



Reverse Polarity SMA Male to Reverse Polarity SMA
Female Cable 50 cm Length Using RG141 Coax

RF Cable Assemblies Technical Data Sheet

PE3C5980-50CM

Configuration

- Connector 1: SMA Male Reverse Polarity
- Connector 2: SMA Female Reverse Polarity
- Cable Type: RG141

Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- PTFE (FG) Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5980-50CM reverse polarity SMA male to reverse polarity SMA female 50 cm cable using RG141 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 reverse polarity SMA to reverse polarity SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG141 coax. The PE3C5980-50CM reverse polarity SMA male to reverse polarity SMA female cable assembly operates to 3 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		3	GHz
VSWR			1.5:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Max.)	0.29	0.34	0.42	0.56	0.61	dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity SMA Male to Reverse Polarity SMA Female Cable 50 cm Length Using RG141 Coax PE3C5980-50CM](#)



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Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax use in the assembly. The Insertion Loss includes an estimated insertion loss of 0.2ddB of connector loss.

Mechanical Specifications

Cable Assembly

Length*	19.68 in [499.87 mm]
Diameter	0.312 in [7.92 mm]

Cable

Cable Type	RG141
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper
Jacket Material	PTFE (FG), Beige
Jacket Diameter	0.19 in [4.83 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Reverse Polarity	SMA Female Reverse Polarity
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Gold	Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	QQ-N-290	QQ-N-290
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	QQ-N-290	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3C5980

- **xx**

uu

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

Example: PE3C5980-12 = 12 inches long cable
PE3C5980-100cm = 100 cm long cable

Reverse Polarity SMA Male to Reverse Polarity SMA Female Cable 50 cm Length Using RG141 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: [Reverse Polarity SMA Male to Reverse Polarity SMA Female Cable 50 cm Length Using RG141 Coax PE3C5980-50CM](#)

URL: <https://www.pasternack.com/sma-male-sma-female-rg141au-cable-assembly-pe3c5980-50cm-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.

PE3C5980-50CM CAD Drawing

Reverse Polarity SMA Male to Reverse Polarity SMA Female
Cable 50 cm Length Using RG141 Coax



REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE3C5980	6/10/2021	S.ELLIS

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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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	K.DANG	PE3C5980	A

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