



# SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240

## RF Connectors Technical Data Sheet



EZ-240-SM-RA-X

### Times Microwave Systems Connector Specification

#### Configuration

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: LMR-240
- 5/16 Inch Hex

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass/Phosphor Bronze Contact
- 50 µinch contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Times Microwave's EZ-240-SM-RA-X SMA male right angle connector offered by Pasternack with crimp/non-solder contact attachment for Times' LMR-240 is part of our full line of RF components available for same-day shipping. Times Microwave's SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Times Microwave's SMA male right angle connector EZ-240-SM-RA-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		6	GHz
VSWR			1.3:1	
Insertion Loss			0.25	dB
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Insulation Resistance	5,000			MOhms

#### Mechanical Specifications

##### Size

Length	0.725 in [18.42 mm]
Width/Dia.	0.312 in [7.92 mm]
Height	0.88 in [22.35 mm]
Weight	0.021 lbs [9.53 g]

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



SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240

RF Connectors  
Technical Data Sheet



EZ-240-SM-RA-X

Mating Cycles 500 Cycles  
Mating Torque 7 to 10 in-lbs [0.79 to 1.13 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Brass/Phosphor Bronze	Gold 50 µinch
Insulation	Teflon	
Body	Brass	Tri-Metal 80 µinch
Coupling Nut	Brass	Tri-Metal 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 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: [SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240 EZ-240-SM-RA-X](#)



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### RF Connectors Technical Data Sheet



EZ-240-SM-RA-X

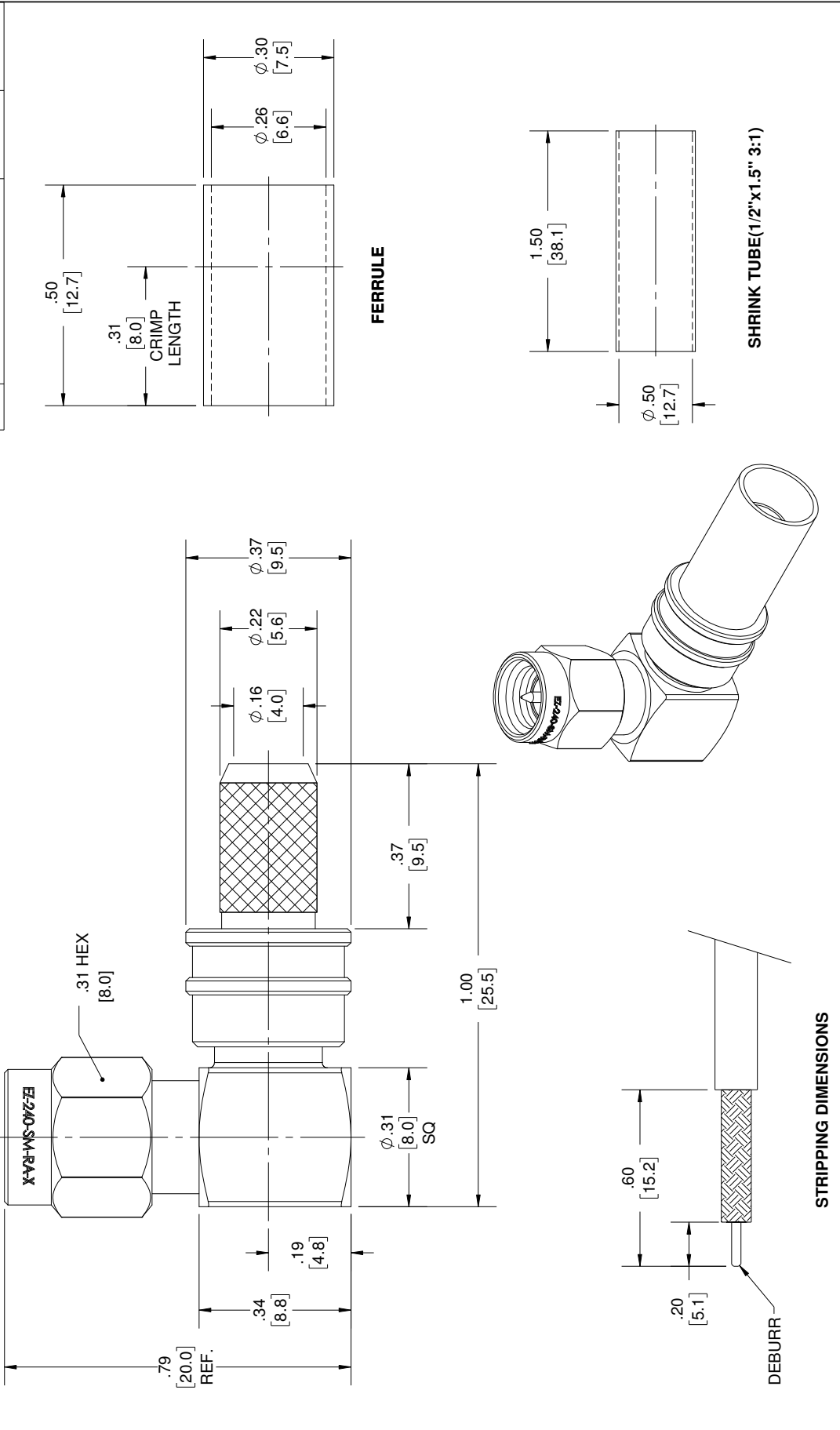
SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR EZ-240-SM-RA-X 20200511	06/15/2020	SRAUTUS



**UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN 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**

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SHEET 1 OF 1

SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	PART NUMBER
A	53919	K.DANG	EZ-240-SM-RA-X
REV			B

- NOTES:**
- CABLE ATTACHMENT:
    - OUTER: CRIMP.
    - INNER: NON-SOLDER.
  - CRIMP SIZE REQUIRED:
    - FERRULE: .255 [6.48] HEX. CRIMP TOOL.
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# SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240

## RF Connectors Technical Data Sheet



EZ-240-SM-RA-X

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#### Configuration

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: LMR-240
- 5/16 Inch Hex

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass/Phosphor Bronze Contact
- 50 µinch contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.25	dB
Dielectric Withstanding Voltage (AC)			1,000	Vrms
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#### Mechanical Specifications

##### Size

Length	0.725 in [18.42 mm]
Width/Dia.	0.312 in [7.92 mm]
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SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240

RF Connectors  
Technical Data Sheet



EZ-240-SM-RA-X

Mating Cycles 500 Cycles  
Mating Torque 7 to 10 in-lbs [0.79 to 1.13 Nm]

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Contact	Brass/Phosphor Bronze	Gold 50 μinch
Insulation	Teflon	
Body	Brass	Tri-Metal 80 μinch
Coupling Nut	Brass	Tri-Metal 80 μinch

**Environmental Specifications**

**Temperature**

Operating Range -40 to +125 deg C  
Shock MIL-STD 202G, Meth.213, Cond I  
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**Plotted and Other Data**

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## SMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240

### RF Connectors Technical Data Sheet



EZ-240-SM-RA-X

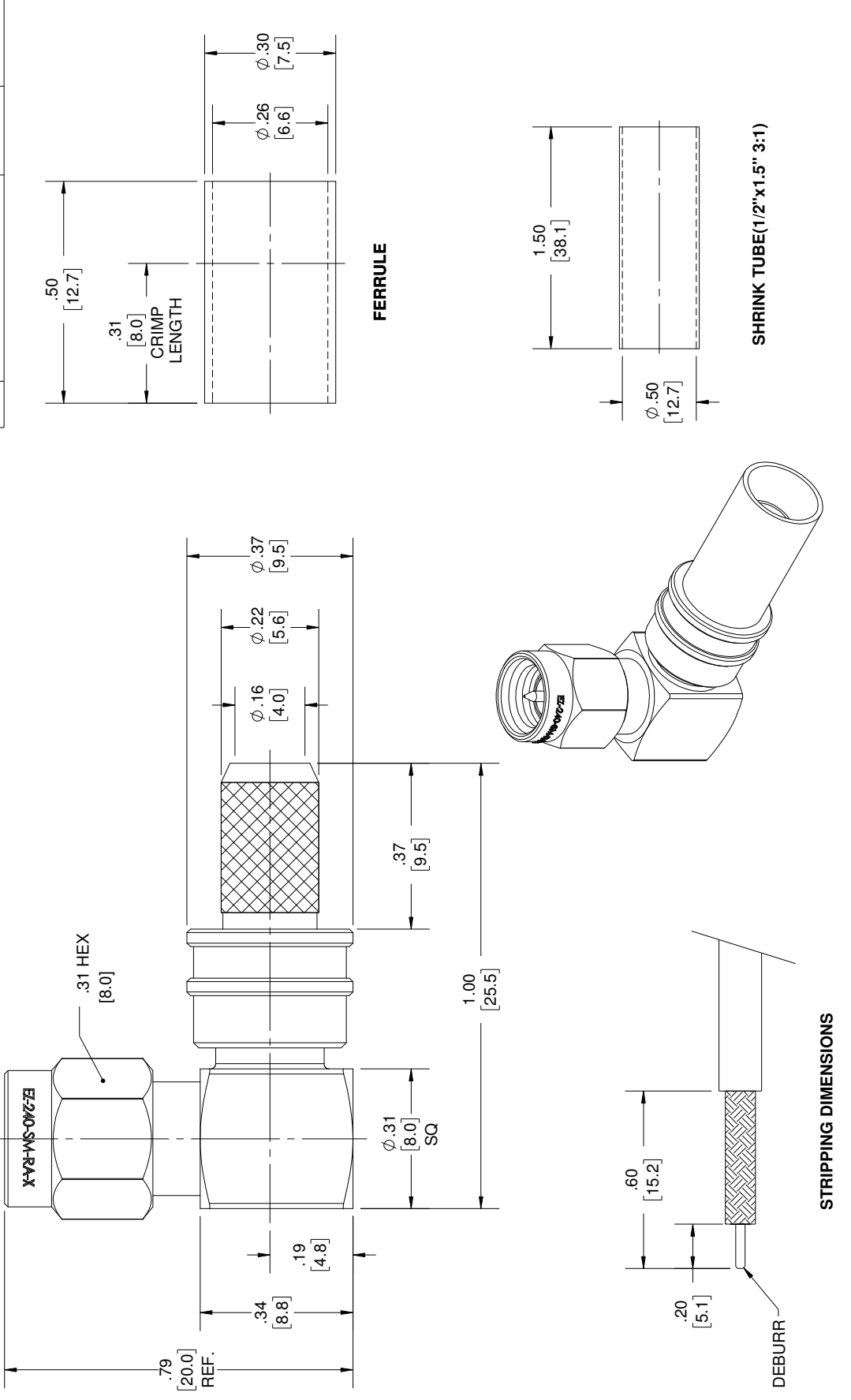
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B	PCR EZ-240-SM-RA-X 20200511	06/15/2020	SRAUTUS



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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	PART NUMBER
A	53919	K.DANG	EZ-240-SM-RA-X

REV B

- NOTES:
- CABLE ATTACHMENT:
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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	

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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

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:

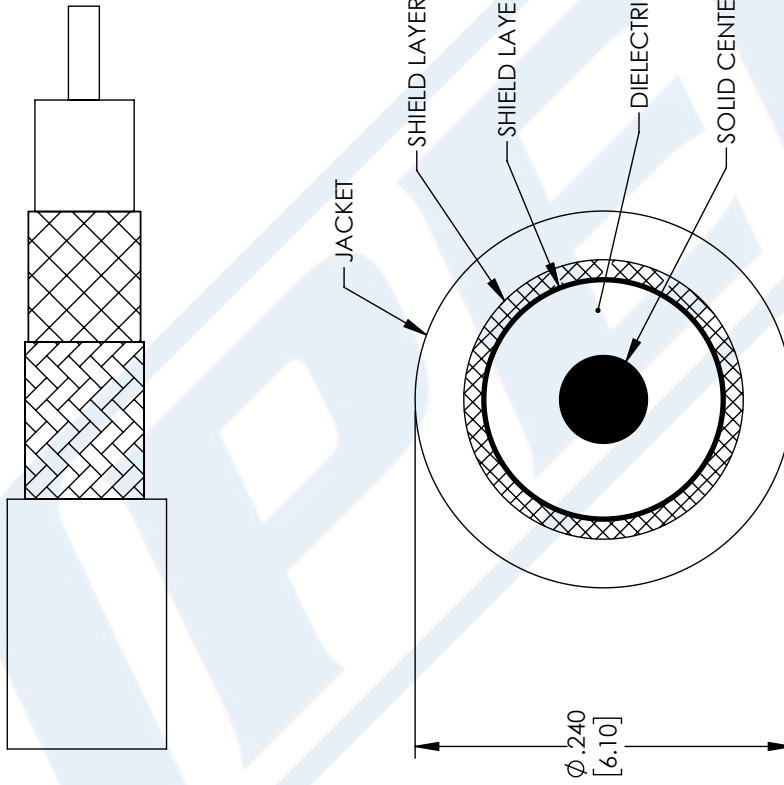
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URL: <https://www.pasternack.com/low-loss-flexible-lmr-240-fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-240-fr-p.aspx>

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



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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

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