



JACKET

SHIELD

OUTER

CONDUCTOR

DIELECTRIC

SOLID CENTER CONDUCTOR

RF Cable Assemblies Technical Data Sheet

PE3W03353-48

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: LMR-240-DB

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles

Applications

General Purpose

Laboratory Use

Description

Pasternack's PE3W03353-48 SMA male to SMA male low loss 48 inch cable using LMR-240-DB 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-240-DB coax. The PE3W03353-48 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.

LMR-240-DB

0.240

Ø [6.1]

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 SMA Male Low Loss Cable 48 Inch Length Using LMR-240-DB Coax PE3W03353-48

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		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω/1000ft [Ω/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.36	0.44	0.54	0.72	1	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly Length* Diameter	48 in [121 0.312 in [
Cable	
Cable Type	LMR-240-
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2

48 in [121.92 cm] 0.312 in [7.92 mm]

LMR-240-DB 50 Ohms Solid Copper PE (F) 2 Aluminum Tape Tinned Copper Braid

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Shield Layer 1

Shield Layer 2



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Jacket Material Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment Flat Plate Crush Tensile Strength PE, Black 0.24 in [6.1 mm]

0.75 in [19.05 mm] 2.5 in [63.5 mm] 0.25 lbs-ft [0.34 N-m] 20 lbs/in [0.36 Kg/mm] 80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2 SMA Male	
Туре	SMA Male		
Impedance	50 Ohms	50 Ohms	
Mating Cycles	500	500	
Contact Material and Plating	Brass, Gold	Brass, Gold	
Dielectric Type	PTFE	PTFE	
Body Material and Plating	Brass, Gold	Brass, Gold	
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold	
Hex Size	5/16 inch	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	3 in-lbs [0.34 Nm]	

Mechanical Specification Notes:

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

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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PE3W03353-48

PE3W03353-36 VSWR 2.00 1.90 1.80 1.70 1.60 1.50 1.40 1.30 1.20 1.10 1.00 0.0 GHz 2.4 4.2 4.8 1.2 1.8 3.0 3.6 5.4 0.6 6.0

Typical Performance Data

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 SMA Male Low Loss Cable 48 Inch Length Using LMR-240-DB Coax PE3W03353-48

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How to Order PE3W03353 Part Number Configuration: - XX uu Unit of Measure: cm = Centimeters <blank> = Inches Length **Base Number** Example: PE3W03353-12 = 12 inches long cable PE3W03353-100cm = 100 cm long cable SMA Male to SMA Male Low Loss Cable 48 Inch Length Using LMR-240-DB 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 Male to SMA Male Low Loss Cable 48 Inch Length Using LMR-240-DB Coax PE3W03353-48 URL: https://www.pasternack.com/sma-male-sma-male-Imr240db-cable-assembly-pe3w03353-48-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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PE3W03353-48 CAD Drawing SMA Male to SMA Male Low Loss Cable 48 Inch Length Using LMR-240-DB Coax

