

Plenum 7/16 DIN Male to 7/16 DIN Male Low PIM
Cable Using SPP-500-LLPL Coax



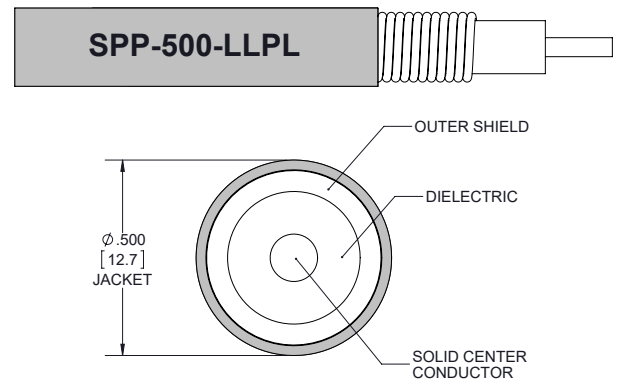
PE3W15978

Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Male
- Cable Type: SPP-500-LLPL
- Coax Flex Type: Corrugated

Features

- Max Frequency 3 GHz
- Low PIM: -160 dBc Max
- 76% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3W15978 7/16 DIN male to 7/16 DIN male cable using SPP-500-LLPL coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-500-LLPL coax. The PE3W15978 7/16 DIN male to 7/16 DIN male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc.

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			1.5:1	
Velocity of Propagation		76		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-160	dBc
Capacitance		26.2 [85.96]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	Units	Weight (lbs)
			Frequency	500	1000	3000	
PE3W15978	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.034	0.065	dB/ft	
			0.08	0.12	0.22	dB/m	
PE3W15978-24	24 In	Insertion Loss (Typ.)	0.25	0.27	0.33	dB	0.912
PE3W15978-48	48 In	Insertion Loss (Typ.)	0.3	0.34	0.46	dB	1.224
PE3W15978-60	60 In	Insertion Loss (Typ.)	0.32	0.37	0.53	dB	1.38
PE3W15978-150CM	150 CM	Insertion Loss (Typ.)	0.32	0.37	0.52	dB	1.368
PE3W15978-200CM	200 CM	Insertion Loss (Typ.)	0.36	0.43	0.63	dB	1.624

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.756 pounds
 Additional Weight per Inch: 0.013 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter .5 in [12.7 mm]
 Weight 0.756 lbs [342.92 g]

Cable

Cable Type SPP-500-LLPL
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Aluminum
 Dielectric Type PTFE
 Number of Shields 1
 Outer Conductor 1 Material and Plating Copper
 Jacket Material FEP, Blue
 Jacket Diameter 0.5 in [12.7 mm]
 One Time Minimum Bend Radius 1.5 in [38.1 mm]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male	7/16 DIN Male
Specification	IEC 61169-4	IEC 61169-4
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Spring Copper, Silver	Spring Copper, Silver
Contact Plating Specification	5 µm minimum	5 µm minimum
Dielectric Type	TPX	TPX
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel
Outer Conductor Plating Specification	5 µm minimum	5 µm minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 µm minimum	2 µm minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	5 µm minimum	5 µm minimum
Hex Size	32 mm	32 mm
Torque	18.417 ft-lbs 24.97 Nm	18.417 ft-lbs 24.97 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

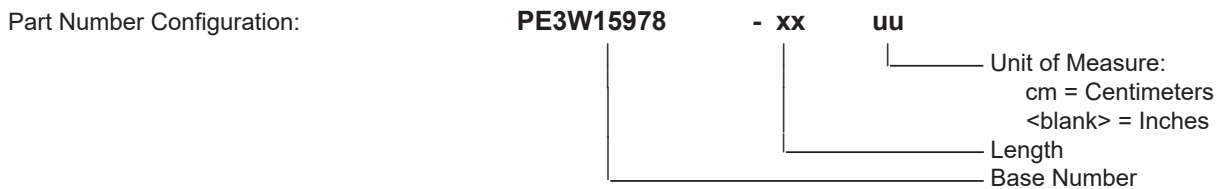
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PE3W15978

Typical Performance Data

How to Order



Example: PE3W15978-12 = 12 inches long cable
 PE3W15978-100cm = 100 cm long cable

Plenum 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPP-500-LLPL Coax 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.

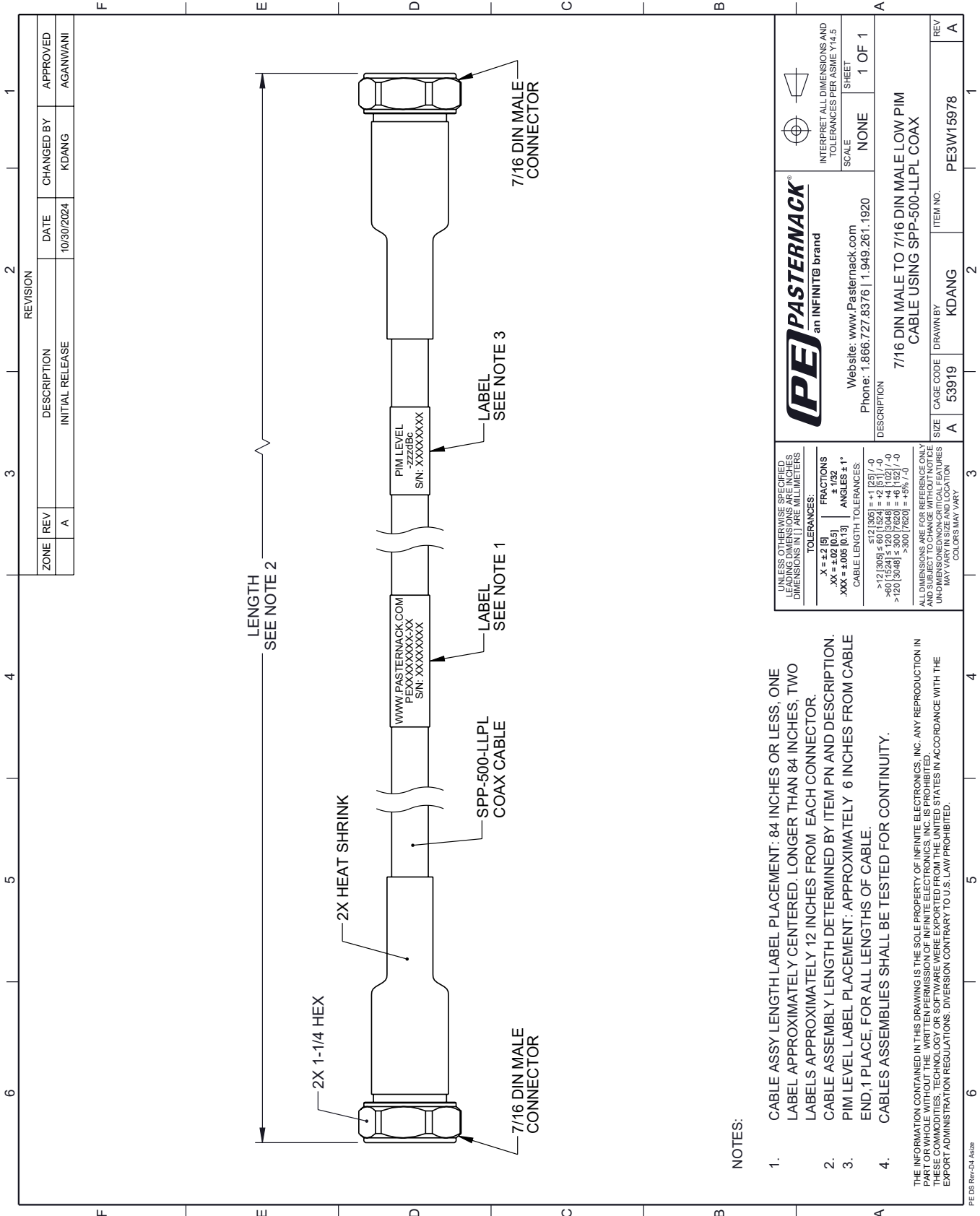
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Plenum 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPP-500-LLPL Coax PE3W15978](https://www.pasternack.com/plenum-7-16-din-male-to-7-16-din-male-low-pim-cable-using-spp-500-llpl-pe3w15978-p.aspx)

URL: <https://www.pasternack.com/plenum-7-16-din-male-to-7-16-din-male-low-pim-cable-using-spp-500-llpl-pe3w15978-p.aspx>

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PE3W15978 CAD Drawing

Plenum 7/16 DIN Male to 7/16 DIN Male Low PIM Cable Using SPP-500-LLPL Coax



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE. FOR ALL LENGTHS OF CABLE.
4. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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PE DS Rev-D4-A320

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	10/30/2024	KDANG	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

PASTERNAK an INFINITB brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION 7/16 DIN MALE TO 7/16 DIN MALE LOW PIM CABLE USING SPP-500-LLPL COAX		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3W15978
DRAWN BY		REV
KDANG		A

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]	FRACTIONS ± 1/32 ANGLES ± 1°
CABLE LENGTH TOLERANCES: ≤ 12 [305] ± .60 [1524] = +1 [25] / -0 > 12 [305] ≤ 60 [1524] = +2 [51] / -0 > 60 [1524] ≤ 120 [3048] = +4 [102] / -0 > 120 [3048] ≤ 300 [7620] = +5% [12] / -0 ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY	