

Low Loss RA SMA Male to N Female Bulkhead Cable LL142 Coax

FMC00620



Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: N Female Bulkhead
- Cable Type: LL142
- Coax Flex Type: Flexible

Features

- Max Frequency 18 GHz
- 80% Phase Velocity
- Triple Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

The RA SMA male to type N female bulkhead cable using LL142 coax, part number FMC00620, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male 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 FMC00620 SMA male to type N female cable assembly operates to 18 GHz. The right angle SMA interface on the LL142 cable allows for easier connections in tight spaces. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
FMC00620	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.11	0.162	0.253	0.342	dB/ft	
			0.25	0.36	0.54	0.84	1.13	dB/m	
FMC00620-12	12 inch	Insertion Loss (Typ.)	0.54	0.59	0.67	0.8	0.94	dB	0.165
FMC00620-24	24 inch	Insertion Loss (Typ.)	0.61	0.7	0.83	1.05	1.28	dB	0.204
FMC00620-36	36 inch	Insertion Loss (Typ.)	0.69	0.8	1	1.3	1.62	dB	0.242
FMC00620-48	48 inch	Insertion Loss (Typ.)	0.76	0.91	1.16	1.56	1.96	dB	0.28
FMC00620-60	60 inch	Insertion Loss (Typ.)	0.84	1.02	1.32	1.81	2.3	dB	0.318

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.42 dB
 Loss due to Connector 2: 0.04 x sqrt(fGHz) dB
 Base Weight: 0.165 pounds
 Additional Weight per Inch: 0.00317 pounds

Mechanical Specifications

Cable Assembly

Weight 0.165 lbs [74.84 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]
 Repeated Minimum Bend Radius 0.975 in [24.77 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	N Female Bulkhead
Specification	MIL-PRF-39012	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	50µ" min. / 50µ" min.
Dielectric Type	PTFE	PEI
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	
Hex Size	5/16 Inch	3/4 inch
Torque	5 in-lbs 0.57 Nm	20 in-lbs 2.26 Nm

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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FMC00620

Typical Performance Data

How to Order

Part Number Configuration:

FMC00620

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMC00620-12 = 12 inches long cable
FMC00620-100cm = 100 cm long cable

Low Loss RA SMA Male to N Female Bulkhead Cable LL142 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss RA SMA Male to N Female Bulkhead Cable LL142 Coax FMC00620](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-n-female-bulkhead-cable-ll142-coax-fmc00620-p.aspx>

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FMC00620 CAD Drawing
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