

FMCA1043-24 DATA SHEET

TNC Male to TNC Male Cable FM141FLEX Coax in 24 Inch with LF Solder

Our new series of flexible cables use high performance FM141FLEX coax and are terminated with a new low profile connector design. These high performance flexible cables are an ideal choice for many applications including in-rack RF devices where tight bends and continual flexure might be required. Our FM141FLEX is a flexible coax alternative to semi-rigid coax and has a solid PTFE resulting in a 69.5% phase velocity. This series features a smooth wall formed by the braid-over-sprial-ribbon design and has similar performance to a solid wall RG402 semi-rigid RG402 cable.

These FM141FLEX cables are similar to our existing SCA1814 cables. The heavier duty SCA1814 test cables have similar electrical performance, but include a heavy duty strain relief mechanism and extra booting material as well as a thick wal SMA connector to increase the ruggedness of the SCA1814 cables for use in more demanding test environments.

Electrical Specifications

Description	Min	Т	ур	Max	ι	Jnits	
Frequency Range	DC			18		GHz	
VSWR				1.4:1			
Return Loss				15.56		dB	
Velocity of Propagation		6	69.5			%	
RF Shielding	90					dB	
Group Delay		1.44	[4.72] ns/ft [ns/		t [ns/m]		
Capacitance		29.4 [96.46] pF/ft [t [pF/m]			
Operating Voltage (AC)				500	\	/rms	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	6	18				GHz
Insertion Loss (Max	x.) 0.995	1.87				dB
VSWR (Max.)	1.25:1	1.4:1				
Power Handling (Ma	x.) 150	88				W

Mechanical Specifications

Cable Assembly

Length* 24 in [609.6 mm] Weight 0.1455 lbs [66 g]

Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1
Shield Layer 2

FM141FLEX 50 Ohms Solid

Copper Clad Steel, Silver

PTFE 2

Silver Plated Copper Tape Silver Plated Copper Braid



Configuration:

- TNC Male
- TNC Male
- FM141FLEX

Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles
- Typical TNC VSWR 1.20:1 to 18 GHz
- Shielding effectivity > 90dB
- One time minimum bend radius:
 0.4 inch

Applications:

- General Purpose
- Laboratory Use
- High Performance RF equipment interconnect
- Flexible in cabinet or in the rack requirements
- Inside the box RF routing
- General purpose lighter duty lab use

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Outer Conductor 1 Material and Plating Outer Conductor 2 Material and Plating

Jacket Material Jacket Diameter Silver Plated Copper Tape Silver Plated Copper Braid

FEP

0.163 in [4.14 mm]

One Time Minimum Bend Radius Repeated Minimum Bend Radius 0.4 in [10.16 mm] 1.58 in [40.13 mm]

Connectors

Type TNC Male TNC Male Impedance 50 Ohms 50 Ohms Mating Cycles 500 500 Contact Material & Plating Beryllium Copper, Gold Beryllium Copper, Gold Dielectric Type PTFE PTFE Body Material & Plating Brass, Nickel Brass, Nickel
Mating Cycles 500 500 Contact Material & Plating Beryllium Copper, Gold Beryllium Copper, Gold Dielectric Type PTFE PTFE
Contact Material & Plating Beryllium Copper, Gold Beryllium Copper, Gold Dielectric Type PTFE PTFE
Dielectric Type PTFE PTFE
Body Material & Plating Brass, Nickel Brass, Nickel
=,
Coupling Nut Material & Plating Brass, Nickel Brass, Nickel
Hex Size 9/16 Inch 9/16 Inch

Environmental Specifications

Temperature

Operating Range

-40 to +150 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA1043 - xx uu | cm = Centimeters | cblank> = Inches | Length

Example: FMCA1043-12 = 12 inches long cable

FMCA1043-100cm = 100 cm long cable

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TNC Male to TNC Male Cable FM141FLEX Coax in 24 Inch with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: TNC Male to TNC Male Cable FM141FLEX Coax in 24 Inch with LF Solder FMCA1043-24

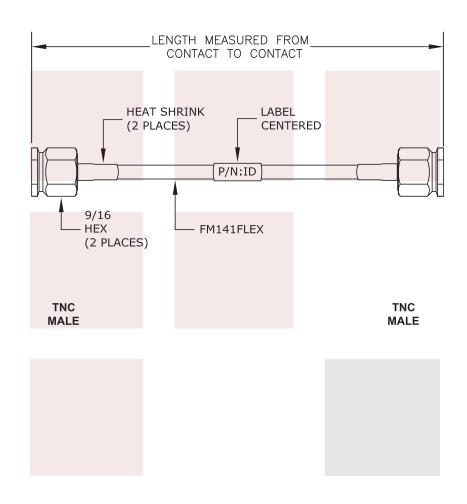
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TNC Male to TNC Male Cable FM141FLEX Coax in 24	DWG NO FMCA1043			CAGE CODE 3FKR5		
Inch with LF Solder	CAD FILE 032715	SHEET	SCALE	E N/A	SIZE A	150