



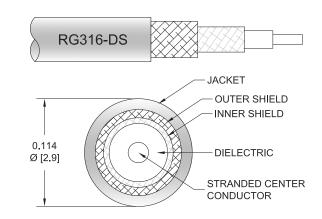
### PE3W15042

#### Configuration

Connector 1: SMA MaleConnector 2: TNC MaleCable Type: RG316-DSCoax Flex Type: Flexible

#### **Features**

- · Max Frequency 3 GHz
- Shielding Effectivity > 85 dB
- · 69.5% Phase Velocity
- · Double Shielded
- FEP Jacket



## **Applications**

· General Purpose

· Laboratory Use

### **Description**

Pasternack's PE3W15042 SMA male to TNC male cable using RG316-DS 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible RG316-DS coax. The PE3W15042 SMA male to TNC male cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 85 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.

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	85			dB
Capacitance		28.96 [95.01]		pF/ft [pF/m]
DC Resistance Inner Conductor		83.82 [275]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		5.33 [17.49]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			335	Vrms

## Specifications by Frequency





## PE3W15042

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	weight (ibs)
PE3W15042	Custom Lengths	Insertion Loss (Typ.)	0.08	0.13	0.19	0.29	0.536	dB/ft	
FE3W13042	Available		0.28	0.43	0.64	0.96	1.76	dB/m	
PE3W15042-6	6 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.35	0.47	dB	0.047
PE3W15042-12	12 inch	Insertion Loss (Typ.)	0.29	0.33	0.4	0.49	0.74	dB	0.054
PE3W15042-24	24 inch	Insertion Loss (Typ.)	0.37	0.46	0.59	0.78	1.28	dB	0.069
PE3W15042-36	36 inch	Insertion Loss (Typ.)	0.45	0.59	0.79	1.07	1.81	dB	0.083
PE3W15042-48	48 inch	Insertion Loss (Typ.)	0.54	0.72	0.98	1.36	2.35	dB	0.097

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:

0.054 pounds

Additional Weight per Inch:

0.00117 pounds

### **Mechanical Specifications**

### Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.054 lbs [24.49 g]

#### Cable

Cable TypeRG316-DSImpedance50 OhmsInner Conductor TypeStranded

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 Diameter0.114 in [2.9 mm]One Time Minimum Bend Radius0.59 in [14.99 mm]Repeated Minimum Bend Radius1.57 in [39.88 mm]





## PE3W15042

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	TNC 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 μin minimum	30μ in. minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μin minimum	100µ in. minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 μin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

## **Environmental Specifications**

Operating Range Temperature

-55 to +165 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:





## PE3W15042

#### **Typical Performance Data**

#### **How to Order**



Example: PE3W15042-12 = 12 inches long cable

PE3W15042-100cm = 100 cm long cable

SMA Male to TNC Male Cable Using RG316-DS 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: SMA Male to TNC Male Cable Using RG316-DS Coax PE3W15042

URL: https://www.pasternack.com/sma-male-to-tnc-male-cable-using-rg316-ds-pe3w15042-p.aspx

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