Fairview Microwave
an INFINITE brand

FMC00309
DATA SHEET

Low Loss N Male to SMB Plug Cable RG-316 Coax

The type N male to SMB plug cable using RG-316 coax, part number FMC00309, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMB cable assembly has a male to plug gender configuration with 50 ohm flexible RG316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00309 type N male to SMB plug cable assembly operates to 3 GHz.

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.

Configuration:

- N Male
- SMB Plug
- RG316

Features:

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	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.)	0.1	0.15	0.23	0.37	0.57	dB/ft
	0.33	0.49	0.75	1.21	1.87	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector

Mechanical Specifications

Cable Assembly

Diameter	0.827 in [21.01 mm]

Cable

Cable Type	RG316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	SMB Plug
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Gold
Body Plating Spec.		3 µin minimum
Coupling Nut Material & Plating	Brass, Nickel	

Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration: **FMC00309 - xx uu**

cm = Centimeters
<blank> = Inches

Length

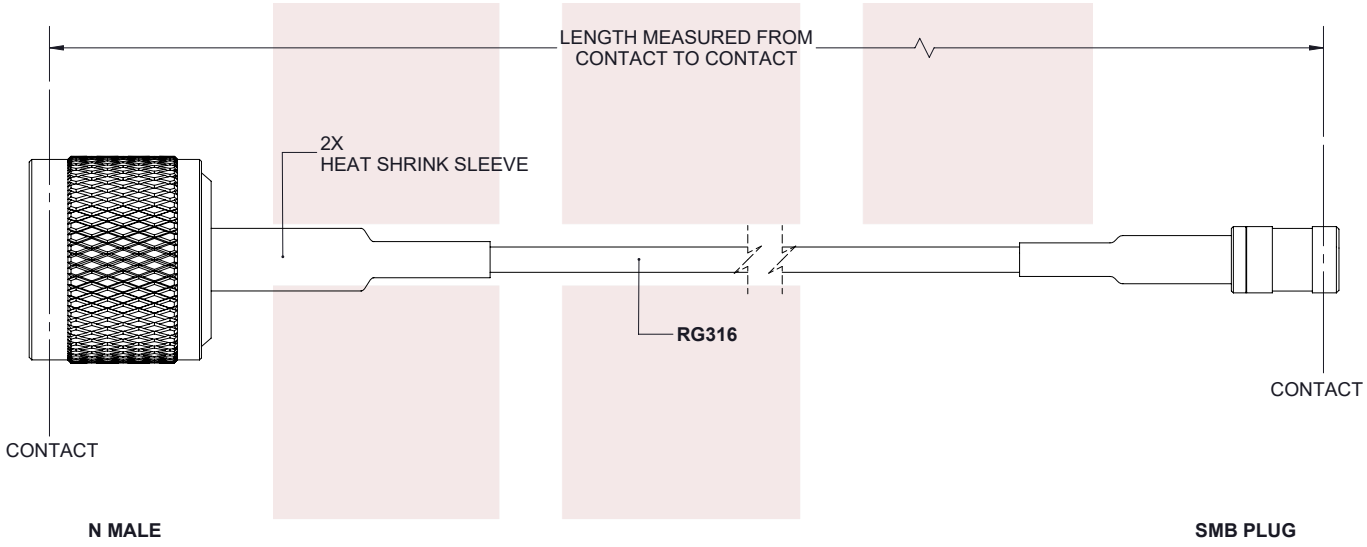
Example: FMC00309-12 = 12 inches long cable
FMC00309-100cm = 100 cm long cable

Low Loss N Male to SMB Plug Cable RG-316 Coax 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 N Male to SMB Plug Cable RG-316 Coax FMC00309

URL: https://www.fairviewmicrowave.com/low-loss-n-male-smb-plug-cable-rg316-coax-fmc00309-p.aspx

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/25/2020	S.ELLIS



N MALE **SMB PLUG**

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TITLE

Low Loss N Male to SMB Plug Cable RG-316 Coax

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

SHEET	OF
1	1

SCALE: N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	FMC00309	A

T-Rev.D

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