PASTERNACK
an INFINITE brand

1.85mm Male to 1.85mm Male Cable Using PE-P103 Coax

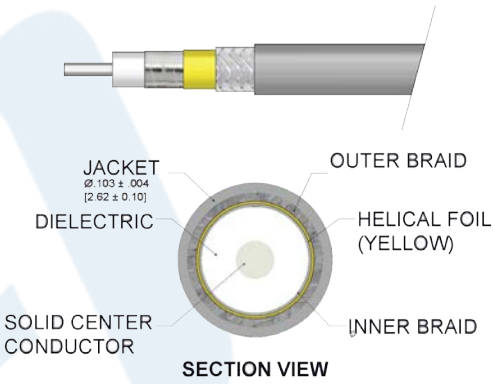
RF Cable Assemblies Technical Data Sheet PE3C6638

Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Male
- Cable Type: PE-P103

Features

- Max Frequency 65 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Triple Shielded
- ETFE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C6638 1.85mm male to 1.85mm male cable using PE-P103 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-P103 coax. The PE3C6638 1.85mm male to 1.85mm male cable assembly operates to 65 GHz. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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.

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 Using PE-P103 Coax PE3C6638

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

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		65	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	90			dB
Capacitance		26 [85.3]		pF/ft [pF/m]
Inductance		65 [213.25]		uH/ft [uH/m]
Input Power (Peak)			550	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	5	10	20	40	65	GHz
Insertion Loss (Max.)	0.84	1.12	1.55	2.2	2.85	dB/ft
	2.76	3.67	5.09	7.22	9.35	dB/m
Insertion Loss (Typ.)	0.78	1.04	1.43	2.02	2.61	dB/ft
	2.56	3.41	4.69	6.63	8.56	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Diameter	0.375 in [9.53 mm]

Cable

Cable Type	PE-P103
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper
Shield Layer 2	Conductive Tape
Shield Layer 3	Silver Plated Copper

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Jacket Material	ETFE, Gray
Jacket Diameter	0.103 in [2.62 mm]
One Time Minimum Bend Radius	0.32 in [8.13 mm]
Repeated Minimum Bend Radius	0.96 in [24.38 mm]
Typical Flex Cycles	500,000

Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488 50µ In. Min	ASTM-B488 50µ In. Min
Dielectric Type	PPO	PPO
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 Inch	5/16 Inch
Torque	8 in-lbs [0.9 Nm]	8 in-lbs [0.9 Nm]

Environmental Specifications

Temperature

Operating Range	-45 to +125 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration: **PE3C6638 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C6638 — Base Number

Example: PE3C6638-12 = 12 inches long cable
PE3C6638-100cm = 100 cm long cable

1.85mm Male to 1.85mm Male Cable Using PE-P103 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 Using PE-P103 Coax PE3C6638

URL: https://www.pasternack.com/1.85mm-male-1.85mm-male-pe-p103-cable-assembly-pe3c6638-p.aspx

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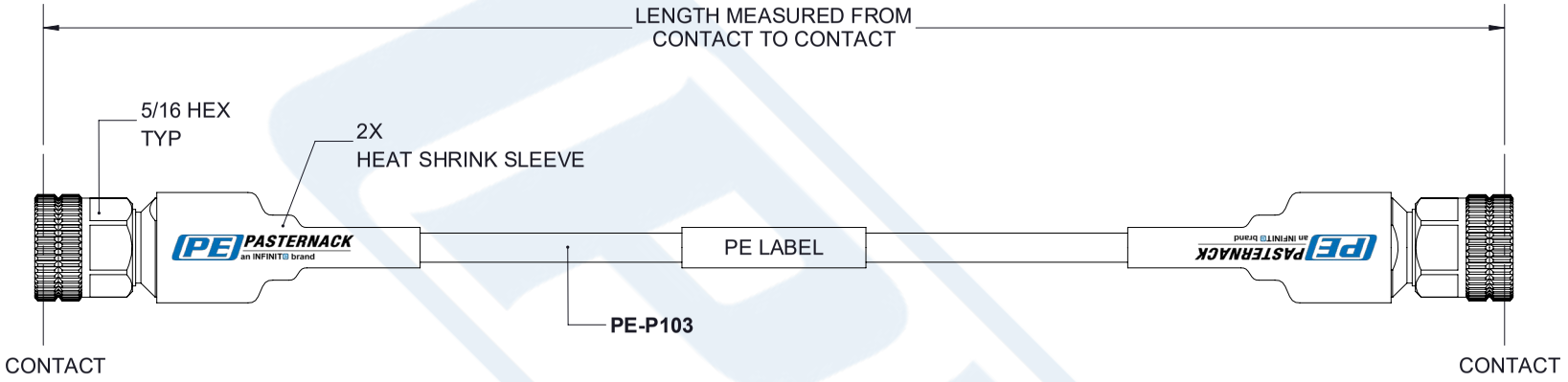
PE3C6638 CAD Drawing

1.85mm Male to 1.85mm Male Cable Using PE-P103 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/19	S.ELLIS



PE LABEL:

www.PASTERNACK.com
PE3C6638

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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ± .2 [5.08]	FRACTIONS
.XX = ± .02 [.51]	± 1/32
.XXX = ± .005 [.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	PART NUMBER	REV
A	53919	K.DANG	PE3C6638	A