



SMA Male to BNC Male Low Loss Cable Using LMR-240-UF Coax

TECHNICAL DATA SHEET

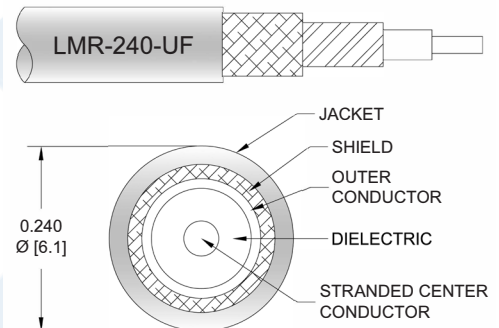
PE3W06789

Configuration

- Connector 1: SMA Male
- Connector 2: BNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W06789 SMA male to BNC male cable using LMR-240-UF coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3W06789 SMA male to BNC male cable assembly operates to 4 GHz. The double shielding of this Pasternack 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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to BNC Male Low Loss Cable Using LMR-240-UF Coax PE3W06789](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω/1000ft [Ω/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3W06789	Custom Lengths Available	Insertion Loss (Typ.)	0.029	0.046	0.066	0.096	0.193	dB/ft	
			0.1	0.16	0.22	0.32	0.64	dB/m	
PE3W06789-12	12 inch	Insertion Loss (Typ.)	0.17	0.2	0.24	0.3	0.5	dB	0.077
PE3W06789-24	24 inch	Insertion Loss (Typ.)	0.19	0.25	0.31	0.4	0.69	dB	0.11
PE3W06789-36	36 inch	Insertion Loss (Typ.)	0.22	0.29	0.37	0.49	0.88	dB	0.142
PE3W06789-60	60 inch	Insertion Loss (Typ.)	0.28	0.38	0.51	0.68	1.27	dB	0.206
PE3W06789-300	300 inch	Insertion Loss (Typ.)	0.86	1.3	1.83	2.6	5.13	dB	0.846

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*SQRT(FGHz) dB

Loss due to Connector 2: 0.1 dB

Base Weight: 0.077 pounds

Additional Weight per Inch: 0.00267 pounds

Mechanical Specifications

Cable Assembly

Weight

0.077 lbs [34.93 g]

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Cable

Cable Type	LMR-240-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	TPE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Threaded	BNC Male Bayonet
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Coupling Nut Material and Plating	Brass, Gold	Brass, Nickel
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to BNC Male Low Loss Cable Using LMR-240-UF Coax PE3W06789](#)



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How to Order

Part Number Configuration:

PE3W06789

- **xx**

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

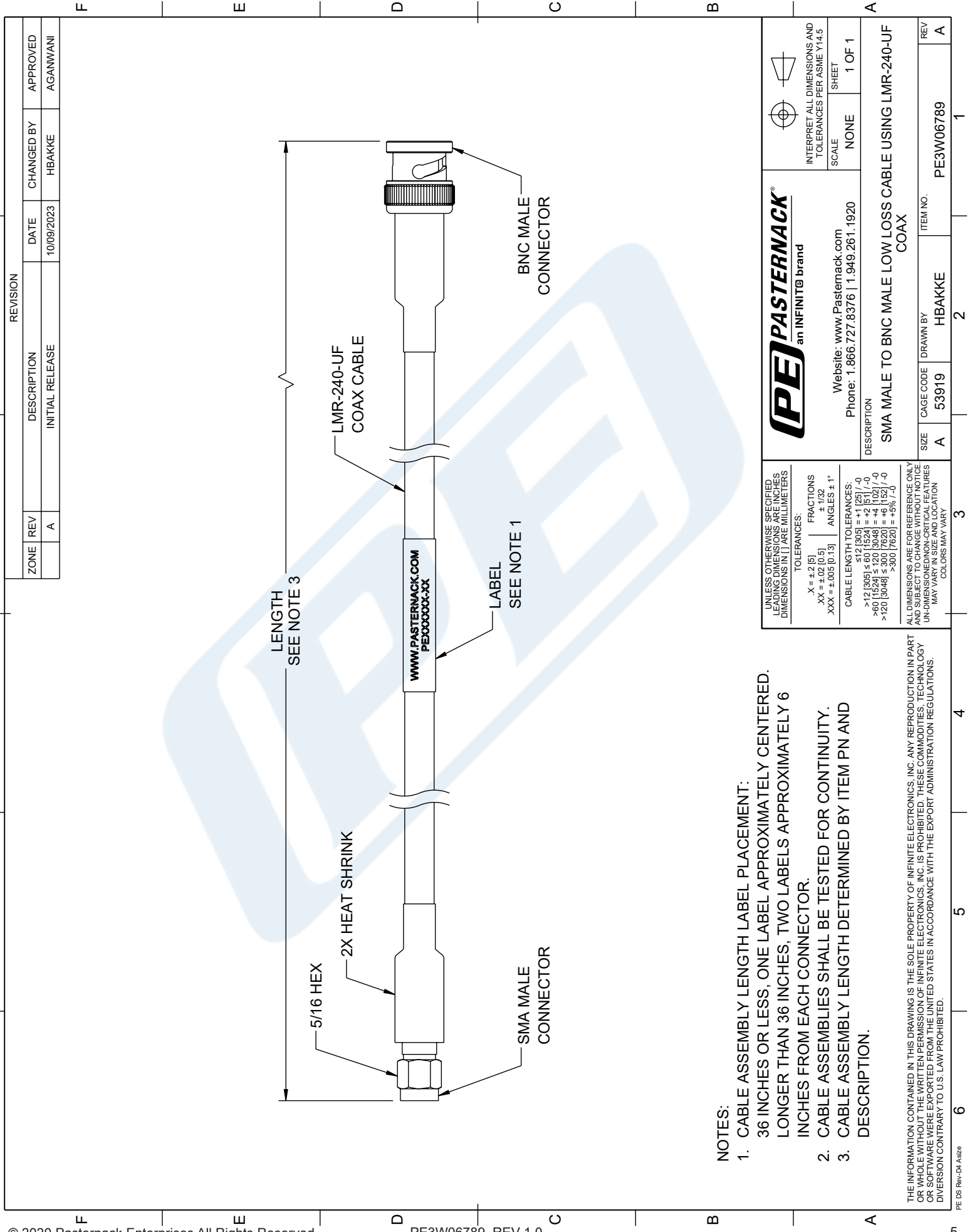
Example: PE3W06789-12 = 12 inches long cable
PE3W06789-100cm = 100 cm long cable

SMA Male to BNC Male Low Loss Cable Using LMR-240-UF Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to BNC Male Low Loss Cable Using LMR-240-UF Coax PE3W06789](https://www.pasternack.com/sma-male-to-bnc-male-low-loss-cable-using-lmr-240-uf-pe3w06789-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-bnc-male-low-loss-cable-using-lmr-240-uf-pe3w06789-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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.



NOTES:

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

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION

SMA MALE TO BNC MALE LOW LOSS CABLE USING LMR-240-UF COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	HBAKKE	PE3W06789	A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	XX = ±.02 [0.5]
XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305] ≤ 517 [1303]	± 1/32
>517 [1303] ≤ 120 [3048]	± 1/16
>120 [3048] ≤ 300 [7620]	± 1/8
>300 [7620]	± 1/4

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.