

Low Loss RP TNC Jack Bulkhead to MMCX Plug Cable LMR-100 Coax



FMCA9988

Configuration

- Connector 1: TNC Jack Reverse Polarity Bulkhead
- Connector 2: MMCX Plug
- Cable Type: LMR-100A-PVC
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- PVC Jacket

Applications

- General Purpose
- Laboratory Use

Description

The RP TNC jack bulkhead to MMCX plug cable using LMR-100 coax, part number FMCA9988, from Fairview Microwave is in-stock and ships same day. This Fairview reverse polarity TNC to MMCX cable assembly has a jack to plug gender configuration with 50 ohm flexible LMR-100A-PVC coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA9988 reverse polarity TNC jack to MMCX plug cable assembly operates to 3 GHz. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		MHz				
FMCA9988	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.12	0.165	0.24	0.434	dB/ft	
			0.23	0.38	0.55	0.79	1.43	dB/m	
FMCA9988-24	24 inch	Insertion Loss (Typ.)	0.34	0.43	0.53	0.68	1.07	dB	0.071
FMCA9988-36	36 inch	Insertion Loss (Typ.)	0.41	0.55	0.7	0.92	1.51	dB	0.08
FMCA9988-48	48 inch	Insertion Loss (Typ.)	0.48	0.66	0.86	1.16	1.94	dB	0.089
FMCA9988-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.58	0.75	0.99	1.63	dB	0.083
FMCA9988-200CM	200 CM	Insertion Loss (Typ.)	0.66	0.96	1.29	1.78	3.05	dB	0.113

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: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.062 pounds
 Additional Weight per Inch: 0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight 0.062 lbs [28.12 g]

Cable

Cable Type LMR-100A-PVC
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 Dielectric Type PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PVC, Blue
 Jacket Diameter 0.11 in [2.79 mm]
 One Time Minimum Bend Radius 0.25 in [6.35 mm]
 Repeated Minimum Bend Radius 1 in [25.4 mm]
 Bending Moment 0.1 lbs-ft [0.14 N-m]
 Flat Plate Crush 10 lbs/in [0.18 Kg/mm]
 Tensile Strength 15 lbs [6.8 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Jack Reverse Polarity Bulkhead	MMCX Plug
Specification	MIL-STD-348	BS EN 122340
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification	30µ in. minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Gold
Body Plating Specification		3 µin minimum
Hex Size	5/8 in.	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

Low Loss RP TNC Jack Bulkhead to MMCX Plug Cable LMR-100 Coax



FMCA9988

Typical Performance Data

How to Order

Part Number Configuration:

FMCA9988

- xx

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

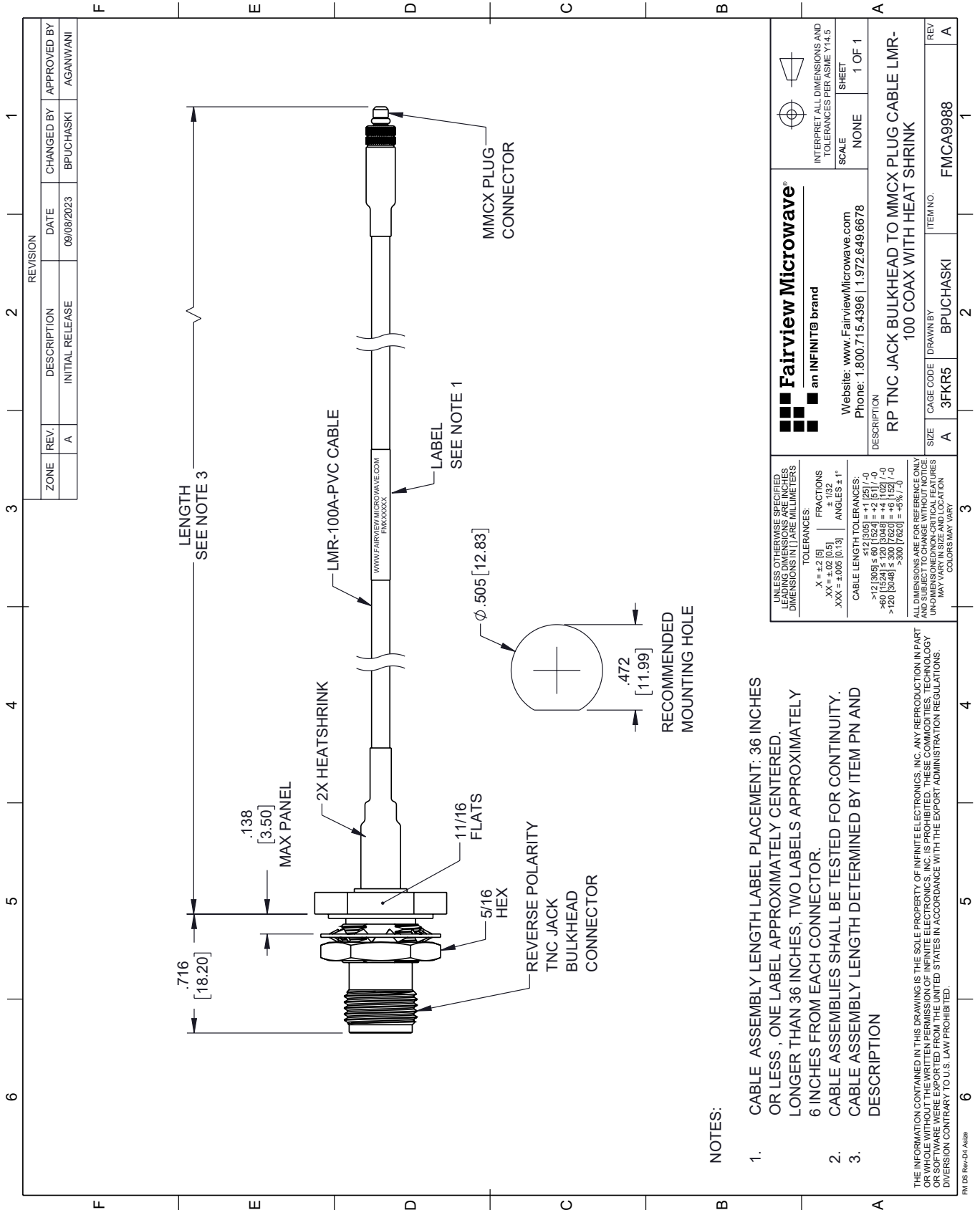
Example: FMCA9988-12 = 12 inches long cable
FMCA9988-100cm = 100 cm long cable

Low Loss RP TNC Jack Bulkhead to MMCX Plug Cable LMR-100 Coax 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: [Low Loss RP TNC Jack Bulkhead to MMCX Plug Cable LMR-100 Coax FMCA9988](#)

URL: <https://www.fairviewmicrowave.com/low-loss-rp-tnc-jack-bulkhead-to-mmcx-plug-cable-lmr-100-coax-fmca9988-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.



REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	INITIAL RELEASE	
	A		09/08/2023	BPUCHASKI
				AGANWANI

 Fairview Microwave an INFINITB brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: RP TNC JACK BULKHEAD TO MMCX PLUG CABLE LMR-100 COAX WITH HEAT SHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	BPUCHASKI	FMCA9988

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

TOLERANCES:

X = +.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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NOTES:

- CABLE ASSEMBLY LABEL LENGTH: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION