



4.1/9.5 Mini DIN Male to 7/16 DIN Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components

RF Cable Assemblies Technical Data Sheet

PE3C8231

Configuration

- Connector 1: 4.1/9.5 Mini DIN Male
- Connector 2: 7/16 DIN Female
- Cable Type: TFT-402

Features

- Max Frequency 3 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 PE3C8231 4.1/9.5 Mini DIN male to 7/16 DIN 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 4.1/9.5 Mini DIN to 7/16 DIN cable assembly has a male to female gender configuration with 50 ohm flexible TFT-402 coax. The PE3C8231 4.1/9.5 Mini DIN male to 7/16 DIN female cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	-80			dB
Passive Intermodulation			-160	dBc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.1/9.5 Mini DIN Male to 7/16 DIN Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components PE3C8231](#)



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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	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.032	0.052	0.076	0.108	0.188	dB/ft
	0.1	0.17	0.25	0.35	0.62	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.866 in [22 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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4.1/9.5 Mini DIN Male to 7/16 DIN Female Low PIM Cable
Using TFT-402 Coax Using Times Microwave Components

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Connectors

Description	Connector 1	Connector 2
Type	4.1/9.5 Mini DIN Male	7/16 DIN Female
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	5 μ m	5 μ m
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		3 μ m
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 μ m	3 μ m
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	5 μ m	
Torque	106 in-lbs [11.98 Nm]	22.083 ft-lbs [29.95 Nm]

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet

PE3C8231

How to Order

Part Number Configuration:

PE3C8231

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C8231-12 = 12 inches long cable
PE3C8231-100cm = 100 cm long cable

4.1/9.5 Mini DIN Male to 7/16 DIN 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: [4.1/9.5 Mini DIN Male to 7/16 DIN Female Low PIM Cable Using TFT-402 Coax Using Times Microwave Components PE3C8231](https://www.pasternack.com/4.1-9.5-mini-din-male-7-16female-tft-402-cable-assembly-pe3c8231-p.aspx)

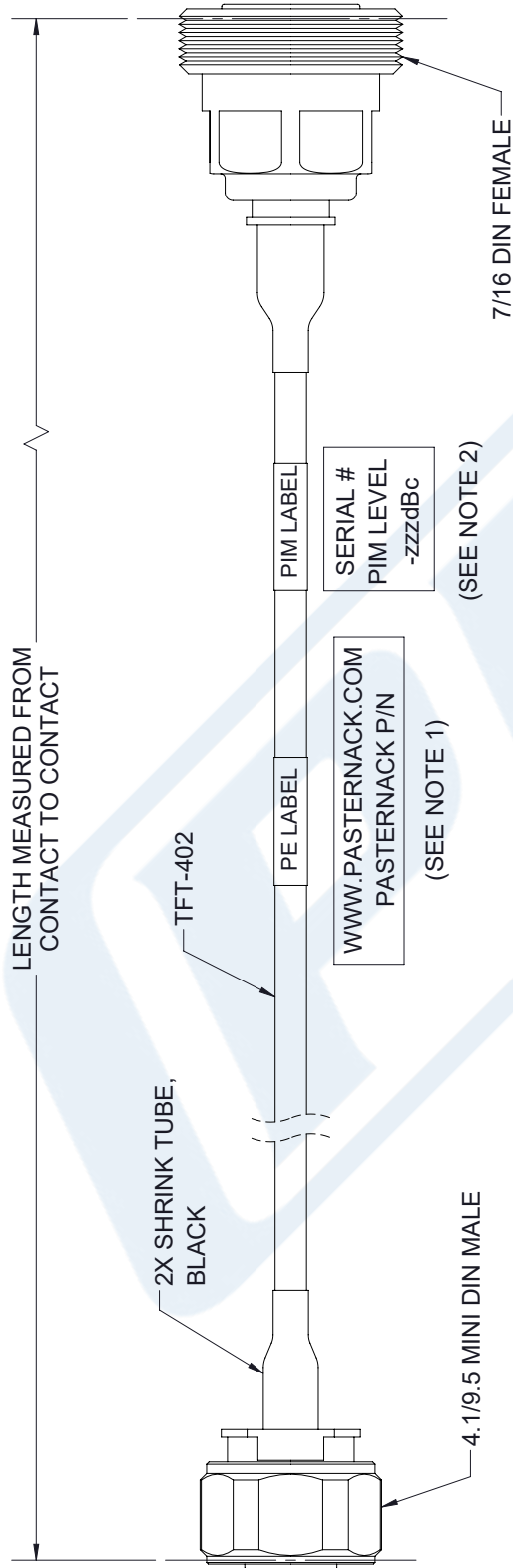
URL: <https://www.pasternack.com/4.1-9.5-mini-din-male-7-16female-tft-402-cable-assembly-pe3c8231-p.aspx>

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.

PE3C8231 CAD Drawing

4.1/9.5 Mini DIN Male to 7/16 DIN Female Low PIM Cable Using
TFT-402 Coax Using Times Microwave Components

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/30/21	SRAUTUS



NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS; ONE AT EACH END 12" FROM THE FRONT OF THE CONNECTOR.
- PIM LABEL 6" FROM CABLE END 1 PLACE.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ± .2	[.50]
.XX = ± .02	[.51]
.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% / -0	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

PE PASTERNAK an INFINITI® brand Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com		THIRD-ANGLE PROJECTION  THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3C8231
SHEET 1 OF 1			REV A
SCALE N/A			

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