

N Male to N Female Bulkhead Low PIM Cable 50 CM Length Using TFT-5G-402 Coax Using Times Microwave Components

PE3C8002-50CM



Configuration

- Connector 1: N Male
- Connector 2: N Female Bulkhead
- Cable Type: TFT-5G-402
- Coax Flex Type: Flexible

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 PE3C8002-50CM type N male to type N female bulkhead 50 cm cable using TFT-5G-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 type N to type N cable assembly has a male to female gender configuration with 50 ohm flexible TFT-5G-402 coax. The PE3C8002-50CM type N 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. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	80			dB
Passive Intermodulation			-160	dBc

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		26.7 [87.6]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.22	0.31	0.39	0.56	0.82	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of $0.1 \cdot \sqrt{F(\text{GHz})}$ dB for the male connector and 0.1 dB for the female connector.

Mechanical Specifications

Cable Assembly

Length	19.68 in [499.87 mm]
Width/Diameter	0.808 in [20.52 mm]

Cable

Cable Type	TFT-5G-402
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PTFE
Number of Shields	2
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	N Male	N Female Bulkhead
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Silver	Brass, Copper Clad Aluminum
Contact Plating Specification	200 µin	3 µm
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Copper Clad Aluminum
Outer Conductor Plating Specification		3 µm
Body Material and Plating	Brass, Tri-Metal	Brass, Copper Clad Aluminum
Body Plating Specification	80 µin	3 µm
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	80 µin	
Torque	15 in-lbs 1.7 Nm	10 in-lbs 1.13 Nm

Environmental Specifications

Operating Range Temperature -40 to +125 deg C

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

Plotted and Other Data

Notes:

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PE3C8002-50CM

Typical Performance Data

How to Order

Part Number Configuration:

PE3C8002

- **xx**

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

Example: PE3C8002-12 = 12 inches long cable
PE3C8002-100cm = 100 cm long cable

N Male to N Female Bulkhead Low PIM Cable 50 CM Length Using TFT-5G-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.

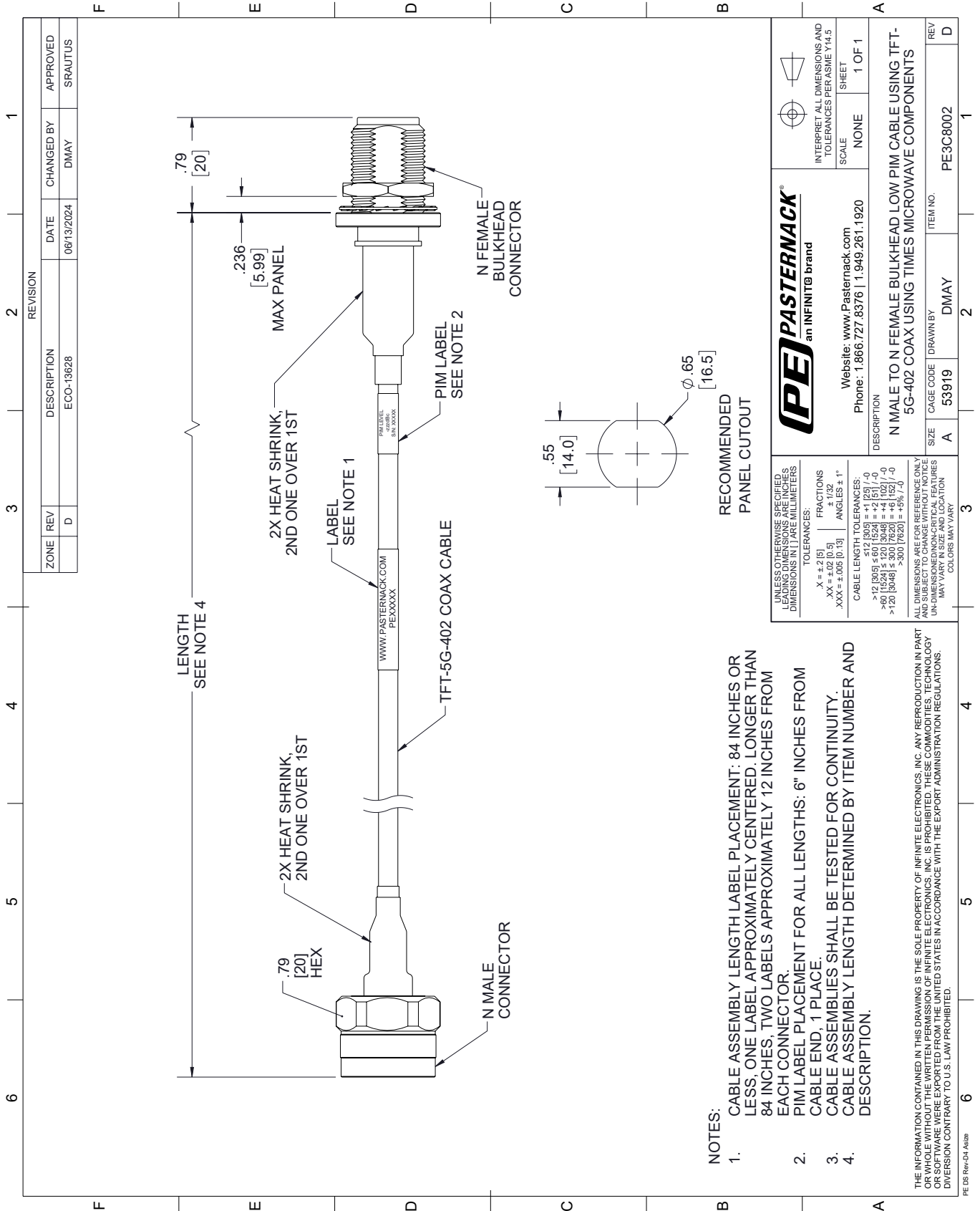
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Female Bulkhead Low PIM Cable 50 CM Length Using TFT-5G-402 Coax Using Times Microwave Components PE3C8002-50CM](https://www.pasternack.com/n-male-to-n-female-bulkhead-low-pim-cable-50-cm-length-using-tft-5g-402-pe3c8002-50cm-p.aspx)

URL: <https://www.pasternack.com/n-male-to-n-female-bulkhead-low-pim-cable-50-cm-length-using-tft-5g-402-pe3c8002-50cm-p.aspx>

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PE3C8002-50CM CAD Drawing

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1 2 3 4 5 6

F E D C B A

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	ECO-13628	DMAY	SRAUTUS
	D				

DESCRIPTION	SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
N MALE TO N FEMALE BULKHEAD LOW PIM CABLE USING TFT-5G-402 COAX USING TIMES MICROWAVE COMPONENTS	A	53919	DMAY	PE3C8002	D

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.

TOLERANCES:
 X = ±.2 (5)
 .XX = ±.02 (0.5)
 .XXX = ±.005 (0.13)

FRACTIONS:
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 0-12 (305) ±.60 (1524) = +2 (51) / -0
 >12 (305) ±.60 (1524) = +2 (51) / -0
 >60 (1524) ±.120 (3048) = +4 (102) / -0
 >120 (3048) ±.300 (7620) = +6 (152) / -0
 >300 (7620) ±.90 (2286) = +9 (228) / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF INDIVIDUAL COMPONENTS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

RECOMMENDED PANEL CUTOUT

NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
- PIM LABEL PLACEMENT FOR ALL LENGTHS: 6" INCHES FROM CABLE END, 1 PLACE.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AND DESCRIPTION.

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