



JACKET

OUTER SHIELD

INNER SHIELD

DIELECTRIC

SOLID CENTER CONDUCTOR

PE-P141

0.163

Ø [4.01]

RF Cable Assemblies Technical Data Sheet

PE302-72

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: PE-P141

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket
- 160 series, PE-P141 Spiral Strip flexible coax

Applications

General Purpose

Laboratory Use

Description

Pasternack's PE302-72 type N male to type N male 72 inch cable using PE-P141 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 male gender configuration with 50 ohm flexible PE-P141 coax. The PE302-72 type N male to type N male cable assembly operates to 18 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 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: N Male to N Male Cable 72 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder PE302-72

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com





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Electrical Specifications

| Description | า | Minimu | ım 1 | ypical | Maximum | Units |
|-------------------------|---------|--------|------|-------------|---------|--------------|
| Frequency Range | | DC | | | 18 | GHz |
| VSWR | | | | | 1.35:1 | |
| Velocity of Propagation | | | | 70 | | % |
| RF Shielding | | 110 | | | | dB |
| Capacitance | | | 29 | 9.4 [96.46] | | pF/ft [pF/m] |
| Specifications by Fre | equency | | | | | |
| Description | F1 | F2 | F3 | F4 | F5 | Units |
| Frequency | 1 | 3 | 5 | 10 | 18 | GHz |
| Insertion Loss (Typ.) | 0.66 | 1.2 | 1.56 | 2.4 | 3.48 | dB |

Electrical Specification Notes:

Insertion loss does not include the loss of the connectors.

Insertion loss is estimated as 0.05 x sqrt(fGHz) dB per connector.

Short lengths up to 24" long may exhibit VSWR measurements up to 9% higher.

Amplitude variation not to exceed 10% in a coiled vs uncoiled, a coil is defined as a 4% loop.

Mechanical Specifications

Cable Assembly Length*

Weight

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material Jacket Diameter

Repeated Minimum Bend Radius

72 in [182.88 cm] 0.395 lbs [179.17 g]

PE-P141 50 Ohms Solid Copper Clad Steel, Silver PTFE 2 Silver Plated Copper Tape Silver Plated Copper Braid FEP, Blue 0.163 in [4.14 mm]

0.82 in [20.83 mm]

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Connectors

| Description | Connector 1 | Connector 2 N Male | |
|-----------------------------------|----------------------------|----------------------------|--|
| Туре | N Male | | |
| Impedance | 50 Ohms | 50 Ohms | |
| Contact Material and Plating | Gold | Gold | |
| Dielectric Type | PTFE | PTFE | |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel | |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel | |
| Hex Size | 13/16 inch | 13/16 inch | |
| Torque | 15 in-lbs [1.7 Nm] | 15 in-lbs [1.7 Nm] | |

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

• Values at 25°C, sea level.

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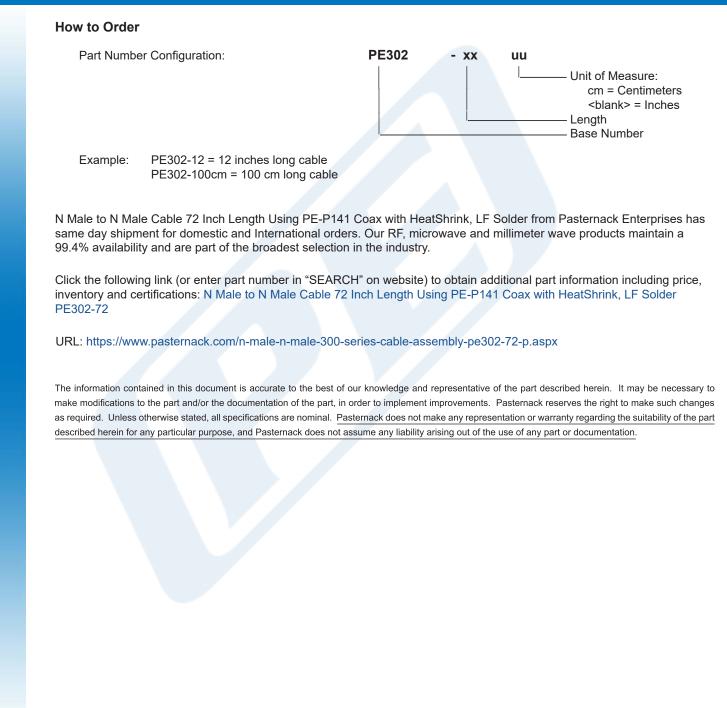
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PE302-72 CAD Drawing N Male to N Male Cable 72 Inch Length Using PE-P141 Coax with HeatShrink, LF Solder

