



Solder

SN63 in accordance with J-STD-006

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		4	GHz
VSWR			1.6:1	
Velocity of Propagation		69.5		%
Capacitance	32 [104.99]			pF/ft [pF/m]
DC Resistance Inner Conductor	0.91 [2.99]			Ω/1000ft [Ω/Km]
Dielectric Withstanding Voltage (AC)			1,000	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	3	4	GHz
Insertion Loss (Max.)	0.3	0.56	0.84	1.73	1.98	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of  $0.06 \cdot \sqrt{\text{GHz}}$  dB maximum for the SMA Male connector and 0.1 dB for the BNC Male connector.

### Mechanical Specifications

#### Cable Assembly

Description	Min	Typ	Max	Units
Length*	48 [121.92]	48 [121.92]	49 [124.46]	in [cm]
Cable Outer Diameter	0.19	0.195	0.2	in
Weight			0.27 [122.47]	lbs [g]

#### Cable Characteristics

Component	Specification
Cable Type	M17/128-RG400
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Mat. & Plat.	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Clad Copper
Shield Layer 2	Silver Clad Copper
Outer Conductor Diameter	0.171 in [4.34 mm]

**Connector Characteristics**

Description	Connector 1	Connector 2
Type	BNC Male	SMA Male
Specification	MIL-PRF-39012	MIL-PRF-39012
Impedance	50 Ohms	50 Ohms
Contact Mat. & Plat.	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	
Dielectric Type	Teflon	PTFE
Body Mat. & Plat.	Brass, Silver	Passivated Stainless Steel
Body Plating Spec.	QQ-S-365	
Coupling Nut Mat. & Plat.		Passivated Stainless Steel
Seal Gasket Material	Silicone Rubber	Silicone Rubber
Contact Gage Spec.	0.210 to 0.230 in	0.000 in min
Insulator Gage Spec.	0.208 to 0.228 in	0.000 inmin

Mechanical Specification Notes:

**Environmental Specifications**

Description	Specification
Temperature Operating Range	-55 to +165 deg C

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

**Process Specifications**

Process	Specification
Soldering	in accordance with J-STD-001, class 3
Crimping	dies in accordance with SAE AS22520
Marking	shall meet the adherence requirements of SAE AS5942
Workmanship	shall be in accordance with IPC/WHMA-A-620, class 3

**Tests and Inspections**

Test	Sampling
Connector Gaging (pin and insulator position)	100%
Insertion Loss	100%
VSWR	100%
Dielectric Withstanding Voltage (DWV)	100%
Visual - workmanship, configuration and marking	100%
Length	C=0, 1.5 AQL
Mass	C=0, 1.5 AQL

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**How to Order**

Part Number Configuration:

**FMHR0061 - xx uu**



Example: FMHR0061-12 = 12 inches long cable  
 FMHR0061-100cm = 100 cm long cable

Cable Assembly Length Tolerances:

Imperial English		Metric	
"L" ≤ 1 ft	+0.5 in / -0 in	"L" ≤ 0.3 m	+12.5 mm / -0 mm
1 ft < "L" ≤ 5 ft	+1 in / -0 in	0.3 m < "L" ≤ 1.5 m	+25 mm / -0 mm
5 ft < "L" ≤ 10 ft	+2 in / -0 in	1.5 m < "L" ≤ 3 m	+50 mm / -0 mm
10 ft < "L" ≤ 25 ft	+3 in / -0 in	3 m < "L" ≤ 7.5 m	+75 mm / -0 mm
25 ft < "L"	+2%"L" / -0%"L"	7.5 m < "L"	+2%"L" / -0%"L"

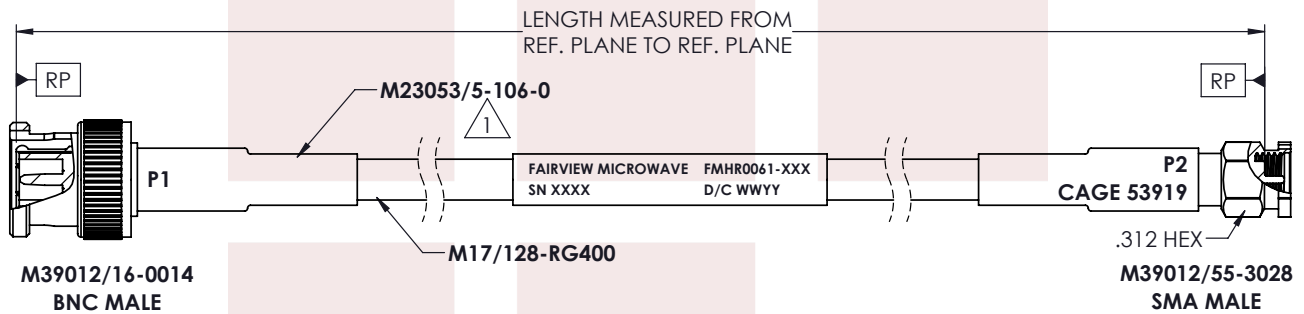
\* Cable Length = "L"

BNC Male to SMA Male MIL-DTL-17 Cable M17/128-RG400 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [BNC Male to SMA Male MIL-DTL-17 Cable M17/128-RG400 Coax in 48 Inch FMHR0061-48](#)

URL: <https://www.fairviewmicrowave.com/bnc-male-sma-male-cable-m17-128-rg400-coax-fmhr0061-48-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.



**STANDARD TOLERANCES**

.X ±0.2  
 .XX ±0.01  
 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**NOTES:**

1. BLACK HEAT SHRINK WITH WHITE MARKINGS 3 PLACES.

<p><b>Fairview Microwave</b>          RF COMPONENTS ON DEMAND. <i>Done!</i></p>	<p>NOTES:          1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.          2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.          3. DIMENSIONS ARE IN INCHES [mm].</p>			
	<p>TITLE          BNC Male to SMA Male MIL-DTL-17 Cable M17/128-RG400 Coax in 48 Inch</p>	<p>DWG NO  <b>FMHR0061</b></p>	<p>CAGE CODE  <b>3FKR5</b></p>	
<p>CAD FILE 11/16/18</p>	<p>SHEET 1 OF 1</p>	<p>SCALE N/A</p>	<p>SIZE A</p>	<p>CN2379</p>