

10-32 Male to SMC Plug Cable RG-316 Coax

The 10-32 male to SMC plug cable using RG-316 coax, part number FMC1018315, from Fairview Microwave is in-stock and ships same day. This Fairview 10-32 to SMC cable assembly has a male to plug gender configuration with 50 ohm flexible RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC1018315 10-32 male to SMC plug cable assembly operates to 2 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.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		2	GHz
VSWR			1.5:1	
Velocity of Propagation		70		%
Capacitance		32 [104.99]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.41 [27.59]		$\Omega/1000ft$ [Ω/Km]
Operating Voltage (AC)			1,200	Vrms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.05	0.1	0.25	0.5	2	GHz
Insertion Loss (Typ.)	0.075	0.11	0.16	0.283	0.48	dB
	0.25	0.36	0.52	0.93	1.57	

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 * \sqrt{FGHz}$ dB per connector.

Mechanical Specifications

Cable Assembly

Length* 0 in [0 mm]
Weight 0.015 lbs [6.8 g]

Cable

Cable Type RG-316
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper, Silver
Dielectric Type PTFE
Number of Shields 1



Configuration:

- 10-32 Male
- SMC Plug
- RG-316

Features:

- Max Frequency 2 GHz
- 70% Phase Velocity
- FEP Jacket

Applications:

- General Purpose
- Laboratory Use

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Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Black
Jacket Diameter	0.098 in [2.49 mm]

Connectors

Description	Connector 1	Connector 2
Type	10-32 Male	SMC Plug
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	50µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material & Plating	Brass, Nickel	Brass, Gold
Body Plating Spec.		3µ in. minimum
Hex Size		1/4 inch

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:

FMC1018315 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMC1018315-12 = 12 inches long cable
 FMC1018315-100cm = 100 cm long cable

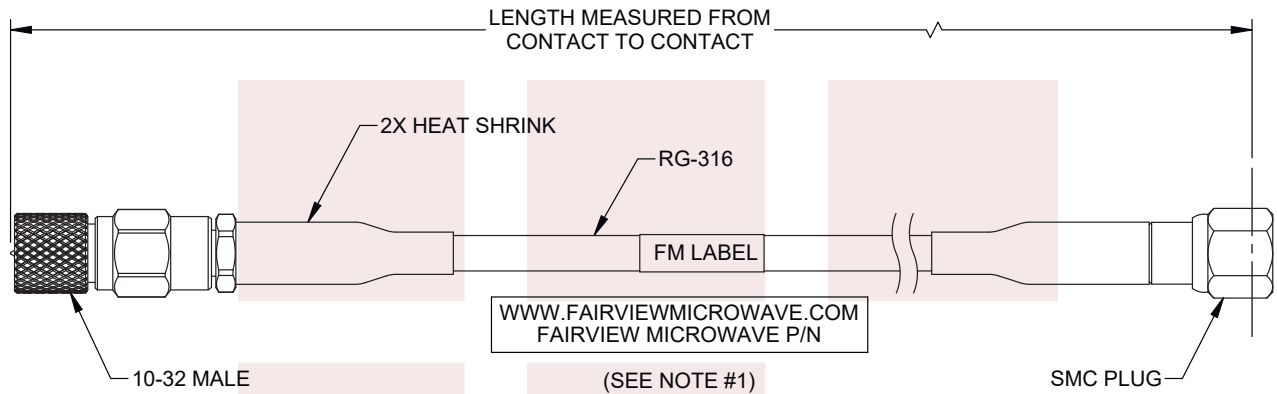
10-32 Male to SMC Plug Cable RG-316 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [10-32 Male to SMC Plug Cable RG-316 Coax FMC1018315](#)

URL: <https://www.fairviewmicrowave.com/10-32-male-to-smc-plug-cable-rg-316-coax-fmc1018315-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/11/2021	SRAUTUS



NOTES:
1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED.
CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END
6.0" FROM THE END OF THE CONNECTOR.

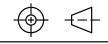
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TITLE
10-32 Male to SMC Plug Cable RG-316 Coax

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

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	
		300 [7620] < L = +5%L / -0	

THIRD-ANGLE PROJECTION



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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE
N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	DMAY	FMC1018315	A

T-Rev.D