PASTERNACK
an INFINITE brand

SMA Female to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax

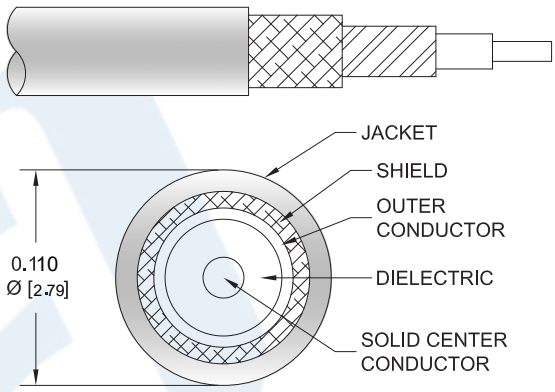
TECHNICAL DATA SHEET PE3W09824

Configuration

- Connector 1: SMA Female
- Connector 2: TNC Male Right Angle
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W09824 SMA female to TNC male right angle cable using LMR-100 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 female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W09824 SMA female to TNC male cable assembly operates to 6 GHz. The right angle TNC interface on the LMR-100A cable allows for easier connections in tight spaces. The double 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: SMA Female to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax PE3W09824

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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3W09824	Custom Lengths Available	Insertion Loss (Typ.)	0.12	0.17	0.24	0.4	0.64	dB/ft	
			0.38	0.55	0.79	1.31	2.11	dB/m	
PE3W09824-24	24 inch	Insertion Loss (Typ.)	0.53	0.63	0.78	1.1	1.59	dB	0.074
PE3W09824-36	36 inch	Insertion Loss (Typ.)	0.65	0.8	1.02	1.5	2.23	dB	0.083
PE3W09824-48	48 inch	Insertion Loss (Typ.)	0.76	0.96	1.26	1.9	2.87	dB	0.092
PE3W09824-100CM	100 cm	Insertion Loss (Typ.)	0.68	0.85	1.09	1.61	2.41	dB	0.086
PE3W09824-200CM	200 cm	Insertion Loss (Typ.)	1.06	1.39	1.88	2.92	4.51	dB	0.116

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:	0.2	dB
Base Weight:	0.065	pounds
Additional Weight per Inch:	0.00075	pounds

Mechanical Specifications

Cable Assembly

Weight	0.065 lbs [29.48 g]

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Cable

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Female Threaded	TNC Male Right Angle Threaded
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Mating Cycles	100	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Dielectric Type	PTFE	POM
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Temperature

Operating Range	-40 to +85 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: **PE3W09824 - xx uu**

- uu — Unit of Measure: cm = Centimeters; <blank> = Inches
- xx — Length
- PE3W09824 — Base Number

Example: PE3W09824-12 = 12 inches long cable
PE3W09824-100cm = 100 cm long cable

SMA Female to TNC Male Right Angle Low Loss Cable Using LMR-100 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 Female to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax PE3W09824

URL: https://www.pasternack.com/sma-female-to-tnc-male-low-loss-cable-using-lmr-100-pe3w09824-p.aspx

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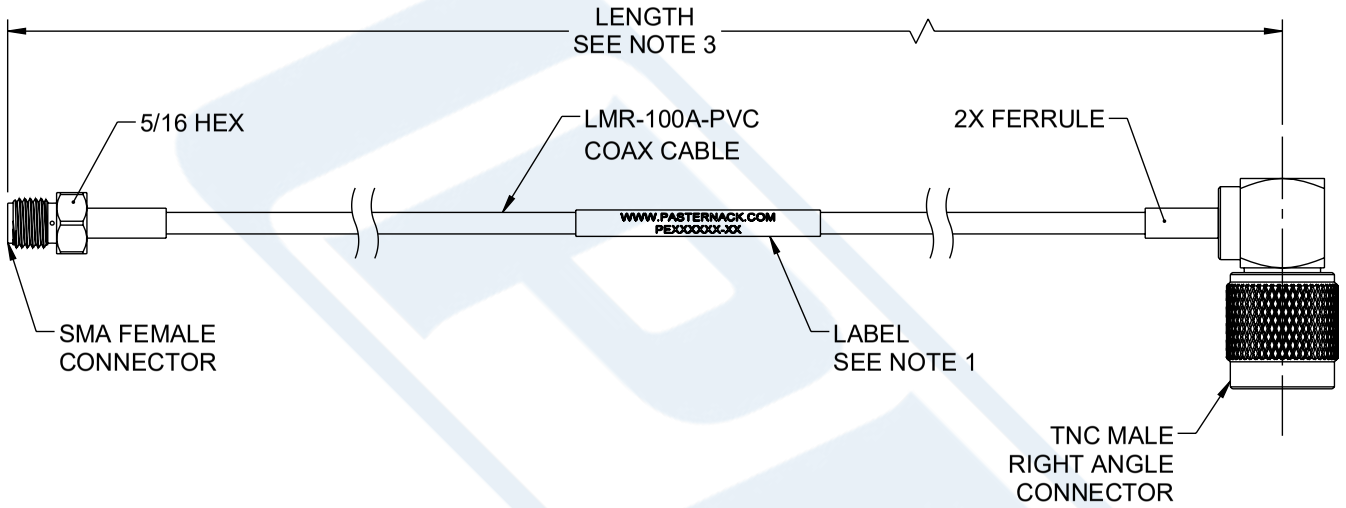
REVISION					
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/27/2023	HBAKKE	AGANWANI

PE3W09824 CAD Drawing

SMA Female to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT:
   36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED.
   LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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

TOLERANCES:

.X = ±.2 [5]	FRACTIONS
.XX = ±.02 [0.5]	± 1/32
.XXX = ±.005 [0.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

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

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.
UN-DIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION
SMA FEMALE TO TNC MALE RIGHT ANGLE LOW LOSS CABLE USING LMR-100 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	HBAKKE	PE3W09824	A

PE3W09824 REV 1.0

PE DS Rev-D4 Asize