



SMA Male to TNC Male Right Angle Cable Using RG142 Coax

RF Cable Assemblies Technical Data Sheet

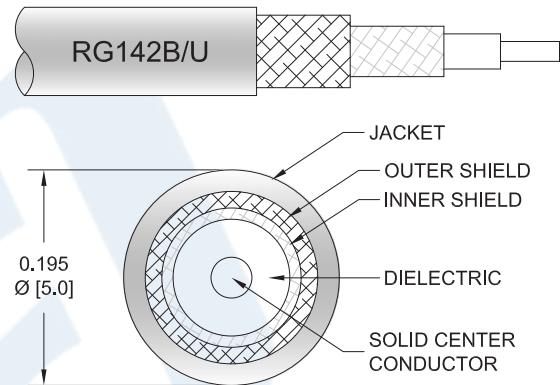
PE3W09246

Configuration

- Connector 1: SMA Male
- Connector 2: TNC Male Right Angle
- Cable Type: RG142

Features

- Max Frequency 8 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W09246 SMA male to TNC male right angle 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible RG142 coax. The PE3W09246 SMA male to TNC male cable assembly operates to 8 GHz. The right angle TNC interface on the RG142 cable allows for easier connections in tight spaces. 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.

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 Right Angle Cable Using RG142 Coax PE3W09246](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2	4	8	GHz
Insertion Loss (Typ.)	0.079	0.13	0.184	0.299	0.543	dB/ft
	0.26	0.43	0.6	0.98	1.78	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the SMA male connector and 0.2 dB for the TNC male connector.

Mechanical Specifications

Cable Assembly

Weight 0.146 lbs [66.22 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	SMA Male	TNC Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μ in minimum	30 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in minimum	100 μ in minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 μ in minimum	100 μ in minimum
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range

-55 to +165 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W09246

- **xx**

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

Example: PE3W09246-12 = 12 inches long cable
PE3W09246-100cm = 100 cm long cable

SMA Male to TNC Male Right Angle 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.

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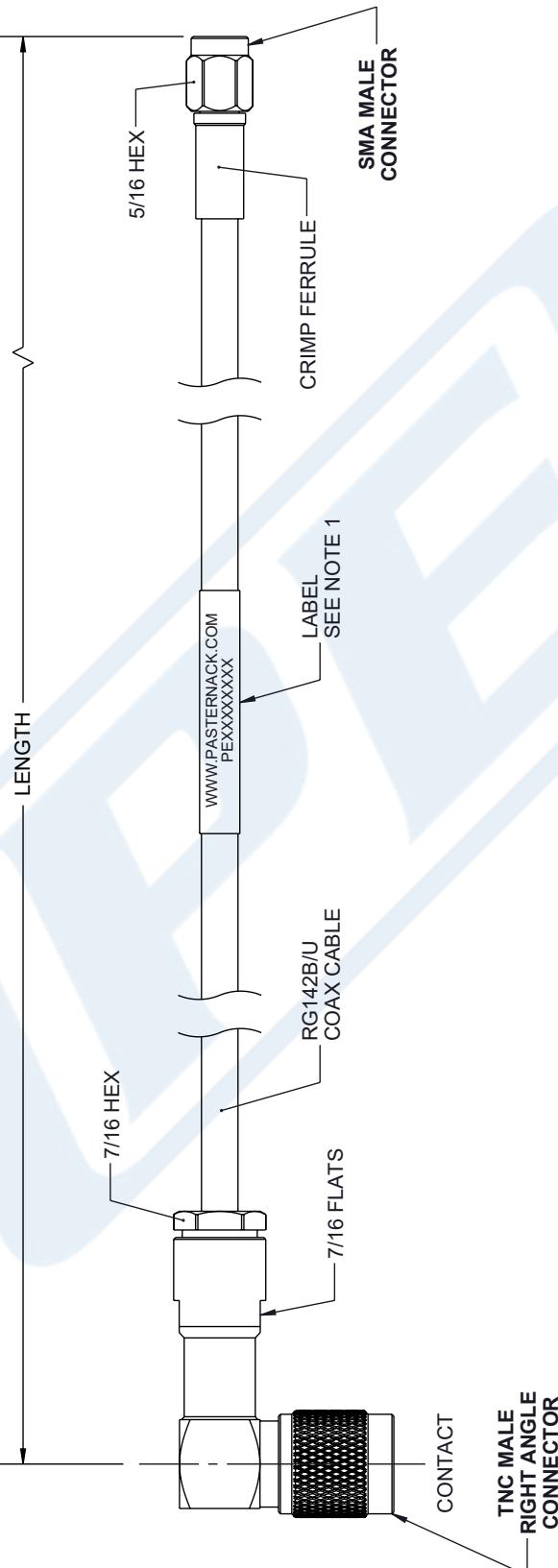
URL: <https://www.pasternack.com/sma-male-to-tnc-male-cable-using-rg142-pe3w09246-p.aspx>

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PE3W09246 CAD Drawing

SMA Male to TNC Male Right Angle Cable Using RG142 Coax

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	01/27/2023	KDANG	AGANWANI



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - 2.

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