

SMP Plug Right Angle to SMP Plug
Right Angle using RG316 Coax Cable



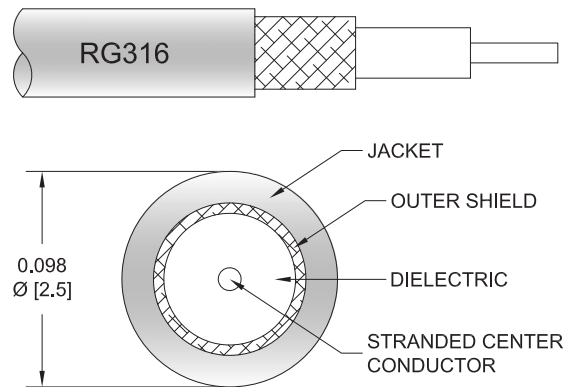
FMCA9846

Configuration

- Connector 1: SMP Plug Right Angle
- Connector 2: SMP Plug Right Angle
- Cable Type: RG316

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- VSWR of 1.4:1



Applications

- General Purpose
- Laboratory Use
- Military
- Aerospace
- Wireless Communications
- General Purpose Test

Description

The RA SMP plug to RA SMP plug cable using RG316, part number FMCA9846, from Fairview Microwave is in-stock and ships same day. This Fairview SMP to SMP cable assembly has a plug to plug gender configuration with 50 ohm RG316. The FMCA9846 SMP plug to SMP plug cable assembly operates to 3 GHz. The right angle SMP interfaces on the RG316 cable allow for easier connections in tight spaces.

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 | | 3 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 69 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|-------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 3 | GHz |
| Insertion Loss (Typ.) | 0.11 | 0.16 | 0.238 | 0.38 | 0.58 | dB/ft |
| | 0.36 | 0.52 | 0.78 | 1.25 | 1.9 | 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

SMP Plug Right Angle to SMP Plug
Right Angle using RG316 Coax Cable



FMCA9846

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.145 lbs [65.77 g] |

Cable

| | |
|--------------------------------------|---------------------------|
| Cable Type | RG316 |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------|------------------------------------|------------------------------------|
| Type | SMP Plug Right Angle | SMP Plug Right Angle |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Right Angle | Right Angle |
| Contact Material and Plating | Beryllium Copper, Gold over Copper | Beryllium Copper, Gold over Copper |
| Body Material and Plating | Bronze, Copper-Tin-Zinc Alloy | Bronze, Copper-Tin-Zinc Alloy |

Environmental Specifications

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

SMP Plug Right Angle to SMP Plug
Right Angle using RG316 Coax Cable



FMCA9846

Typical Performance Data

How to Order

Part Number Configuration:

FMCA9846

- **xx**

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: FMCA9846-12 = 12 inches long cable
FMCA9846-100cm = 100 cm long cable

SMP Plug Right Angle to SMP Plug Right Angle using RG316 Coax Cable 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.

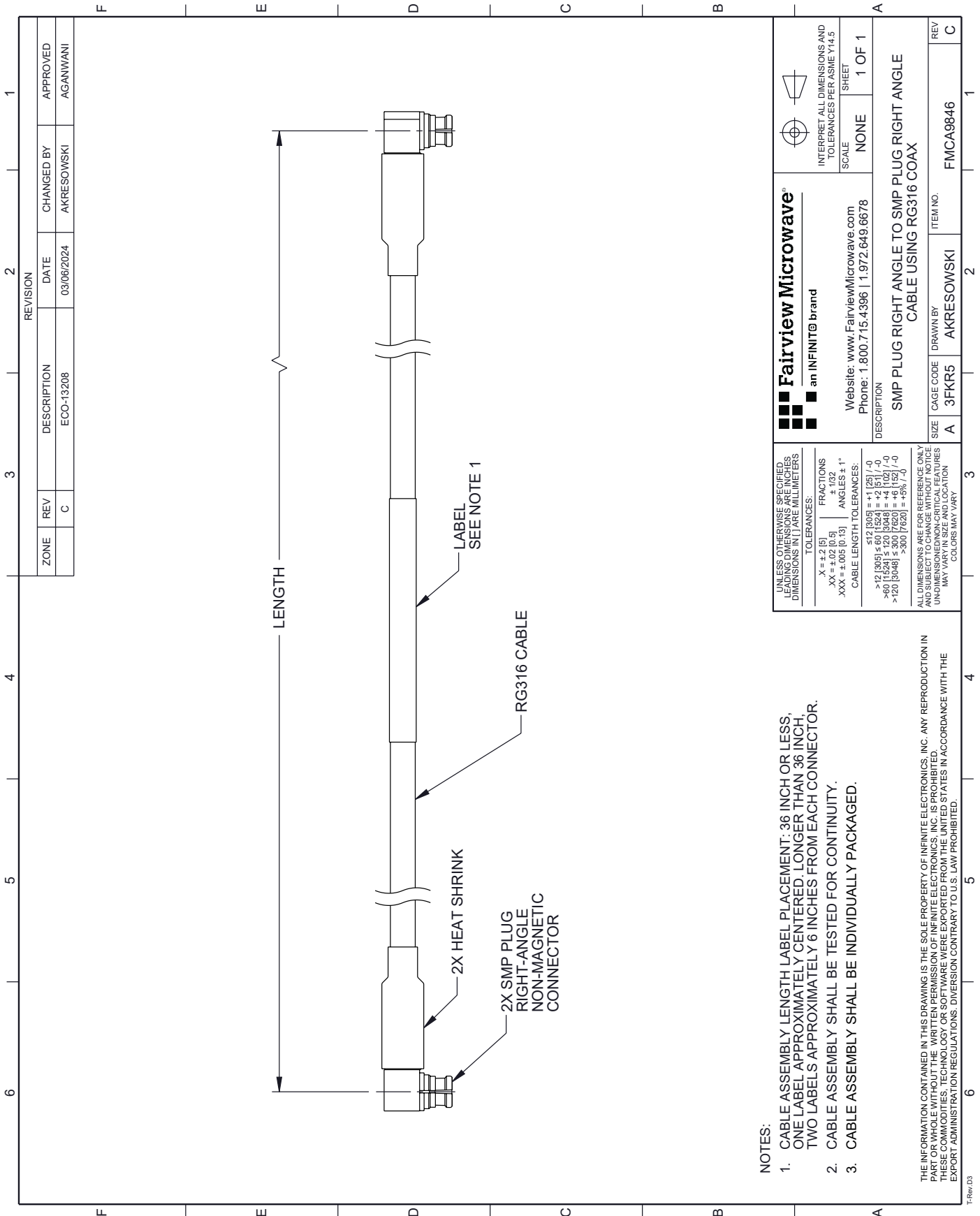
For additional information on this product, please click the following link: [SMP Plug Right Angle to SMP Plug Right Angle using RG316 Coax Cable FMCA9846](#)

URL: <https://www.fairviewmicrowave.com/non-magnetic-ra-smp-plug-to-ra-smp-plug-cable-rg316-coax-fmca9846-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FMCA9846 CAD Drawing

SMP Plug Right Angle to SMP Plug Right Angle using RG316 Coax Cable



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY SHALL BE INDIVIDUALLY PACKAGED.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC.. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TRev_03

| | | | |
|---|------------|---|----------|
| <p>Fairview Microwave an INFINIT[®] brand</p> | | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> | |
| Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678 | | SCALE | NONE |
| DESCRIPTION | | SHEET | 1 OF 1 |
| SMP PLUG RIGHT ANGLE TO SMP PLUG RIGHT ANGLE CABLE USING RG316 COAX | | | |
| SIZE | A | CAGE CODE | 3FKR5 |
| DRAWN BY | AKRESOWSKI | ITEM NO. | FMCA9846 |
| REV | C | REV | C |

| | |
|---|---------------------------------------|
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS | TOLERANCES: |
| X = ±.2 (5) | FRACTIONS ± 1/32 |
| .XX = ±.02 (0.5) | ANGLES ± 1° |
| .XXX = ±.005 (0.13) | CABLE LENGTH TOLERANCES: |
| | <12 (305) ±.11 (28) |
| | >12 (305) ≤ 60 (1524) = ±.15 (3.8) |
| | >60 (1524) ≤ 120 (3048) = ±.10 (2.5) |
| | >120 (3048) ≤ 300 (7620) = ±.16 (4.1) |
| | >300 (7620) = ±.25 (6.4) |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. | |