



PE3C2953-48

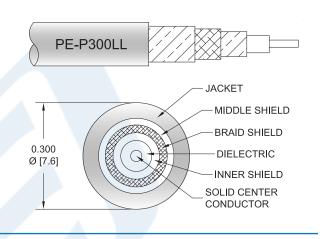
RF Cable Assemblies Technical Data Sheet

Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Female Bulkhead
- Cable Type: PE-P300LL

Features

- 83% Velocity of Propagation
- Shielding effectiveness > 95 dB
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1.5 inches
- Operating Temperature range of -55 to +125 °C
- · ROHS and REACH Compliant
- · Same day shipment of custom lengths
- 100% Continuity and RF tested



Description

The PE3C2953 high performance test cable's 0.3 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy Duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All PE3C2953 cable assemblies are 100% Continuity and RF tested to published specifications. Custom lengths are built to order and shipped same day.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|------------|---------|--------------|
| Frequency Range | DC | | 18 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 83 | | % |
| RF Shielding | 95 | | | dB |
| Capacitance | | 25 [82.02] | | pF/ft [pF/m] |
| | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: N Male Right Angle to N Female Bulkhead Low Loss Test Cable 48 Inch Length Using PE-P300LL Coax, RoHS PE3C2953-48

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Specifications by Frequency

| Description | F1 | F2 | F 3 | F4 | F5 | Units |
|-----------------------|-------|-------|------------|------|------|-------|
| Frequency | 1 | 2 | 4.5 | 9 | 18 | GHz |
| Insertion Loss (Max.) | 0.44 | 0.52 | 0.68 | 0.92 | 1.24 | dB |
| Insertion Loss (Typ.) | 0.4 | 0.48 | 0.6 | 0.8 | 1.08 | dB |
| Power Handling (Max.) | 1,800 | 1,200 | 900 | 650 | 400 | Watts |

Mechanical Specifications

Cable Assembly Length* Diameter

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter

Repeated Minimum Bend Radius

48 in [121.92 cm] 0.875 in [22.23 mm]

PE-P300LL 50 Ohms Solid Copper, Silver PTFE 3 Silver Plated Copper Tape Aluminum Polyester Silver Plated Copper Wire FEP, Green 0.3 in [7.62 mm]

1.5 in [38.1 mm]

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Connectors

| Description | Connector 1 | Connector 2 | |
|---------------------------------------|----------------------------|------------------------------------|--|
| Туре | N Male Right Angle | N Female Bulkhead | |
| Specification | | MIL-STD-348 | |
| Impedance | 50 Ohms | 50 Ohms | |
| Mating Cycles | | 500 | |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold over Nickel | |
| Contact Plating Specification | ASTM-B488 | 50 µin minimum | |
| Dielectric Type | PTFE | PEI | |
| Outer Conductor Material and Plating | | Passivated Stainless Steel | |
| Outer Conductor Plating Specification | | SAE-AMS-2700 | |
| Coupling Nut Material and Plating | Passivated Stainless Steel | | |
| Coupling Nut Plating Specification | SAE-AMS-2700 | | |
| Torque | | 20 in-lbs [2.26 Nm] | |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel | |
| Body Plating Specification | SAE-AMS-2700 | SAE-AMS-2700 | |

Mechanical Specification Notes:

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

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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| Part Number Configuration: PE3C2953 - xx uu Unit of Measure: cm = Centimeters sblank> = Inches Length Base Number Example: PE3C2953-12 = 12 inches long cable PE3C2953-100cm = 100 cm long cable N Male Right Angle to N Female Bulkhead Low Loss Test Cable 48 Inch Length Using PE-P300LL Coax, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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 Right Angle to N Female Bulkhead Low Loss Test Cable 48 Inch Length Using PE-P300LL Coax, RoHS from P300LL Coax, RoHS PE3C2953-48 URL: https://www.pasternack.com/n-male-n-female-pe-p300IL-cable-assembly-pe3c2953-48-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 charge as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part are required. Unless otherwise tated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part are required. Unless otherwise tated, all specifications are nominal. | How to Order | | | | |
|--|---|--|--|---|---|
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| P300LL Coax, RoHS PE3C2953-48 URL: https://www.pasternack.com/n-male-n-female-pe-p300ll-cable-assembly-pe3c2953-48-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 change as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part | Pasternack Enter wave products m Click the followin | prises has same day shipm aintain a 99% availability ar g link (or enter part number | nent for domestic and Intended are part of the broades in "SEARCH" on website) | rnational orders. (t selection in the i) to obtain addition | Our RF, microwave and millimeter industry. nal part information including price, |
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| described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation. | make modifications to as required. Unless o | the part and/or the documentation therwise stated, all specifications ar | of the part, in order to implement e nominal. Pasternack does not r | improvements. Paste nake any representatio | ernack reserves the right to make such change on or warranty regarding the suitability of the pa |
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PE3C2953-48 CAD Drawing N Male Right Angle to N Female Bulkhead Low Loss Test Cable 48 Inch Length Using PE-P300LL Coax, RoHS

