



## **RF Cable Assemblies Technical Data Sheet**

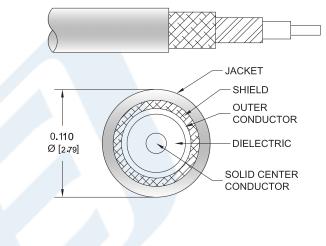
## PE3W02943

### Configuration

- Connector 1: FAKRA Jack
- Connector 2: FAKRA Jack Right Angle
- Cable Type: LMR-100A

### **Features**

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



## Applications

General Purpose

Laboratory Use

#### Description

Pasternack's PE3W02943 bordeaux FAKRA jack to FAKRA jack 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 FAKRA to FAKRA cable assembly has a jack to jack gender configuration with 50 ohm flexible LMR-100A coax. The PE3W02943 FAKRA jack to FAKRA jack to FAKRA jack cable assembly operates to 3 GHz. The right angle FAKRA 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: Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax PE3W02943

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



## **RF Cable Assemblies Technical Data Sheet**

## PE3W02943

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	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

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	0.07	0.12	0.17	0.24	0.43	dB/ft
	0.23	0.39	0.56	0.79	1.41	dB/m

**Electrical Specification Notes:** 

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1dB per connector.

### Mechanical Specifications

Cable Assembly	
Diameter	0.37 in [9.4 mm
Cable	
Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad St
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 m

n]

Steel е Braid nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax PE3W02943

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



## **RF Cable Assemblies Technical Data Sheet**

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength 0.25 in [6.35 mm] 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

Connector 1	Connector 2 FAKRA Jack Right Angle	
FAKRA Jack		
50 Ohms	50 Ohms	
Straight	Right Angle	
Phosphor Bronze, Gold	Phosphor Bronze, Gold	
PTFE	PTFE	
Brass, Nickel	Brass, Nickel	
Plastic	Plastic	
	FAKRA Jack 50 Ohms Straight Phosphor Bronze, Gold PTFE Brass, Nickel	

#### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax PE3W02943

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

© 2018 Pasternack Enterprises All Rights Reserved



## PE3W02943



## **RF Cable Assemblies Technical Data Sheet**



**Typical Performance Data** PE3W02943-36 VSWR 1.50 1.45 1.40 1.35 1.30 1.25 1.20 1.15 1.10 1.05 1.00 0.0 GHz 0.9 1.8 0.3 0.6 1.2 1.5 2.1 2.4 2.7 3.0

**INSERTION LOSS** 0.00 -0.50 -1.00 -1.50 -2.00 -2.50 -3.00 -3.50 -4.00 -4.50 5.00 0.0 GHz 0.6 0.3 0.9 1.2 1.5 1.8 2.1 2.4 2.7 3.0

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax PE3W02943

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

© 2018 Pasternack Enterprises All Rights Reserved

PE3W02943



## **RF Cable Assemblies Technical Data Sheet**

PE3W02943

# How to Order PE3W02943 Part Number Configuration: - XX uu Unit of Measure: cm = Centimeters <blank> = Inches Length Base Number Example: PE3W02943-12 = 12 inches long cable PE3W02943-100cm = 100 cm long cable Bordeaux FAKRA Jack to FAKRA Jack Right Angle 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: Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax PE3W02943 URL: https://www.pasternack.com/fakra-jack-fakra-jack-Imr100-cable-assembly-pe3w02943-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.

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

PE3W02943 CAD Drawing Bordeaux FAKRA Jack to FAKRA Jack Right Angle Cable Using LMR-100 Coax

