

Low Loss SMA Male to TNC Male Cable LL142 Coax and RoHS with LF Solder

Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1245 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heat-shrink booting which provides added strain relief while increasing the durability of the cable assembly. The low attenuation per foot in a 0.195 inch diameter cable creates a cable that has good flexibility while offering industry leading loss characteristics. All FMCA1245 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.45:1	
Return Loss	14.72			dB
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.1 [0.33]	0.14 [0.46]	0.2 [0.66]	0.29 [0.95]	0.4 [1.31]	dB/ft [dB/m]
Insertion Loss (Typ.)	0.07 [0.23]	0.1 [0.33]	0.16 [0.52]	0.23 [0.75]	0.33 [1.08]	dB/ft [dB/m]

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.05dB x vFrequency (GHz) per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.625 in [15.88 mm]
Weight 0.188 lbs [85.28 g]

Cable

Cable Type LL142
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper, Silver
Dielectric Type PTFE
Number of Shields 3
Shield Layer 1 Silver Plated Copper Tape
Shield Layer 2 Aluminum Polyester
Shield Layer 3 Silver Plated Copper Wire
Jacket Material FEP, Green
Jacket Diameter 0.195 in [4.95 mm]

Configuration:

- SMA Male
- TNC Male
- LL142

Features:

- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.45:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- RoHS and REACH Compliant
- 100% RF Tested
- Custom lengths available

Applications:

- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

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One Time Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	TNC Male
Polarity	Standard	Standard
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488 50µ In. Min	ASTM-B488, 50µ In. Min
Dielectric Type	PTFE	PEI
Coupling Nut Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Spec.	SAE-AMS-2700	SAE-AMS-2701
Hex Size	5/16 Inch	9/16 Inch
Torque	8 in-lbs [0.9 Nm]	
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2701

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

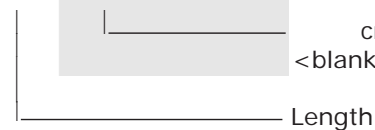
- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA1245 - xx uu

cm = Centimeters
 <blank> = Inches



Example: FMCA1245-12 = 12 inches long cable
 FMCA1245-100cm = 100 cm long cable

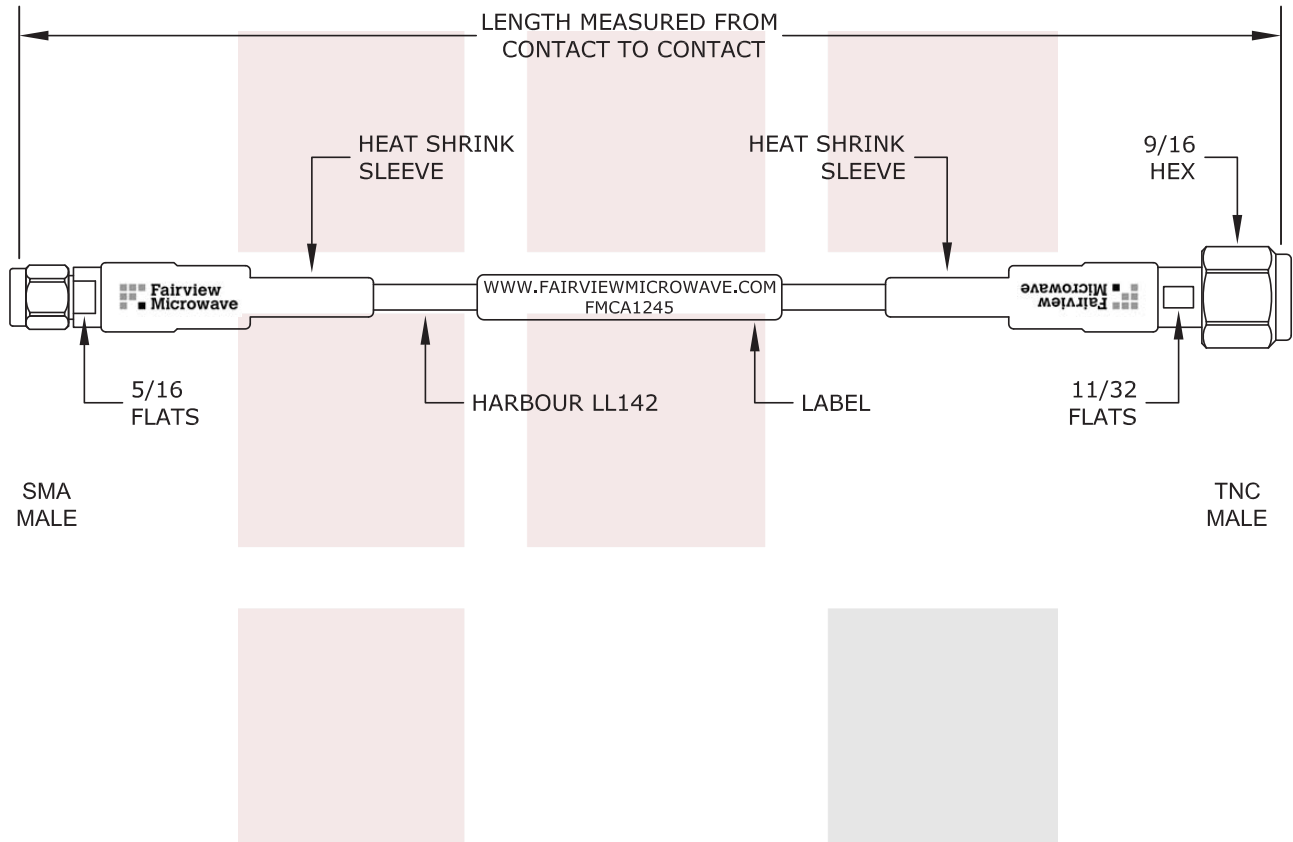
Low Loss SMA Male to TNC Male Cable LL142 Coax and RoHS with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Male to TNC Male Cable LL142 Coax and RoHS with LF Solder FMCA1245](https://www.fairviewmicrowave.com/low-loss-sma-male-tnc-male-cable-ll142-coax-fmca1245-p.aspx)

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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 Low Loss SMA Male to TNC Male Cable LL142 Coax and RoHS with LF Solder		DWG NO FMCA1245		CAGE CODE 3FKR5	
CAD FILE 072116 SHEET		SCALE N/A		SIZE A 2233	