



1.85mm Male to 1.85mm Male Low Loss Cable Using 047 Coax

RF Cable Assemblies Technical Data Sheet

PE3C6487

Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Male
- Cable Type: PE-SR047TNLL

Features

- Max Frequency 70 GHz
- 76.5% Phase Velocity
- 500 Mating Cycles
- Maximum Cable Assembly Length of 5 Feet

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C6487 1.85mm male to 1.85mm male cable using 047 coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm semi-rigid PE-SR047TNLL coax. The PE3C6487 1.85mm male to 1.85mm male cable assembly operates to 70 GHz.

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		70	GHz
VSWR			1.4:1	
Velocity of Propagation		76.5		%

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	5	10	18	26.5	GHz
Insertion Loss (Typ.)	0.21	0.68	0.96	1.3	1.6	dB/ft
	0.69	2.23	3.15	4.27	5.25	dB/m

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 Low Loss Cable Using 047 Coax PE3C6487](#)



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Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.04 \times \sqrt{\text{FGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.35 in [8.89 mm]

Cable

Cable Type PE-SR047TNLL
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper, Silver
Dielectric Type Microporous PTFE
Number of Shields 1
Outer Conductor Material and Plating Copper, Tin

One Time Minimum Bend Radius 0.125 in [3.18 mm]

Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488	ASTM-B488
Dielectric Type	PTFE	PTFE
Body Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Plating Specification	ASTM-B488	ASTM-B488
Coupling Nut Material and Plating	Steel	Steel
Torque	8 in-lbs [0.9 Nm]	8 in-lbs [0.9 Nm]

Environmental Specifications

Temperature

Operating Range -65 to +150 deg C

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

Plotted and Other Data

Notes:

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 Low Loss Cable Using 047 Coax PE3C6487](#)

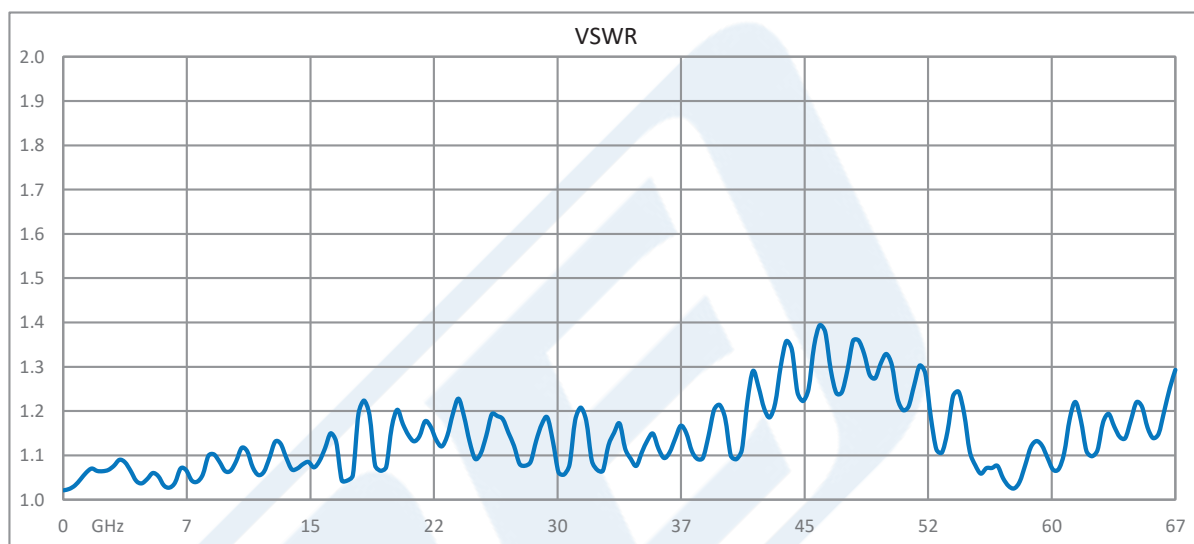


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Typical Performance Data



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How to Order

Part Number Configuration:

PE3C6487

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C6487-12 = 12 inches long cable
PE3C6487-100cm = 100 cm long cable

1.85mm Male to 1.85mm Male Low Loss Cable Using 047 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.

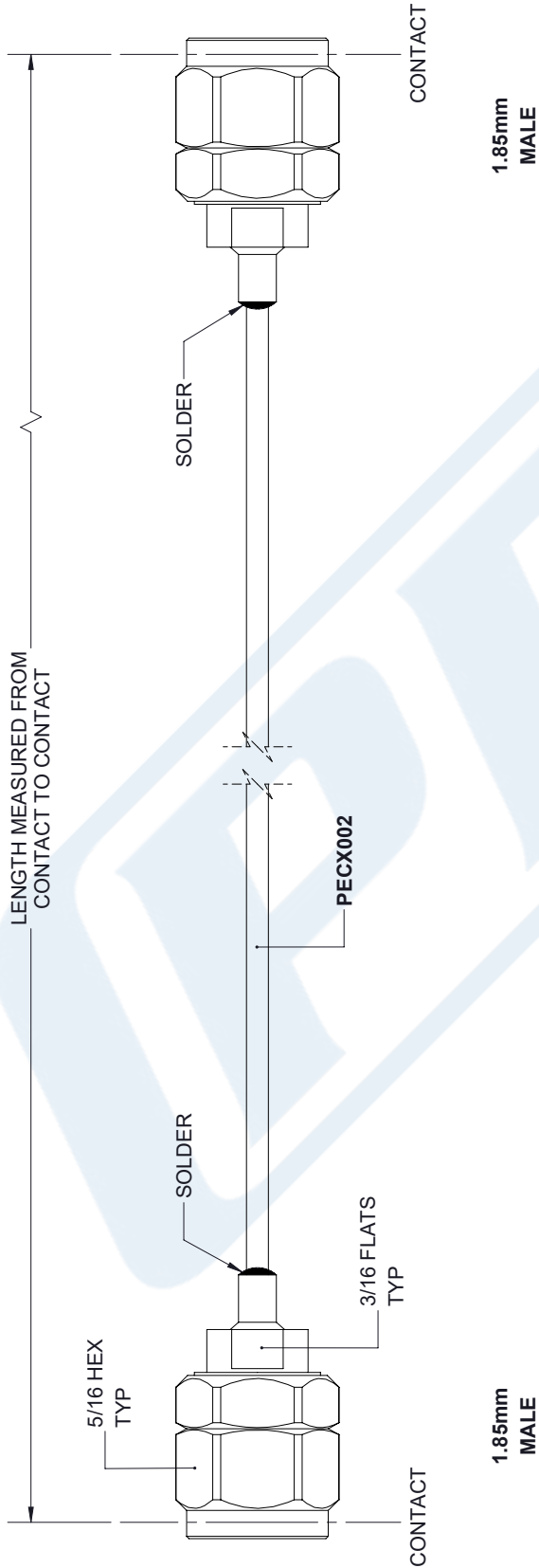
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male to 1.85mm Male Low Loss Cable Using 047 Coax PE3C6487](#)

URL: <https://www.pasternack.com/1.85mm-male-1.85mm-male-047-cable-assembly-pe3c6487-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.

PE3C6487 CAD Drawing
1.85mm Male to 1.85mm Male Low Loss Cable Using 047 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/11/19	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS			
TOLERANCES:			
X±.2	[5.08]	FRACTIONS	
.XX±.01	[.25]		±.132
.XXX±.005	[.13]	ANGLES ± 1°	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			
THIRD-ANGLE PROJECTION			

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SIZE	CAGE	DRAWN BY	PART NUMBER
A	53919	K.DANG	PE3C6487
			REV
			A

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SCALE	N/A		

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