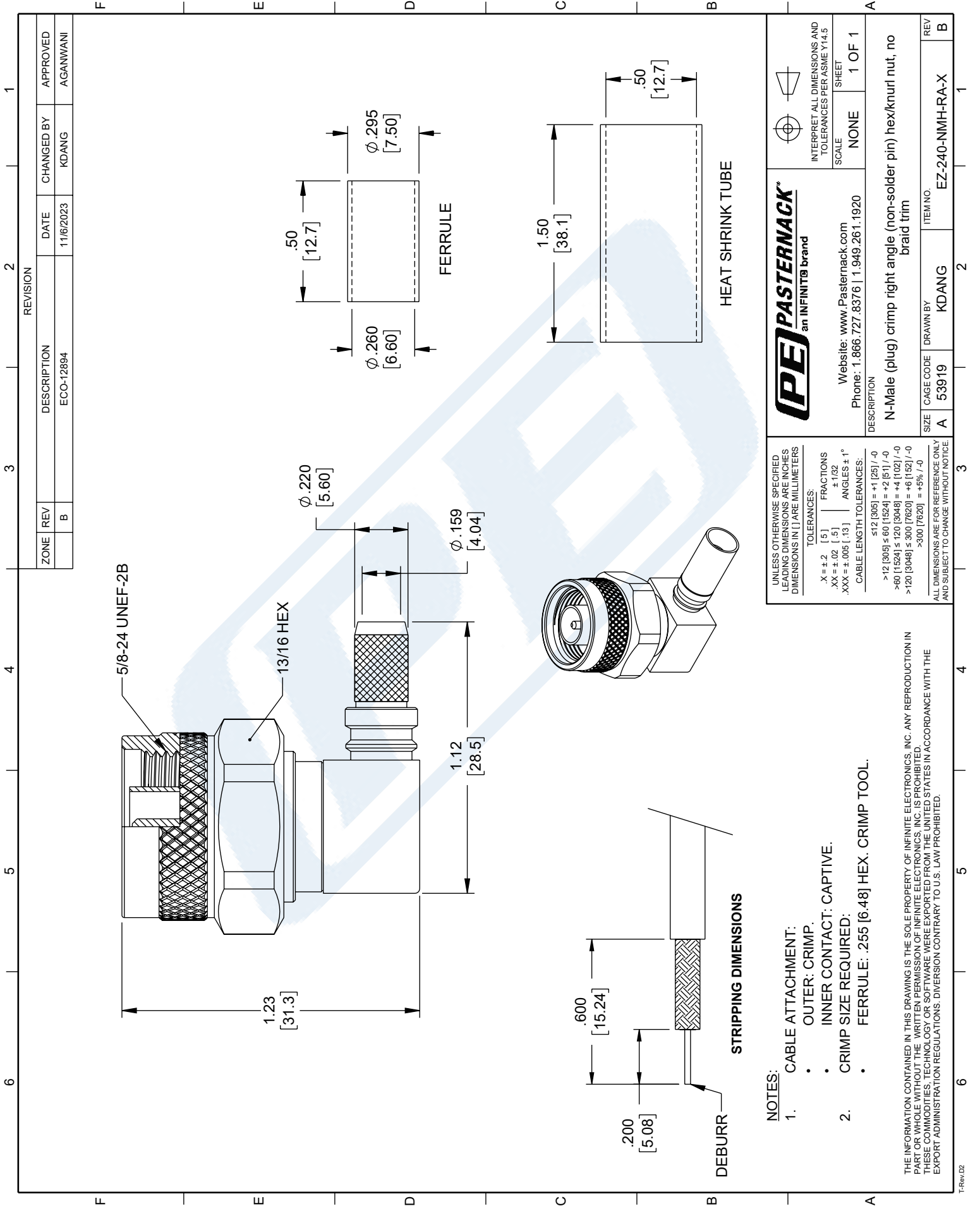
**EZ-240-NMH-RA-X**

N Male Right Angle 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: [N Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 EZ-240-NMH-RA-X](https://www.pasternack.com/n-male-lmr-240-lmr-240-db-connector-ez-240-nmh-ra-x)

URL: <https://www.pasternack.com/n-male-lmr-240-lmr-240-db-connector-ez-240-nmh-ra-x-p.aspx>

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## LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

### RF Cables Technical Data Sheet



LMR-240-FR

## Times Microwave Systems Coax Cable Specification

### Configuration

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

### Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke FRPE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 83% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.75 inches

### Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

### Description

LMR-240-FR Fire Rated version of the 240 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-240-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-240-FR is constructed with a 0.240 inch diameter and Black FRPE jacket.

LMR-240-FR flexible 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.240 inch diameter and low loss fire rated coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-240-FR FRPE coax is constructed with Foam PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-240-FR coax cable provides specs for this wire on its RF coax cable LMR-240-FR datasheet.

LMR-240-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-240-FR coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		83		%
Time Delay		1.21 3.97		ns/ft ns/m
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			1,500	Vdc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-240-FR Fire Rated version of the 240 series Low Loss Coax LMR-240-FR](#)



## LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

### RF Cables Technical Data Sheet



### LMR-240-FR

Jacket Spark	5,000	Vrms
Inner Conductor DC Resistance	3.2	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
Attenuation, Typ	1.7	3	3.7	5.3	7.6	dB/100ft
	5.58	9.84	12.14	17.39	24.93	dB/100m
Input Power (CW), Max	1,150	660	540	380	260	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	9.9	10.9	11.5	12.9	20.4	dB/100ft
	32.48	35.76	37.73	42.32	66.93	dB/100m
Input Power (CW), Max	200	180	170	150	100	Watts

#### Mechanical Specifications

Diameter	0.24 in 6.1 mm
Min. Bend Radius (Installation)	0.75 in [19.05 mm]
Min. Bend Radius (Repeated)	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Tensile Strength	80 lbs [36.29 kg]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.056 in [1.42 mm]
Conductor Type	Solid	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-240-FR Fire Rated version of the 240 series Low Loss Coax LMR-240-FR](#)



LMR-240-FR Fire Rated version of the 240 series Low Loss Coax

RF Cables  
Technical Data Sheet



LMR-240-FR

Dielectric	Foam PE	0.15 in [3.81 mm]
First Shield	Aluminum Tape	[ ]
Second Shield	Tinned Copper	[ ]
Jacket	FRPE, 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

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

**Plotted and Other Data**

Notes:

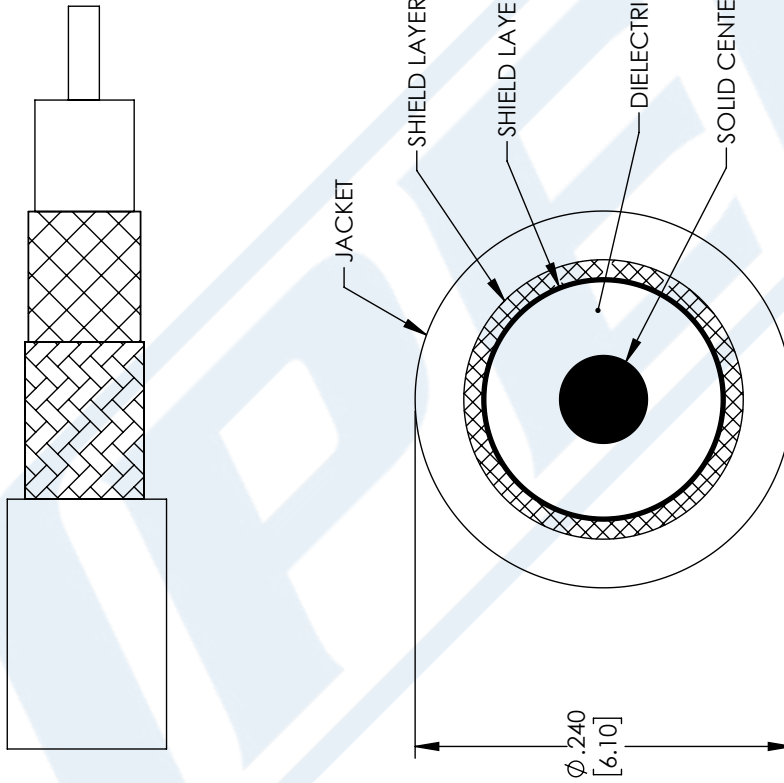
LMR-240-FR Fire Rated version of the 240 series Low Loss Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-240-FR Fire Rated version of the 240 series Low Loss Coax LMR-240-FR](#)

URL: <https://www.pasternack.com/low-loss-flexible-lmr-240-fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-240-fr-p.aspx>

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REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	06-04-2021
		APPROVED
		SELLIS



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

TOLERANCES:  
 .X = ±.2 [ .008] 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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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 E-mail: sales@pasternack.com

ITEM NO. LMR-240-FR  
 DRAWN BY MVEERAPPAN  
 CAGE CODE 53919

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A