

## TNC Male to TNC Male Cable FM141FLEX Coax in 36 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-spiral-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 wall SMA connector to increase the ruggedness of the SCA1814 cables for use in more demanding test environments.

### Electrical Specifications

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

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	6	18				GHz
Insertion Loss (Max.)	1.358	2.572				dB
VSWR (Max.)	1.25:1	1.4:1				
Power Handling (Max.)	150	88				W

### Mechanical Specifications

#### Cable Assembly

Length*	36 in [914.4 mm]
Weight	0.175 lbs [79.38 g]

#### Cable

Cable Type	FM141FLEX
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	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	Silver Plated Copper Tape
Outer Conductor 2 Material and Plating	Silver Plated Copper Braid
Jacket Material	FEP
Jacket Diameter	0.163 in [4.14 mm]
One Time Minimum Bend Radius	0.4 in [10.16 mm]
Repeated Minimum Bend Radius	1.58 in [40.13 mm]

**Connectors**

Description	Connector 1	Connector 2
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
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  
<blank> = Inches

Length

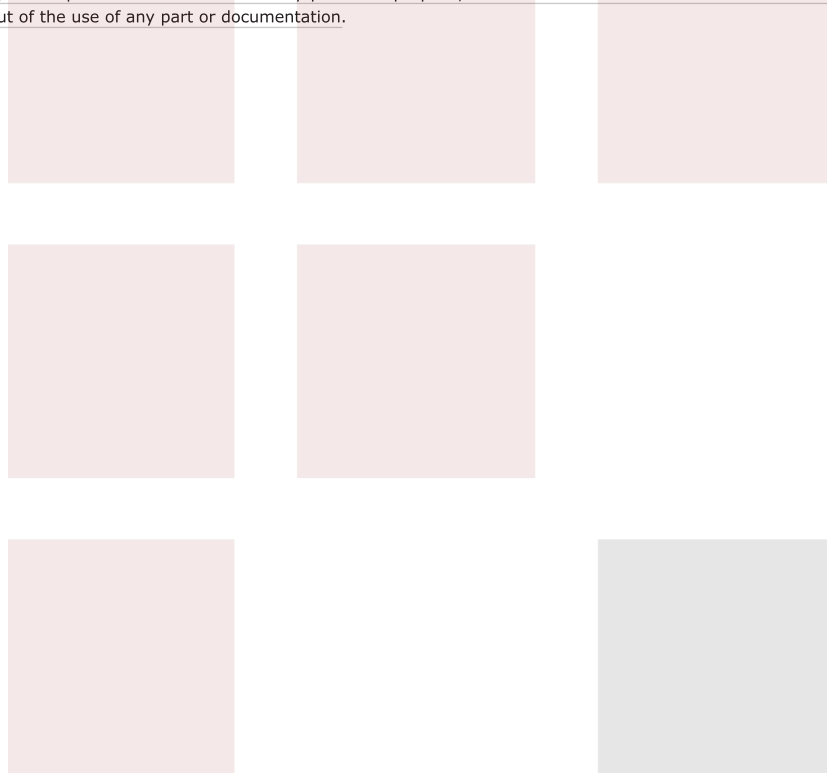
Example: FMCA1043-12 = 12 inches long cable  
FMCA1043-100cm = 100 cm long cable

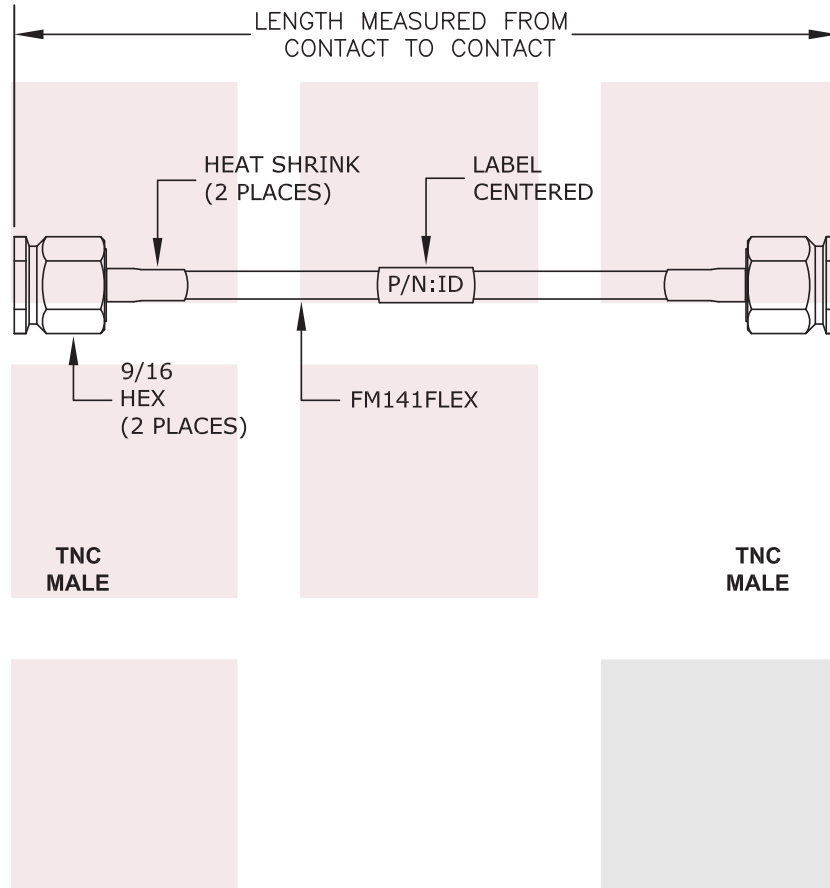
TNC Male to TNC Male Cable FM141FLEX Coax in 36 Inch with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [TNC Male to TNC Male Cable FM141FLEX Coax in 36 Inch with LF Solder FMCA1043-36](#)

URL: <https://www.fairviewmicrowave.com/tnc-male-tnc-male-cable-fm141flex-coax-fmca1043-36-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





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TITLE TNC Male to TNC Male Cable FM141FLEX Coax in 36 Inch with LF Solder		DWG NO FMCA1043		CAGE CODE 3FKR5	
		CAD FILE 032715	SHEET	SCALE N/A	SIZE A 150