

Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U



PE45952

Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG174, RG174NM
- Non-Magnetic Design

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.24:1
- Gold Plated Beryllium Copper Contact
- 50 μ m minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies
- Medical
- Quantum Computing
- Military and Aerospace

Description

Pasternack's PE45952 Right Angle, SMA, Non-Magnetic, Connector is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.24:1. Its right angle body geometry allows for easier connections in tight spaces. Pasternack's Non Magnetic connectors are manufactured with materials that are especially adapted to non magnetism. Our non-magnetic connectors have a susceptibility of around 10^{-5} , as opposed to 10^{-2} for standard connectors made of brass/nickel materials. As a result, our non-magnetic connectors are transparent to the magnetic field, which means no field distortion and a higher Signal-to-Noise Ratio (SNR).

Our SMA male right angle connector PE45952 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			1.24:1	
Operating Voltage (AC)			335	Vrms
Impedance		50		Ohms

Mechanical Specifications

Size

Length	0.65 in [16.51 mm]
Width	0.315 in [8.00 mm]
Height	0.496 in [12.6 mm]
Weight	0.012 lbs [5.44 g]
Mating Torque	3 to 5 in-lbs [0.34 to 0.57 Nm]

Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U



PE45952

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 50 µin minimum
Insulation	Teflon	
Body	Beryllium Copper	Gold 3 µin minimum
Coupling Nut	Beryllium Copper	Gold 3 µin minimum
Gasket	Silicone	
Crimp Sleeve	Brass	Gold 3 µin minimum
Washer	Beryllium Copper	

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U 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.

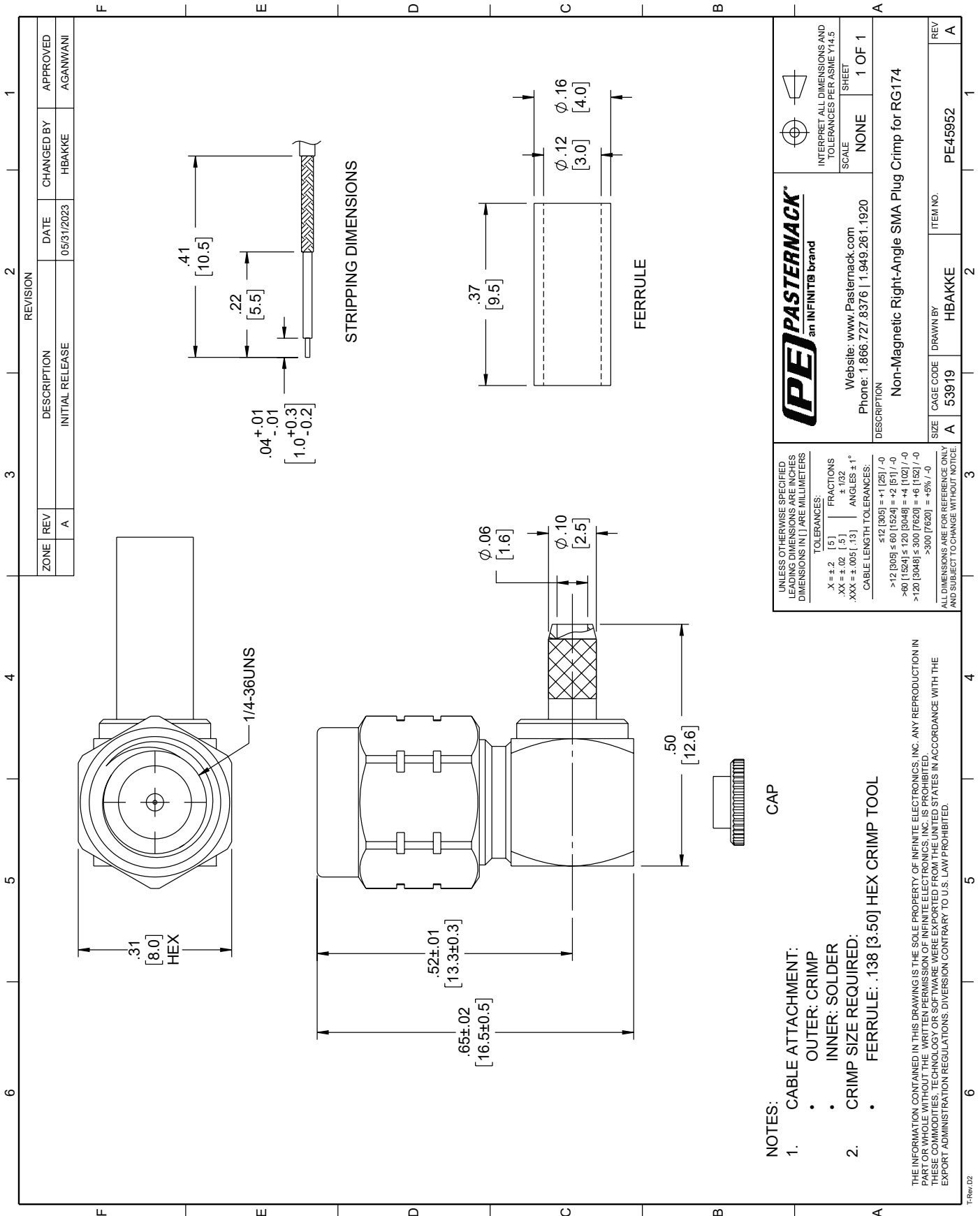
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U PE45952](#)

URL: <https://www.pasternack.com/sma-male-rg188-ds-rg316-ds-connector-pe45952-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE45952 CAD Drawing

Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	05/31/2023	HBAKKE	AGANWANI

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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: Non-Magnetic Right-Angle SMA Plug Crimp for RG174

SIZE: A

CAGE CODE: 53919

DRAWN BY: HBAKKE

ITEM NO.: PE45952

REV: A

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Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U



PE45952

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- MIL-STD-348A
- 50 Ohms
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Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U



PE45952

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Gasket	Silicone	
Crimp Sleeve	Brass	Gold 3 µin minimum
Washer	Beryllium Copper	

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

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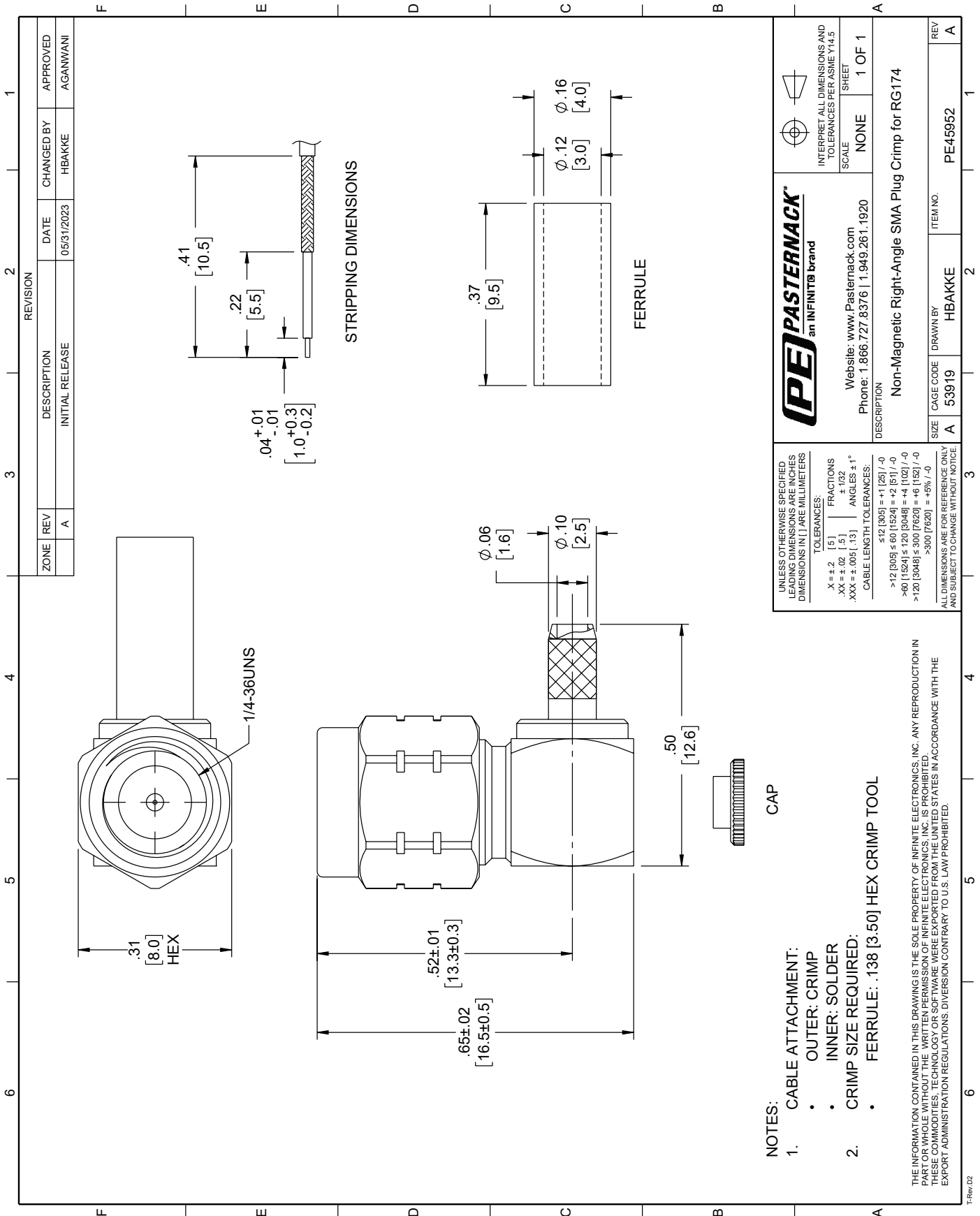
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URL: <https://www.pasternack.com/sma-male-rg188-ds-rg316-ds-connector-pe45952-p.aspx>

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PE45952 CAD Drawing

Non-Magnetic SMA Male Right Angle Connector Crimp/Solder Attachment for RG174U





RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket

RF Cables Technical Data Sheet

RG174NM

Configuration

- Non-Magnetic Flexible Cable
- 1 Shield(s)

Features

- Max Frequency 100 MHz
- Magnetic Susceptibility 10^{-5}

Applications

- General Purpose Test
- Medical
- Quantum Computing
- Custom Cable Assemblies
- Military and Aerospace

Description

RG174NM part number from Pasternack is a RG174 non-magnetic coax cable that is flexible. Pasternack flexible coax RF cable has an impedance of 50 Ohm and a PE dielectric. Our RG174 coax cable is constructed with a jacket made of PVC. This black-colored non-magnetic coax cable has a nominal capacitance of 31.7 pF/Ft.

The RG174 coax RF cable has a shield count of 1. Our coax cable from Pasternack has a maximum frequency of 0.1 GHz. Additional specifications for this RG174NM single-shielded RF coaxial cable are on our downloadable PDF datasheet above. This flexible coax RF cable has a minimum bend radius of 15 in along with 0.021 in of center conductor diameter.

Our RG174 coax cable can operate at temperatures ranging from -40 to +105 degrees C. The RG174NM flexible RF cable has a solid copper center conductor. This black-colored flexible RF cable with a 50 Ohm impedance has a typical insertion loss/ maximum attenuation of 12.5 dB/100ft at a frequency of 0.1 GHz.

Pasternack RG174 non-magnetic coax cables are part of over 40,000 RF, microwave, and millimeter wave components. These flexible cables and our other RF parts are available for same-day shipping worldwide. Custom RF cable assemblies using RG174, or other coax can be built and shipped the same business day as well.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		100	MHz
Impedance		50		Ohms
Nominal Capacitance		31.7 [104]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket RG174NM](#)



RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket

RF Cables Technical Data Sheet

RG174NM

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	100					MHz
Attenuation, Typ	12.5					dB/100ft
	41.01					dB/100m

Mechanical Specifications

Min. Bend Radius (Repeated) 1.5 in [38.1 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.021 in [0.53 mm]
Conductor Type	Solid	
Dielectric	PE PE	0.063 in [1.6 mm]
Outer Conductor	Copper 100% coverage	0 in [0 mm]
Jacket	PVC, Black	[]

Environmental Specifications

Temperature

Operating Range -40 to 105 deg C

Storage Range -40 to 105 deg C

Environmental Specification Notes:

All tests performed in accordance with MIL-DTL-17 (current issue)

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket RG174NM](#)



RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket

RF Cables Technical Data Sheet

RG174NM

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

Plotted and Other Data

Notes:

RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC 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.

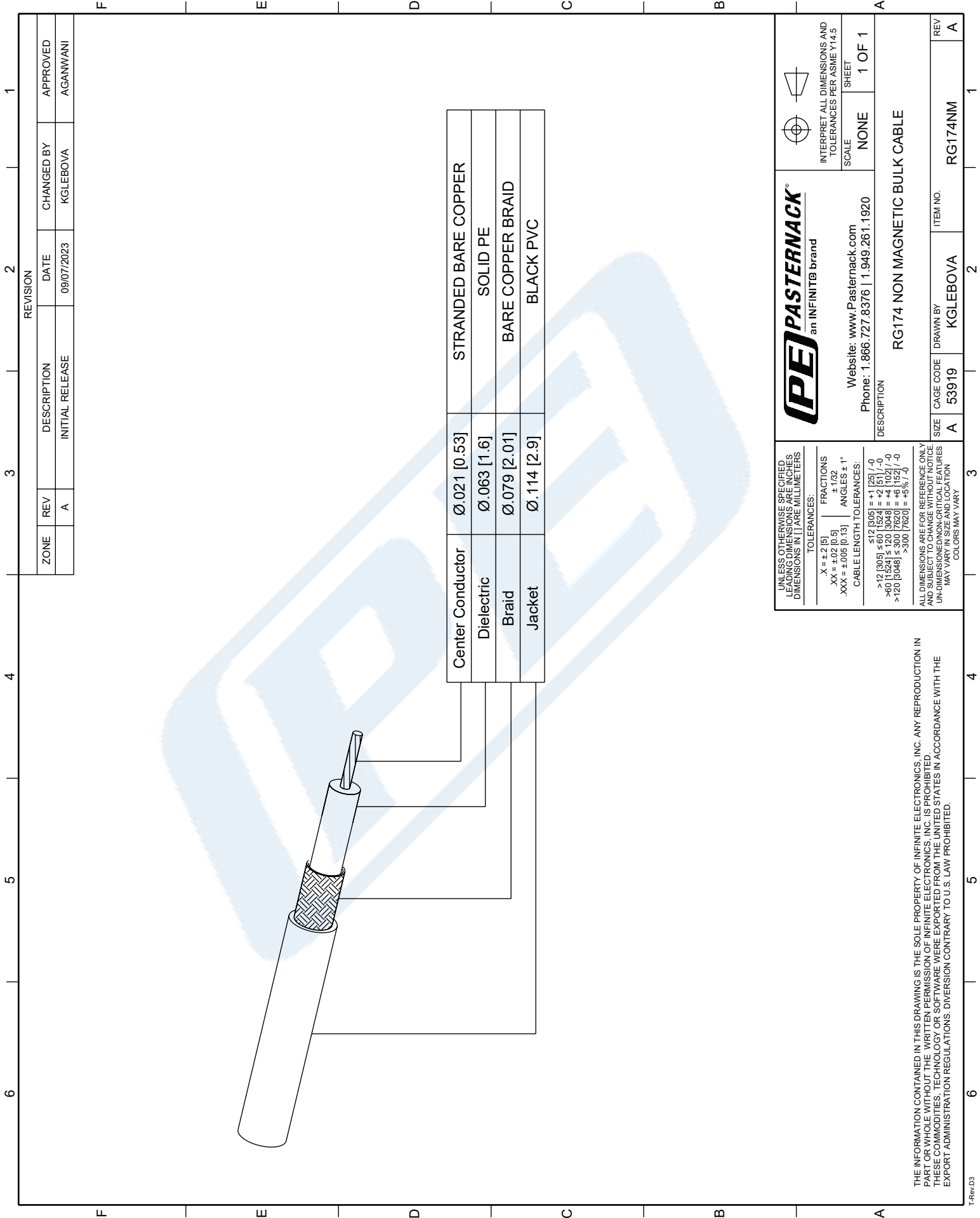
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket RG174NM](#)

URL: <https://www.pasternack.com/non-magnetic-flexible-pvc-jacket-single-shielded-rg174nm-p.aspx>

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RG174NM CAD Drawing

RG174 Non-Magnetic Flexible Coaxial Cable, Single Shielded with Black PVC Jacket



Center Conductor	Ø.021 [0.53]	STRANDED BARE COPPER
Dielectric	Ø.063 [1.6]	SOLID PE
Braid	Ø.079 [2.01]	BARE COPPER BRAID
Jacket	Ø.114 [2.9]	BLACK PVC

REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	09/07/2023
		CHANGED BY	AGANWANI
		APPROVED	AGANWANI

	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: RG174 NON MAGNETIC BULK CABLE	
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X = ±.2 [5] FRACTIONS XX = ±.02 [0.5] ANGLES ± 1° XXX = ±.005 [0.13]	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 UNLESS INDICATED OTHERWISE IN THE UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY
SIZE: A CAGE CODE: 53919 DRAWN BY: KGLEBOVA ITEM NO.: RG174NM	REV: A	

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