

1.85mm Male to 1.85mm Male Cable 100 cm  
Length Using PE-P106LL Coax



## RF Cable Assemblies Technical Data Sheet

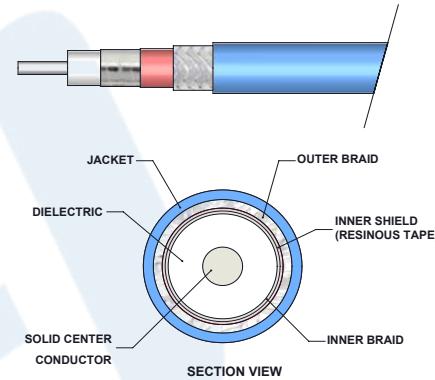
PE3C5998-100CM

### 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

### Description

Pasternack's PE3C5998-100CM 1.85mm male to 1.85mm male 100 cm 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 PE3C5998-100CM 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 100 cm Length Using PE-P106LL Coax PE3C5998-100CM](#)

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### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	5	18	40	50	67	GHz
Insertion Loss (Max.)	1.9	3	5	6.3	7.5	dB

Electrical Specification Notes:  
Assembly to be 100% tested for Return loss and Insertion loss.

### Mechanical Specifications

#### Cable Assembly

Length\* 39.3701 in [100 cm]

#### Cable

Cable Type	PE-P106LL
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
Type	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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PE3C5998-100CM

### 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 100 cm 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 100 cm Length Using PE-P106LL Coax PE3C5998-100CM](#)

URL: <https://www.pasternack.com/1.85mm-male-1.85mm-male-pe-p106ll-cable-assembly-pe3c5998-100cm-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.

# PE3C5998-100CM CAD Drawing

1.85mm Male to 1.85mm Male Cable 100 cm Length Using PE-P106LL Coax

