



RF Cable Assemblies Technical Data Sheet

PE3W13450/HS

Configuration

Connector 1: SMA MaleConnector 2: SMA MaleCable 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 PE3W13450/HS SMA male 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 PE3W13450/HS SMA male to SMA male cable assembly operates to 5.8 GHz. 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 to SMA Male Low Loss Cable Using LMR-100-FR Coax with HeatShrink PE3W13450/HS

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

00	5.8 1.4:1	GHz
00	1.4:1	
00		
66		%
		dB
1.54 [5.05]		ns/ft [ns/m]
30.8 [101.05]		pF/ft [pF/m]
0.077 [0.25]		uH/ft [uH/m]
81 [265.75]		Ω/1000ft [Ω/Km]
9.5 [31.17]		Ω/1000ft [Ω/Km]
	2,000	Vrms
	30.8 [101.05] 0.077 [0.25] 81 [265.75]	30.8 [101.05] 0.077 [0.25] 81 [265.75] 9.5 [31.17]

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 per connector.

Mechanical Specifications

Cable Assembly

Weight 0.034 lbs [15.42 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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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	
Туре	SMA Male	SMA Male	
Specification	MIL-STD-348A	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms	
Contact Material and Plating	Brass, Gold	Brass, Gold	
Contact Plating Specification	30 μin minimum	30 μin minimum	
Dielectric Type	PTFE	PTFE	
Body Material and Plating	Brass, Nickel	Brass, Nickel	
Body Plating Specification	100 μin minimum	100 μin minimum	
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel	
Coupling Nut Plating Specification	100 μin minimum	100 μin minimum	
Hex Size	16-May inch	16-May inch	
Torque	3 in-lbs [0.34 Nm]	3 in-lbs [0.34 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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How to Order



Example: PE3W13450/HS-12 = 12 inches long cable PE3W13450/HS-100cm = 100 cm long cable

Fire Rated SMA Male 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-to-sma-male-low-loss-cable-using-lmr-100-fr-with-heatshrink-pe3w13450-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.

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PE3W13450/HS CAD DrawingFire Rated SMA Male to SMA Male Low Loss Cable Using LMR-100-FR Coax with HeatShrink ш ш O В ⋖ INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 ⋖ APPROVED BY AGANWANI 1 OF FIRE RATED SMA MALE TO SMA MALE LOW LOSS CABLE USING LMR-100-FR COAX WITH HEATSHRINK SHEET PE3W13450/HS SMA MALE CONNECTOR NONE CHANGED BY DZINN 5/16 HEX PASTERNACK ITEM NO. 01/20/2023 Website: www.Pasternack.com Phone: 1.866.727.8376 | 1.949.261.1920 DATE 2X HEAT SHRINK an INFINIT® brand REVISION N DZINN DRAWN BY INITIAL RELEASE DESCRIPTION CAGE CODE 53919 DESCRIPTION SIZE ⋖ ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. >60 [1524] < 120 [3048] = +4 [102] / -0 >120 [3048] < 300 [7620] = +6 [152] / -0 UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS ± 1/32 ANGLES ± 1° >12 [305] = +1 [25] / -0 >12 [305] < 60 [1524] = +2 [51] / -0 FRACTIONS CABLE LENGTH TOLERANCES: >300 [7620] = +5% / -0 က REV. ⋖ TOLERANCES: ZONE $\begin{array}{c|c}
X = \pm .2 & [5] \\
XX = \pm .02 & [.5] \\
XXX = \pm .005 & [.13]
\end{array}$ WWW.PASTERNACK.COM -LABEL SEE NOTE 1 LMR-100A-FR CABLE THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PRAT OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED.
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