



N Male Right Angle Connector Crimp/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

RF Connectors Technical Data Sheet



TC-240-NMH-RA-D

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 1.3:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

TC-240-NMH-RA-D 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/solder 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 1.3:1. Pasternack's N coaxial connector has a brass body with tri-metal plating. Our TC-240-NMH-RA-D N right angle connector uses a gold 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 TC-240-NMH-RA-D features an 80 µin minimum body plating specification. The Pasternack TC-240-NMH-RA-D N connector operates at a temperature range of -40 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			1.3:1	
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 $0.1 \cdot \sqrt{\text{fGHz}}$ dB

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



N Male Right Angle Connector Crimp/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

RF Connectors Technical Data Sheet



TC-240-NMH-RA-D

Mechanical Specifications

Size

Length	1.00 in [25.40 mm]
Width	0.81 in [20.57 mm]
Height	1.24 in [31.50 mm]
Weight	0.10 lbs [45.36 g]
Mating Cycles	500 Cycles
Mating Torque	9 to 14 in-lbs [1.02 to 1.58 Nm]
Cable Retention Force	60 lbs 27.22 kg

Material Specifications

Description	Material	Plating
Contact	Brass	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.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/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 TC-240-NMH-RA-D](#)



N Male Right Angle Connector Crimp/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240

RF Connectors Technical Data Sheet



TC-240-NMH-RA-D

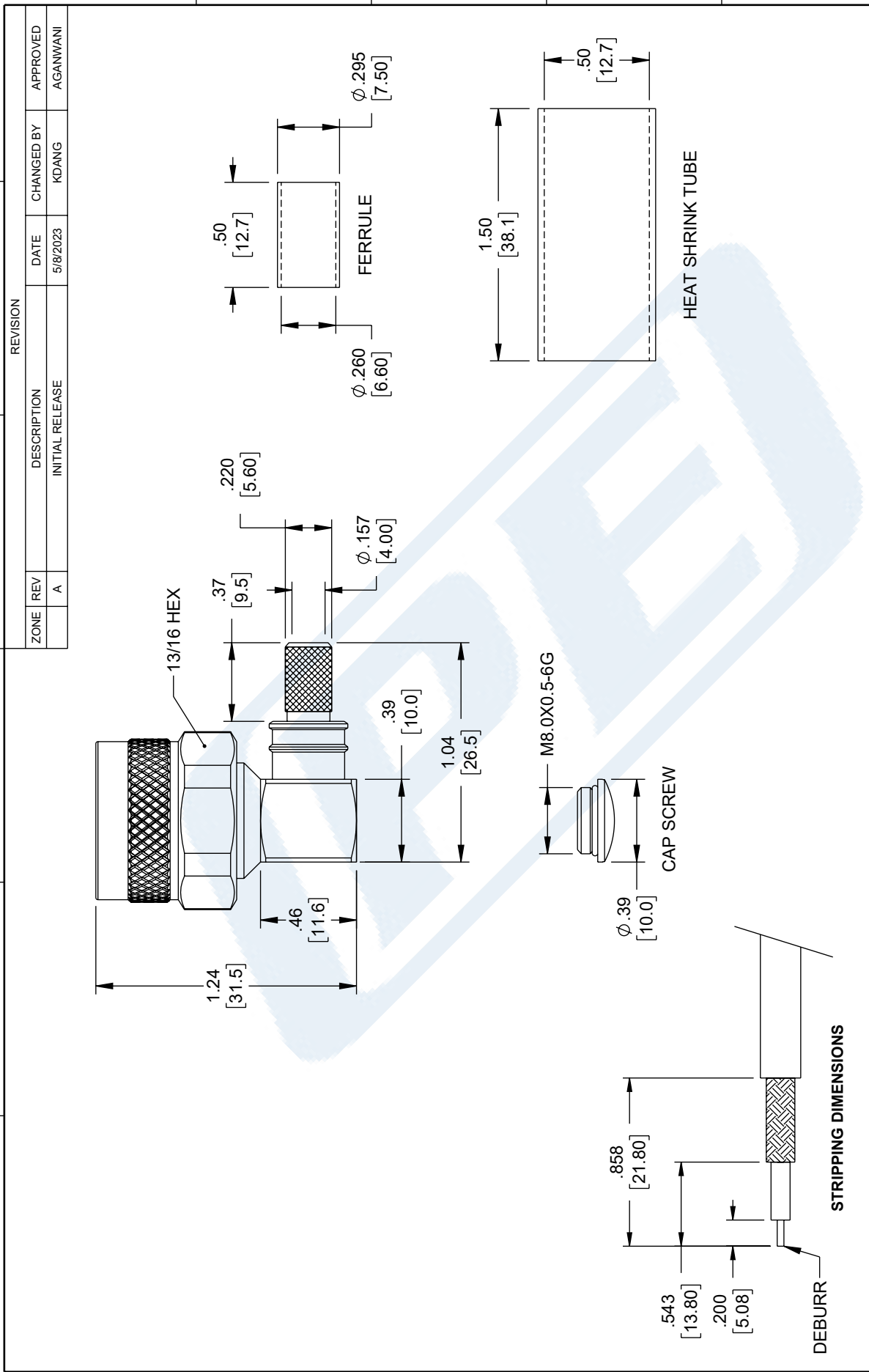
N Male Right Angle Connector Crimp/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the 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/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240 TC-240-NMH-RA-D](https://www.pasternack.com/n-male-lmr-240-lmr-240-db-connector-tc-240-nmh-ra-d-p.aspx)

URL: <https://www.pasternack.com/n-male-lmr-240-lmr-240-db-connector-tc-240-nmh-ra-d-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.

TIMES MICROWAVE SYSTEMS **TC-240-NMH-RA-D CAD Drawing**
 N Male Right Angle Connector Crimp/Solder Attachment for LMR-240, LMR-240-DB, LMR-240-UF, LMR-240-FR, RG8X, PE-C240



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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

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: N Male Right Angle Connector Crimp/Solder Attachment for LMR-240

REV: A

ITEM NO.: TC-240-NMH-RA-D

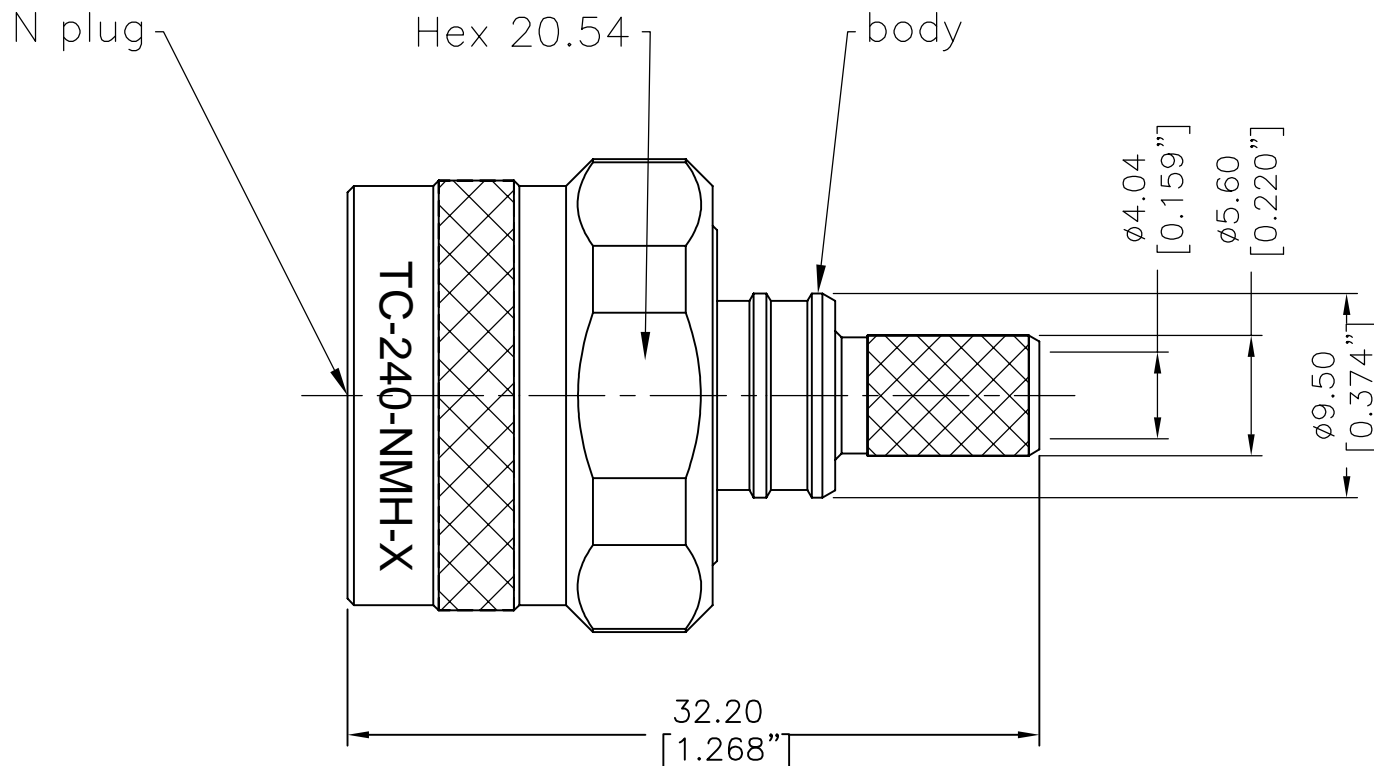
SIZE: A

CAGE CODE: 53919

DRAWN BY: KDANG

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

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I. MATERIALS & FINISHES

Components	Materials	Finishes	Thk. (μ")
Body	Brass	Albaloy	80
Center Cont.	Brass	Gold	50
Ferrule	Brass	Albaloy	80
Nut	Brass	Albaloy	80
Insulator	PTFE	--	--
Gasket	Silicone	--	--

III. ENVIRONMENT PROPERTIES

Temperature Range:	-40°C~+125°C
Thermal Shock:	MIL-STD 202G, Meth.107, Cond.B
Vibration:	MIL-STD 202G, Meth.204, Cond.B
Shock:	MIL-STD 202G, Meth.213, Cond I
Climatic Class:	IEC 60068 55/155/56
(2002/95/EC)RoHS:	Compliant

V. TOOLING

Stripping Tool: 3192-152/CST-240A
 Crimping Tool: 3190-667/CT-240/200/100

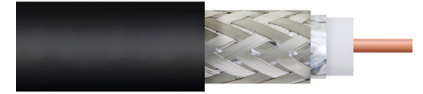
II. ELECTRICAL PROPERTIES

Impedance (Ω):	50
Frequency Range (GHz):	DC to 6 GHz
Working Voltage (V):	2500
Insulation Resistance (MΩ):	≥10000
VSWR:	≤1.30
Insertion Loss(dB, f/GHz):	-0.1x √f

IV. MECHANICAL PROPERTIES

Center Cont.:	Solder
Outer Cont.:	Crimp
Coupling Nut Torque (N.m):	1.7
Cbl-Connector Retention Force (N):	250
Durability (cycles):	500

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB



Times Microwave Systems Connector Specification

Configuration

- Low Loss Flexible Cable
- 2 Shield(s)

Features

- Easily Routed
- Low Loss Cable
- RF Shielding > 90dB
- Designed for Outdoor Use
- Watertight

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

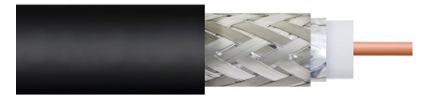
LMR-240-DB part number from Pasternack is a LMR-240-DB coax cable that is flexible. Pasternack LMR-240-DB flexible coax cable is 50 Ohm and has a PE (F) dielectric. Our LMR-240-DB coax is constructed with a 0.24 jacket made of PE. LMR-240-DB coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-240-DB coax cable has an attenuation at 1 GHz of 7.66 dB.

Pasternack LMR-240-DB coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-240-DB cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-240-DB or other coax can be built and shipped same day as well.

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			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

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB

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

Electrical Specification Notes:

Values at 25°C, sea level.

Attenuation = $0.242080 \cdot \sqrt{\text{FMHz}} + 0.000330$

Mechanical Specifications

Diameter	0.24 in [6.1 mm]
Weight	0.034 lbs/ft [0.05 kg/m]
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

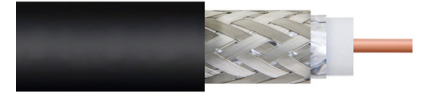
Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.056 in [1.42 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.15 in [3.81 mm]
First Shield	Aluminum Tape	0.155 in [3.94 mm]
Second Shield	Tinned Copper Braid	0.178 in [4.52 mm]
Jacket	PE, Black	0.24 in [6.1 mm]

Environmental Specifications

Temperature

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

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



LMR-240-DB

Environmental Specification Notes:
Designed for indoor and outdoor use.

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket 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.

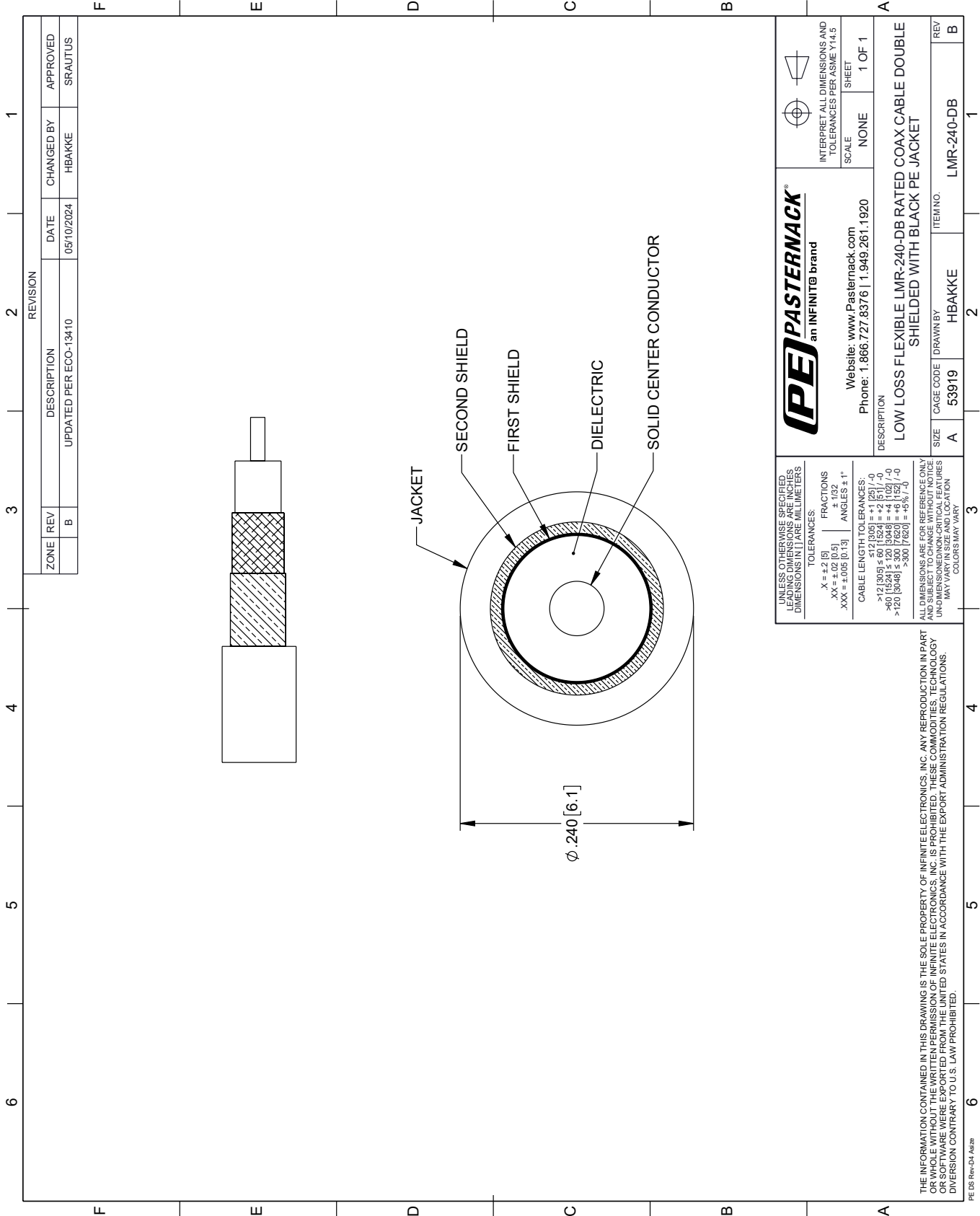
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket LMR-240-DB](#)

URL: <https://www.pasternack.com/low-loss-flexible-lmr240db-pe-jacket-double-shielded-black-lmr-240-db-p.aspx>

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LMR-240-DB CAD Drawing

Low Loss Flexible LMR-240-DB Rated Coax Cable Double Shielded with Black PE Jacket



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	B	UPDATED PER ECO-13410	HBAKKE	SRAUTUS

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

DESCRIPTION: LOW LOSS FLEXIBLE LMR-240-DB RATED COAX CABLE DOUBLE SHIELDED WITH BLACK PE JACKET

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	HBAKKE	LMR-240-DB

REV B

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

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15] / -0

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PE DS Rev-04 Add2