

Low Loss Push-On RA SMP Female to Push-On RA SMP Female Cable LMR-100 Coax, 180 Degree Clocking

The RA SMP female push-on to RA SMP female push-on cable using LMR-100 coax, part number FMCA3168, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to SMP cable assembly has a female to female gender configuration with 50 ohm flexible LMR-100A-PVC coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3168 SMP female to SMP female cable assembly operates to 3 GHz. The right angle SMP interfaces on the LMR-100A-PVC cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Operating Voltage (AC)			350	Vrms
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.434	dB/ft
	0.23	0.38	0.54	0.79	1.42	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.03 lbs [13.61 g]

Cable

Cable Type LMR-100A-PVC



Configuration:

- Push-OnSMP Female Right Angle
- Push-OnSMP Female Right Angle
- LMR-100A-PVC

Features:

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female	SMP Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Push-On	Push-On
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	30μ in. minimum	30μ in. minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Cond Plating Spec.	3μ in. minimum	3μ in. minimum
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	3μ in. minimum	3μ in. minimum

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA3168 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

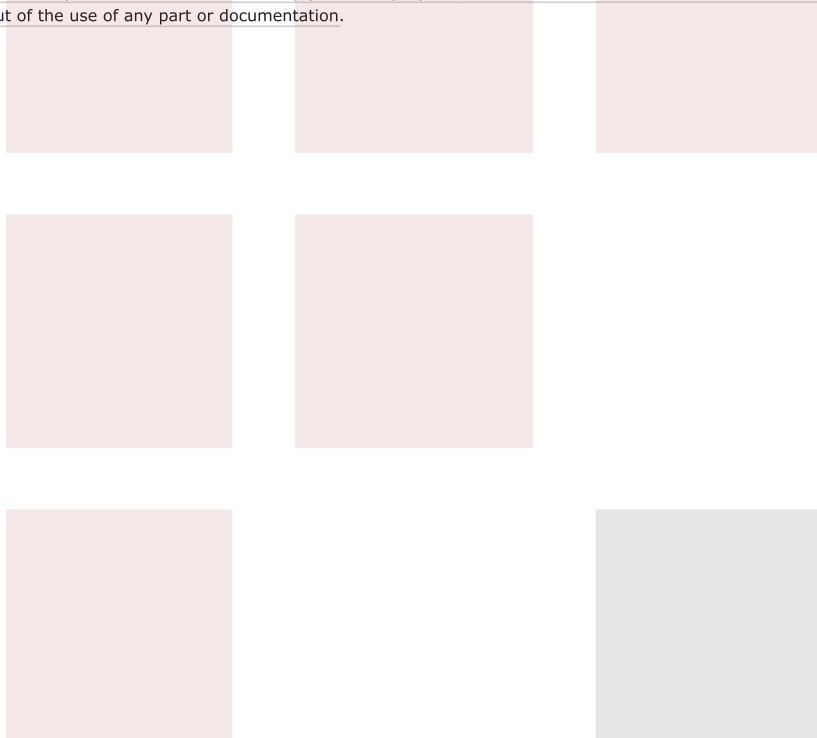
Example: FMCA3168-12 = 12 inches long cable
 FMCA3168-100cm = 100 cm long cable

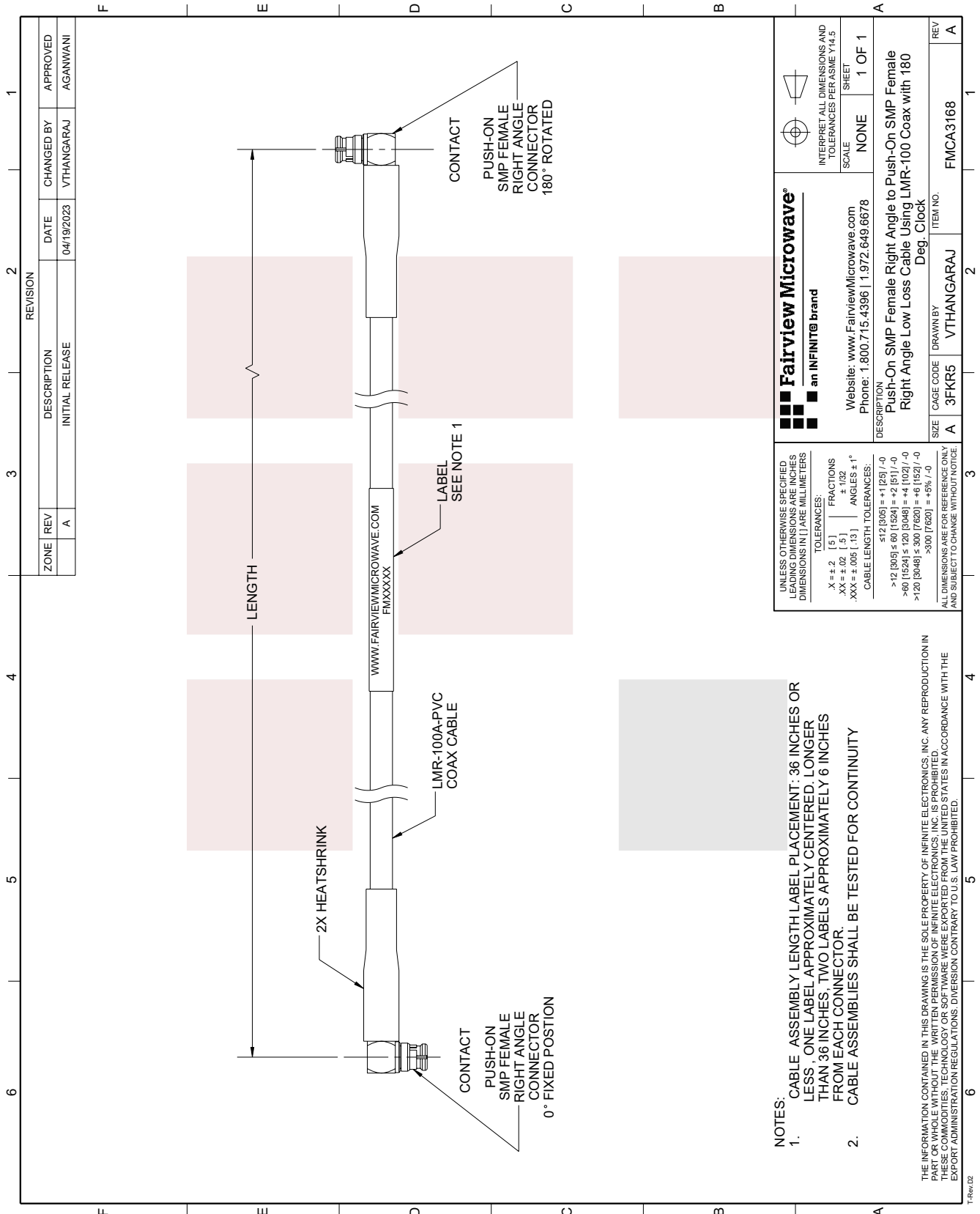
Low Loss Push-On RA SMP Female to Push-On RA SMP Female Cable LMR-100 Coax, 180 Degree Clocking from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss Push-On RA SMP Female to Push-On RA SMP Female Cable LMR-100 Coax, 180 Degree Clocking FMCA3168](https://www.fairviewmicrowave.com/low-loss-push-on-ra-smp-female-to-push-on-ra-smp-female-cable-lmr-100-coax-180-degree-clocking-fmca3168)

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