



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

### TECHNICAL DATA SHEET

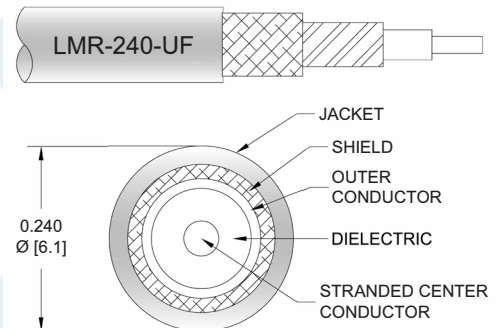
**PE3C1589**

#### Configuration

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

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1589 SMA male to SMA female 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 SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C1589 SMA male to SMA female cable assembly operates to 6 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 SMA Female Low Loss Cable Using LMR-240-UF Coax PE3C1589](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
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]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		3.89 [12.76]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3C1589	Custom Lengths Available	Insertion Loss (Typ.)	0.05	0.07	0.1	0.16	0.24	dB/ft	
			0.16	0.22	0.32	0.51	0.81	dB/m	
PE3C1589-12	12 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.36	0.45	dB	0.057
PE3C1589-24	24 inch	Insertion Loss (Typ.)	0.3	0.34	0.4	0.51	0.69	dB	0.09
PE3C1589-36	36 inch	Insertion Loss (Typ.)	0.34	0.4	0.49	0.67	0.94	dB	0.122
PE3C1589-60	60 inch	Insertion Loss (Typ.)	0.43	0.53	0.68	0.98	1.42	dB	0.186
PE3C1589-300	300 inch	Insertion Loss (Typ.)	1.35	1.85	2.6	4.08	6.3	dB	0.826

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:	0.057 pounds
Additional Weight per Inch:	0.00267 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.057 lbs [25.85 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	SMA Female Threaded
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	
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:

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**TECHNICAL DATA SHEET**

**PE3C1589**

**How to Order**

Part Number Configuration:

**PE3C1589**

- **xx**

**uu**

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

Example: PE3C1589-12 = 12 inches long cable  
PE3C1589-100cm = 100 cm long cable

SMA Male to SMA Female 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.

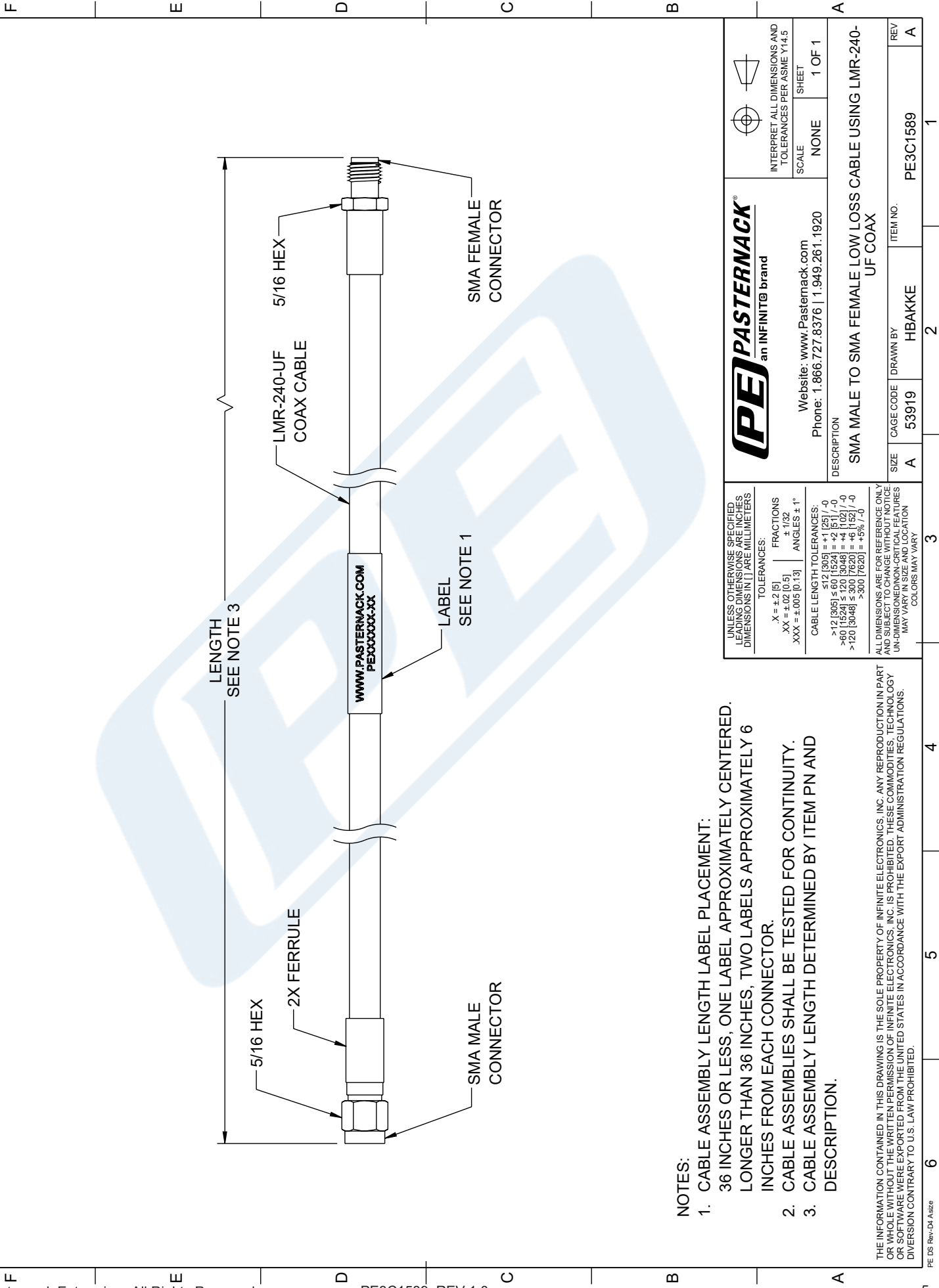
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Low Loss Cable Using LMR-240-UF Coax PE3C1589](https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-240-uf-pe3c1589-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-240-uf-pe3c1589-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.

PE3C1589 CAD Drawing


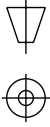
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- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT:  
36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED.  
LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
  - 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
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REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	10/09/2023

CHANGED BY	APPROVED
HBAKKE	AGANWANI

 an INFINIT@ brand			
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		SCALE	NONE
DESCRIPTION		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
SMA MALE TO SMA FEMALE LOW LOSS CABLE USING LMR-240-UF COAX		SHEET	1 OF 1
SIZE	A	CAGE CODE	53919
ITEM NO.	53919	DRAWN BY	HBAKKE
REV	A	PE3C1589	