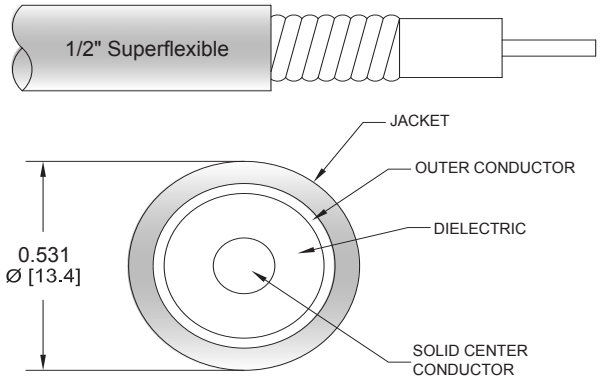
7/16 DIN Male Right Angle to 7/16 DIN Male Low PIM Cable Using 1/2 inch Superflexible Coax

PE3C3977

Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: 7/16 DIN Male
- Cable Type: 1/2" Superflexible
- Coax Flex Type: Corrugated



Features

- Max Frequency 3 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3C3977 7/16 DIN male right angle to 7/16 DIN male cable using 1/2 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm corrugated 1/2" superflexible coax. The PE3C3977 7/16 DIN male to 7/16 DIN male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The right angle 7/16 DIN interface on the 1/2" superflexible cable allows for easier connections in tight spaces.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.27:1	
Velocity of Propagation		82		%
RF Shielding	120			dB
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-160	dBc
Capacitance		25.3 [83.01]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.91 [2.99]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
DC Resistance Outer Conductor		1.08 [3.54]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3C3977	Custom Lengths Available	Insertion Loss (Typ.)	0.01	0.015	0.023	0.034	0.063	dB/ft	
			0.04	0.05	0.08	0.12	0.21	dB/m	
PE3C3977-24	24 inch	Insertion Loss (Typ.)	0.32	0.33	0.35	0.37	0.43	dB	0.993
PE3C3977-48	48 inch	Insertion Loss (Typ.)	0.34	0.36	0.4	0.44	0.56	dB	1.201
PE3C3977-60	60 inch	Insertion Loss (Typ.)	0.35	0.38	0.42	0.47	0.62	dB	1.305
PE3C3977-150CM	150 CM	Insertion Loss (Typ.)	0.35	0.38	0.42	0.47	0.62	dB	1.296
PE3C3977-200CM	200 CM	Insertion Loss (Typ.)	0.37	0.4	0.46	0.53	0.72	dB	1.467

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2	dB
Loss due to Connector 2:	0.1	dB
Base Weight:	0.888	pounds
Additional Weight per Inch:	0.00867	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.888 lbs [402.79 g]

Cable

Cable Type	1/2" Superflexible
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	1
Outer Conductor 1 Material and Plating	Helically Corrugated Copper Tube
Jacket Material	PE, Black
Jacket Diameter	0.519 in [13.18 mm]
One Time Minimum Bend Radius	0.6 in [15.24 mm]
Repeated Minimum Bend Radius	1.18 in [29.97 mm]
Typical Flex Cycles	20
Tensile Strength	79 lbs [35.83 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male Right Angle	7/16 DIN Male
Specification		IEC 61169-4
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Silver	Spring Copper, Silver
Contact Plating Specification	5µ in. minimum	5 µm minimum
Dielectric Type	PTFE	TPX
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		5 µm minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2µ in. minimum	2 µm minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	5µ in. minimum	5 µm minimum
Hex Size	1 1/4 in.	32 mm
Torque	18.439 ft-lbs 25 Nm	18.417 ft-lbs 24.97 Nm

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **PE3C3977 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C3977 — Base Number

Example: PE3C3977-12 = 12 inches long cable
PE3C3977-100cm = 100 cm long cable

7/16 DIN Male Right Angle to 7/16 DIN Male Low PIM Cable Using 1/2 inch Superflexible 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: 7/16 DIN Male Right Angle to 7/16 DIN Male Low PIM Cable Using 1/2 inch Superflexible Coax PE3C3977

URL: https://www.pasternack.com/7-16-din-male-right-angle-to-7-16-din-male-low-pim-cable-using-1-2-inch-superflexible-pe3c3977-p.aspx

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PE3C3977 CAD Drawing

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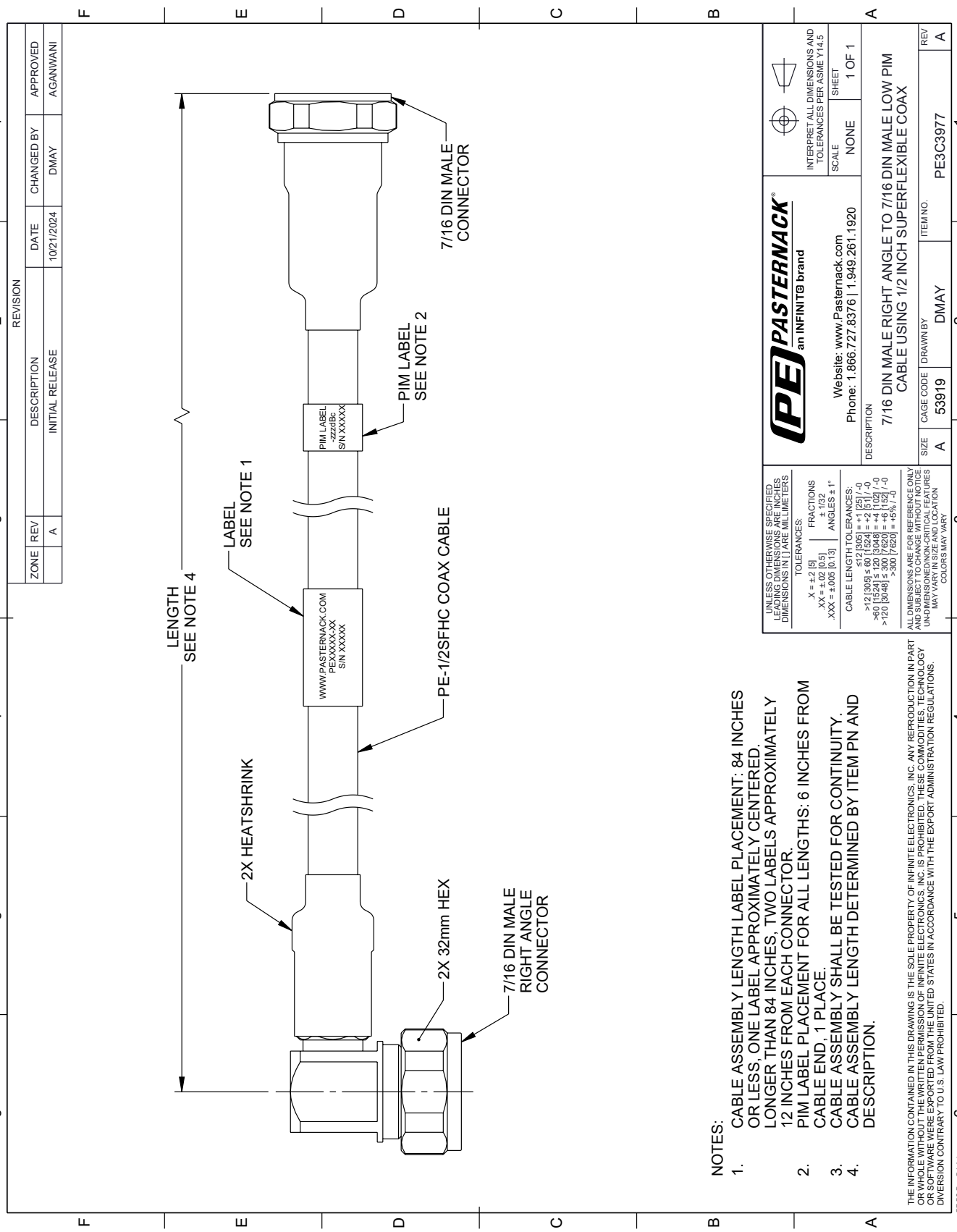

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