

Fire Rated SMA Male Right Angle to SMA Male Low Loss Cable Using LMR-100-FR Coax with HeatShrink



RF Cable Assemblies Technical Data Sheet

PE3W12243/HS

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male
- Cable Type: LMR-100A-FR

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- FRPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12243/HS SMA male right angle to SMA male cable using LMR-100-FR 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A-FR coax. The PE3W12243/HS SMA male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-100A-FR 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: [Fire Rated SMA Male Right Angle to SMA Male Low Loss Cable Using LMR-100-FR Coax with HeatShrink PE3W12243/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
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

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft
	0.38	0.54	0.79	1.31	2.1	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 straight connector and 0.2 dB for the SMA male right angle connector.

Mechanical Specifications

Cable Assembly

Weight 0.036 lbs [16.33 g]

Cable

Cable Type LMR-100A-FR
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper
Dielectric Type PE
Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper
Jacket Material FRPE, Black
Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

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PE3W12243/HS

Repeated Minimum Bend Radius
Bending Moment
Flat Plate Crush
Tensile Strength

1 in [25.4 mm]
0.1 lbs-ft [0.14 N-m]
10 lbs/in [0.18 Kg/mm]
15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold
Hex Size	5/16 in	5/16 in
Torque	5 in-lbs [0.57 Nm]	5 in-lbs [0.57 Nm]

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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Fire Rated SMA Male Right Angle to SMA Male Low Loss
Cable Using LMR-100-FR Coax with HeatShrink

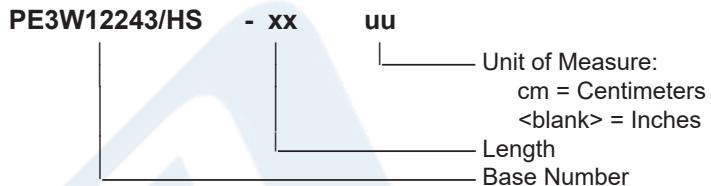


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PE3W12243/HS

How to Order

Part Number Configuration:



Example: PE3W12243/HS-12 = 12 inches long cable
PE3W12243/HS-100cm = 100 cm long cable

Fire Rated SMA Male Right Angle to SMA Male Low Loss Cable Using LMR-100-FR Coax with HeatShrink 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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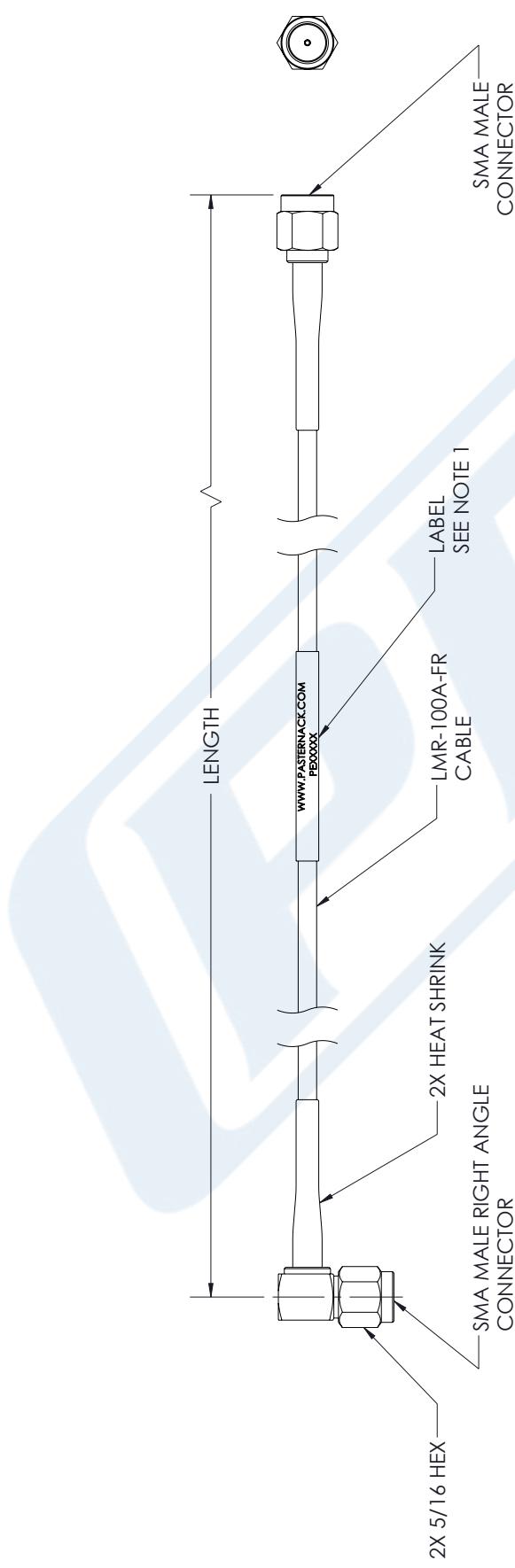
URL: <https://www.pasternack.com/fire-rated-sma-male-right-angle-to-sma-male-low-loss-cable-using-lmr-100-fr-with-heatshrink-pe3w12243-hs-p.aspx>

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.

PE3W12243/HS CAD Drawing

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REVISION					
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	12/23/2022	AKRESOWSKI	SRAUTUS



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT:
36 INCHES OR LESS, ONE LABEL APPROXIMATE
LONGER THAN 36 INCHES, TWO LABELS APPROX
FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CON

TEES:
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.
CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
$X = \pm 2$	[5]
$XXX = \pm .02$	[.5]
$XXXX = \pm 0.005$ [1.13]	
FRACTIONS	
	$\pm 1/32$
ANGLES $\pm 1^\circ$	
CABLE LENGTH TOLERANCES:	
	$> 12 [305] = +1 [25] / -0$

FIRE RATED SMA MALE RIGHT ANGLE TO SMA MALE LOW LOSS CABLE USING LMR-100-FR COAX WITH HEATSHRINK

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