

FMCA1255-24 DATA SHEET

Low Loss SMA Female to SMA Female Cable LL142 Coax in 24 Inch with LF Solder

The SMA female to SMA female 24 inch cable using LL142 coax, part number FMCA1255-24, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a female to female gender configuration with 50 ohm flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1255-24 SMA female to SMA female cable assembly operates to 18 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 95 dB. Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1255 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 FMCA1255 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Return Loss			16.54	dB
Insertion Loss			1.22	dB
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]	pF/ft [pF/	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.62	0.7	0.82	1	1.22	dB
Insertion Loss (Typ.)	0.56	0.62	0.74	0.88	1.08	dB

Mechanical Specifications

Cable Assembly

Length* 24 in [609.6 mm]

Cable Time

Cable Type LL142



Configuration:

- SMA Female
- SMA Female
- LL142

Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation (Von)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.35:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- 100% RF Tested
- Custom lengths available

Applications:

- General Purpose
- Laboratory Use
- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

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Impedance

Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields

Shield Layer 1
Shield Layer 2
Shield Layer 3

Jacket Material
Jacket Diameter

50 Ohms Solid

Copper, Silver

PTFE 3

Silver Plated Copper Tape Aluminum Polyester

Silver Plated Copper Wire

FEP, Green

0.195 in [4.95 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Туре	SMA Female	SMA Female
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488, 50μ In.	MinASTM-B488, 50µ In. Minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plat	ng Passivated Stainless S	Steel Passivated Stainless Steel
Outer Cond Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
Body Material & Plating	Passivated Stainless S	Steel Passivated Stainless Steel
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2700

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:

Example: FMCA1255-12 = 12 inches long cable

FMCA1255-100cm = 100 cm long cable

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Low Loss SMA Female to SMA Female Cable LL142 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: Low Loss SMA Female to SMA Female Cable LL142 Coax in 24 Inch with LF Solder FMCA1255-24

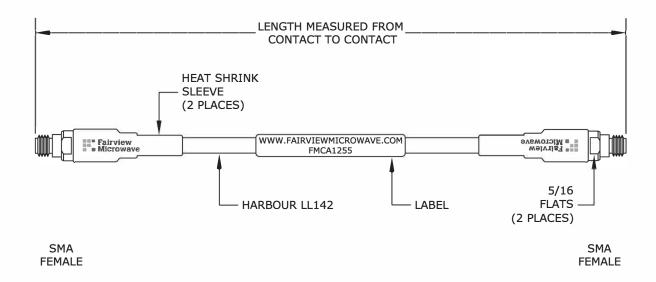
URL: https://www.fairviewmicrowave.com/low-loss-sma-female-sma-female-cable-ll142-coax-fmca1255-24-p.aspx



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NOTE:

LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. LONGER THAN 48" WILL BE 6" AWAY FROM CONNECTOR.

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].					
Low Loss SMA Female to SMA Female Cable LL142 Coax in 24 Inch with LF Solder	DWG NO FMCA1255			CAGE CODE 3FKR5		
	CAD FILE 072216	SHEET	SCAL	E N/A	SIZE A	2233