



### Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Male
- Cable Type: PE-P106LL

#### **Features**

- Max Frequency 67 GHz
- 78% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles
- Low Loss

### **Applications**

- General Purpose
- Laboratory Use

- Automated Test Systems
- 5G High Data Rate Applications

JACKET

SOLID CENTER

#### Description

Pasternack's PE3C5998-6 1.85mm male to 1.85mm male 6 inch cable using PE-P106LL 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 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm flexible PE-P106LL coax. The PE3C5998-6 1.85mm male to 1.85mm male cable assembly operates to 67 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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		67	GHz
VSWR			1.4:1	
Velocity of Propagation		78		%
Capacitance		25.91 [85.01]		pF/ft [pF/m]
Dielectric Withstanding Voltage (AC)			500	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 1.85mm Male to 1.85mm Male Cable 6 Inch Length Using PE-P106LL Coax PE3C5998-6

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

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OUTER BRAID

SECTION VIEW

INNER SHIELD (RESINOUS TAPE)

# PE3C5998-6



# **RF Cable Assemblies Technical Data Sheet**



# PE3C5998-6

#### **Specifications by Frequency** F4 Description **F1 F2** F3 F5 Units 5 18 40 50 67 GHz Frequency Insertion Loss (Max.) 0.9 1 1.2 1.8 2.4 dB **Electrical Specification Notes:** Assembly to be 100% tested for Return loss and Insertion loss. **Mechanical Specifications Cable Assembly** Length\* 6 in [152.4 mm] Cable PE-P106LL Cable Type 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 Silver Plated Copper Braid **Outer Conductor Diameter** 0.085 in [2.16 mm] Jacket Material FEP Jacket Diameter 0.106 in [2.69 mm]

#### Connectors

Description	Connector 1	Connector 2	
Туре	1.85mm Male	1.85mm Male	
Impedance	50 Ohms	50 Ohms	
Mating Cycles	500	500	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel	
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel	

Mechanical Specification Notes:

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

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Environmental Specifications Temperature Operating Range

-40 to +125 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data Notes:

**Typical Performance Data** 

#### \*Cable Length Tolerances

Cable Length	Tolerance	
3.94 in - 11.42 in	+0.236 in/-0.0	
11.81 in - 38.98 in 🖊	+0.630 in/-0.0	
39.37 in - 117.72 in	+1.181 in/-0.0	
118.11 in - 393.31 in	+1.969 in/-0.0	
393.70 in - 3937.01 in	+3.937 in/-0.0	

Cable length tolerances in this table supercede Pasternack standard cable length tolerances.

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## PE3C5998-6





# **RF Cable Assemblies Technical Data Sheet**

# PE3C5998-6

# How to Order Part Number Configuration: **PE3C5998** - XX uu - Unit of Measure: cm = Centimeters <blank> = Inches Length **Base Number** Example: PE3C5998-12 = 12 inches long cable PE3C5998-100cm = 100 cm long cable 1.85mm Male to 1.85mm Male Cable 6 Inch Length Using PE-P106LL 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: 1.85mm Male to 1.85mm Male Cable 6 Inch Length Using PE-P106LL Coax PE3C5998-6 URL: https://www.pasternack.com/1.85mm-male-1.85mm-male-pe-p106ll-cable-assembly-pe3c5998-6-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.

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PE3C5998-6 CAD Drawing 1.85mm Male to 1.85mm Male Cable 6 Inch Length Using PE-P106LL Coax

