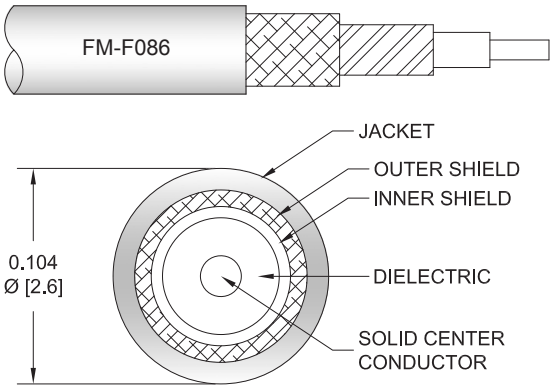
RA SMP Female to RA SMP Female Cable FM-F086 Coax with Low Outgassing Heatshrink, 270 Degree Clocking



FMC2121085/SP3

Configuration

- Connector 1: SMP Female Right Angle
- Connector 2: SMP Female Right Angle
- Cable Type: FM-F086
- Coax Flex Type: Flexible



Features

- Max Frequency 18 GHz
- 70.6% Phase Velocity
- Double Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

The RA SMP female to RA SMP female cable using FM-F086 coax, part number FMC2121085/SP3, 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 FM-F086 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC2121085/SP3 SMP female to SMP female cable assembly operates to 18 GHz. The right angle SMP interfaces on the FM-F086 cable allow for easier connections in tight spaces. The double 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		70.6		%
Capacitance		28.95 [94.98]		pF/ft [pF/m]

Specifications by Frequency

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FMC2121085/SP3

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
FMC2121085/SP3	Custom Lengths Available	Insertion Loss (Typ.)	0.19	0.28	0.429	0.631	0.951	dB/ft	
			0.63	0.91	1.41	2.08	3.13	dB/m	
FMC2121085/SP3-6	6 inch	Insertion Loss (Typ.)	0.5	0.54	0.62	0.72	0.88	dB	0.015
FMC2121085/SP3-12	12 inch	Insertion Loss (Typ.)	0.6	0.68	0.83	1.04	1.36	dB	0.021
FMC2121085/SP3-24	24 inch	Insertion Loss (Typ.)	0.79	0.96	1.26	1.67	2.31	dB	0.035
FMC2121085/SP3-36	36 inch	Insertion Loss (Typ.)	0.98	1.24	1.69	2.3	3.26	dB	0.048
FMC2121085/SP3-48	48 inch	Insertion Loss (Typ.)	1.17	1.51	2.12	2.93	4.21	dB	0.061

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:	0.2	dB
Loss due to Connector 2:	0.2	dB
Base Weight:	0.021	pounds
Additional Weight per Inch:	0.00109	pounds

Mechanical Specifications

Cable Assembly

Weight	0.021 lbs [9.53 g]

Cable

Cable Type	FM-F086
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.104 in [2.64 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	SMP Female Right Angle
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Conductor Plating Specification	MIL-G-45204	MIL-G-45204

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FMC2121085/SP3

Environmental Specifications

Operating Range Temperature	-55 to +125 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration: **FMC2121085/SP3 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMC2121085/SP3 — Base Number

Example: FMC2121085/SP3-12 = 12 inches long cable
FMC2121085/SP3-100cm = 100 cm long cable

RA SMP Female to RA SMP Female Cable FM-F086 Coax with Low Outgassing Heatshrink, 270 Degree Clocking 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: RA SMP Female to RA SMP Female Cable FM-F086 Coax with Low Outgassing Heatshrink, 270 Degree Clocking FMC2121085/SP3

URL: https://www.fairviewmicrowave.com/ra-smp-female-to-ra-smp-female-cable-fm-f086-coax-with-low-outgassing-heatshrink-270-degree-clocking-fmc2121085-sp3-p.aspx

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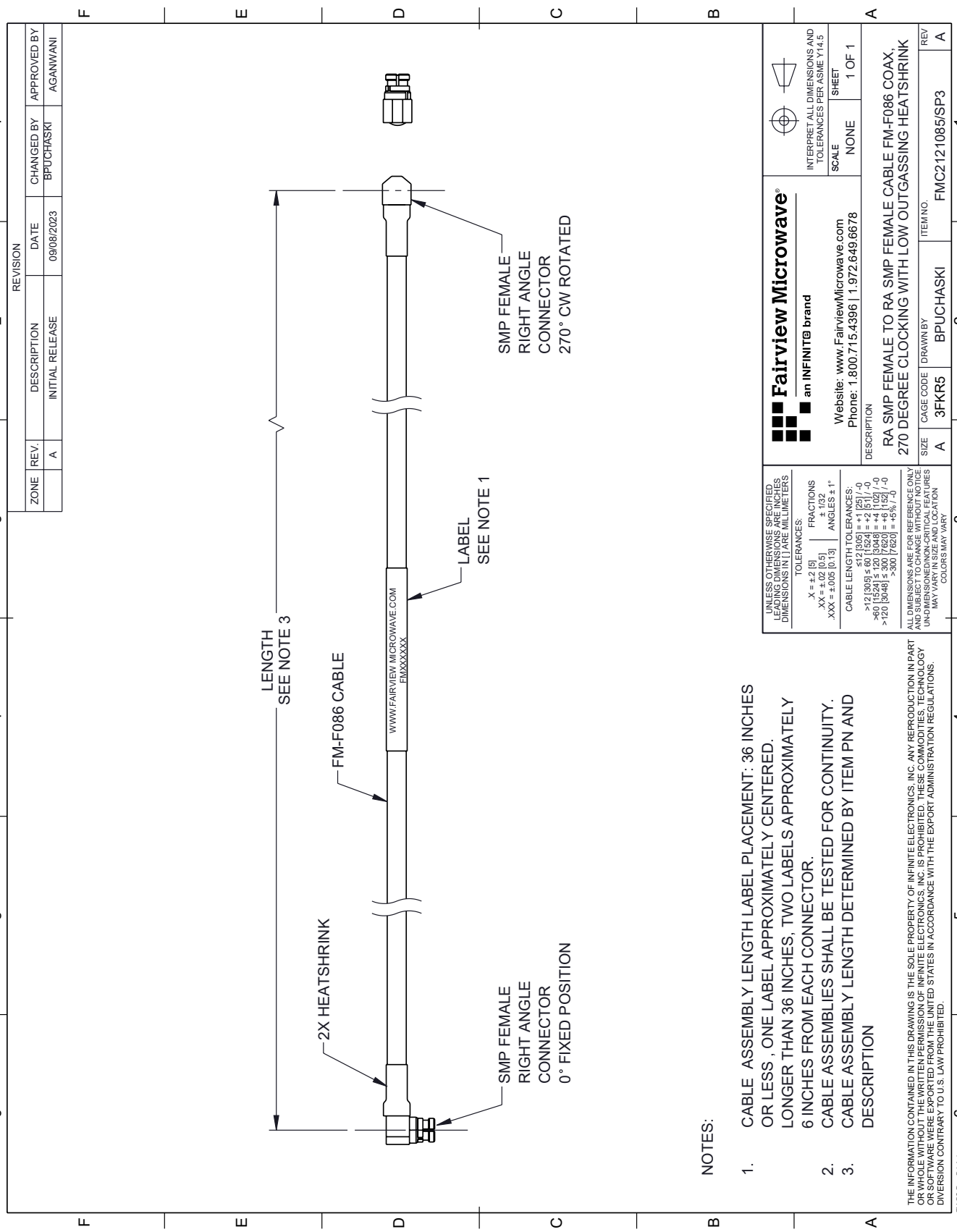
FMC2121085/SP3 CAD Drawing

RA SMP Female to RA SMP Female Cable FM-F086 Coax with Low Outgassing Heatshrink, 270 Degree Clocking



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