

## MHV Male to MHV Male Cable Using RG142 Coax



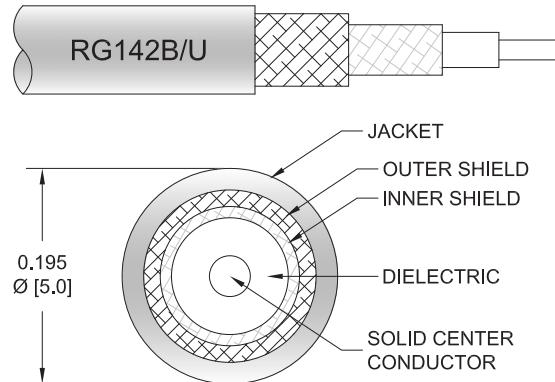
### PE3C9451

#### Configuration

- Connector 1: MHV Male
- Connector 2: MHV Male
- Cable Type: RG142
- Coax Flex Type: Flexible

#### Features

- Max Frequency 300 MHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C9451 MHV male to MHV male cable using RG142 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 MHV to MHV cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3C9451 MHV male to MHV male cable assembly operates to 300 MHz. 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		300	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			1,400	Vrms

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	Units	Weight (lbs)
		Frequency	100	250	300	MHz	
PE3C9451	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.065	dB/ft	
			0.13	0.2	0.22	dB/m	
PE3C9451-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.27	dB	0.148
PE3C9451-24	24 inch	Insertion Loss (Typ.)	0.28	0.32	0.33	dB	0.19
PE3C9451-36	36 inch	Insertion Loss (Typ.)	0.32	0.38	0.4	dB	0.232
PE3C9451-48	48 inch	Insertion Loss (Typ.)	0.36	0.44	0.46	dB	0.274
PE3C9451-60	60 inch	Insertion Loss (Typ.)	0.4	0.5	0.53	dB	0.316

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB

Loss due to Connector 2: 0.1 dB

Base Weight: 0.148 pounds

Additional Weight per Inch: 0.0035 pounds

## Mechanical Specifications

### Cable Assembly

Width/Diameter 0.5 in [12.7 mm]  
Weight 0.148 lbs [67.13 g]

### Cable

Cable Type	RG142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.195 in [4.95 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	MHV Male	MHV Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 $\mu$ in minimum	30 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 $\mu$ in minimum	100 $\mu$ in minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 $\mu$ in minimum	100 $\mu$ in minimum

#### Environmental Specifications

Operating Range Temperature -55 to +165 deg C

#### Compliance Certifications

(see product page for current document)

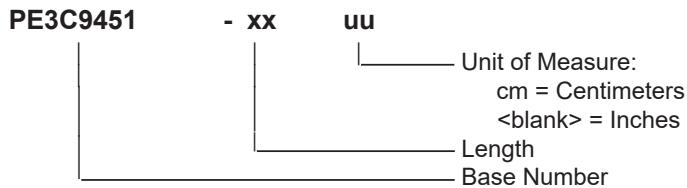
#### Plotted and Other Data

Notes:

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**PE3C9451****Typical Performance Data****How to Order**

Part Number Configuration:



Example: PE3C9451-12 = 12 inches long cable  
PE3C9451-100cm = 100 cm long cable

MHV Male to MHV Male Cable Using RG142 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: [MHV Male to MHV Male Cable Using RG142 Coax PE3C9451](#)

URL: <https://www.pasternack.com/mhv-male-to-mhv-male-cable-using-rg142-pe3c9451-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3C9451 CAD Drawing

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