



7/16 DIN Male Right Angle to N Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components

RF Cable Assemblies Technical Data Sheet

PE3C8271

Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: N Female
- Cable Type: TFT-402

Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > -80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

Description

Pasternack's PE3C8271 7/16 DIN male right angle to type N female cable using TFT-402 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack 7/16 DIN to type N cable assembly has a male to female gender configuration with 50 ohm flexible TFT-402 coax. The PE3C8271 7/16 DIN male to type N female cable assembly operates to 5.8 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 TFT-402 cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than -80 dB.

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.

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 N Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components PE3C8271](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	-80			dB
Passive Intermodulation			-160	dBc
Capacitance		26.7 [87.6]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.5 [27.89]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		5.6 [18.37]		Ω /1000ft [Ω /Km]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.052	0.076	0.108	0.173	0.267	dB/ft
	0.17	0.25	0.35	0.57	0.88	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.12 dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Diameter 1.25 in [31.75 mm]

Cable

Cable Type TFT-402
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper, Silver
 Dielectric Type PTFE
 Number of Shields 2
 Shield Layer 1 Silver Plated Copper Braid
 Shield Layer 2 Tinned Copper Braid
 Jacket Material FEP, Blue
 Jacket Diameter 0.16 in [4.06 mm]

One Time Minimum Bend Radius 0.75 in [19.05 mm]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male Right Angle	N Female
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin	5 µm
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		3 µm
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 µin	3 µm
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	100 µin	
Torque	22.083 ft-lbs [29.95 Nm]	10 in-lbs [1.13 Nm]

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

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PE3C8271

How to Order

Part Number Configuration:

PE3C8271

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C8271-12 = 12 inches long cable
PE3C8271-100cm = 100 cm long cable

7/16 DIN Male Right Angle to N Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components 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 N Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components PE3C8271](https://www.pasternack.com/7-16-din-male-n-female-tft-402-cable-assembly-pe3c8271-p.aspx)

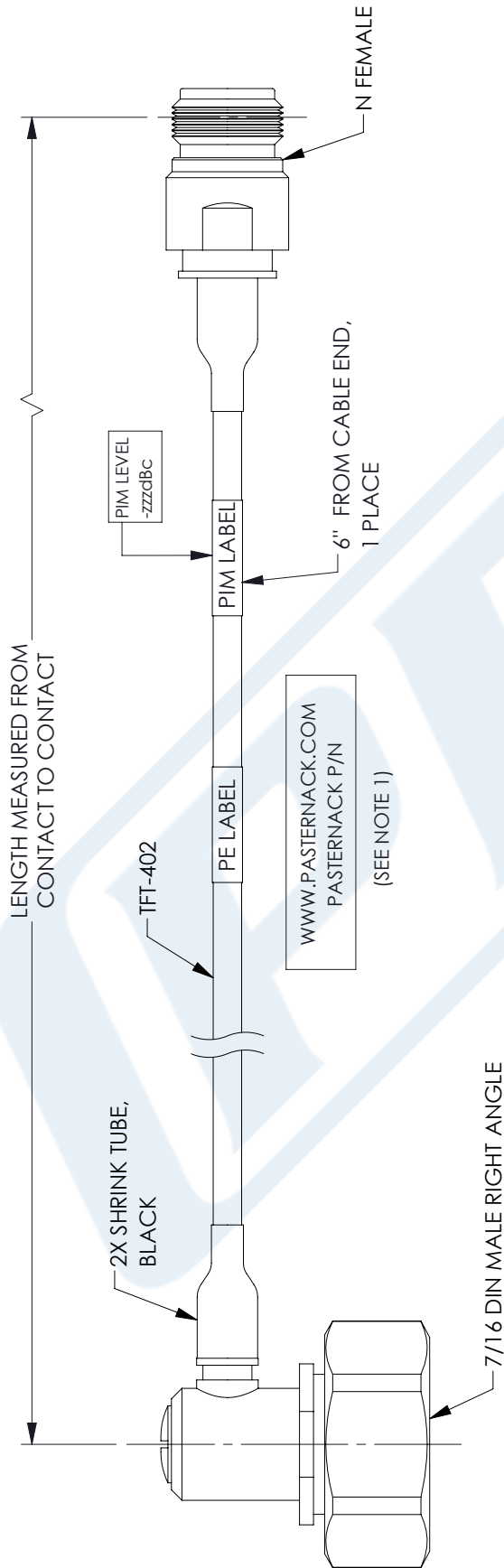
URL: <https://www.pasternack.com/7-16-din-male-n-female-tft-402-cable-assembly-pe3c8271-p.aspx>

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PE3C8271 CAD Drawing

7/16 DIN Male Right Angle to N Female Low PIM Cable Using
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06/04/2021	AGANWANI



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

TOLERANCES:

.X = ±.2	[5.08]	FRACTIONS
.XX = ±.02	[.51]	±.132
.XXX = ±.005	[.13]	ANGLES ± 1°

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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SCALE N/A

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SIZE A CAGE CODE MVEERAPPAN ITEM NO. PE3C8271 REV A

NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END
12.0" FROM THE FRONT OF THE CONNECTOR.

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