PASTERNACK
an INFINITE brand

SMA Male to SMA Female Cable Using LMR-240-UF Coax with HeatShrink

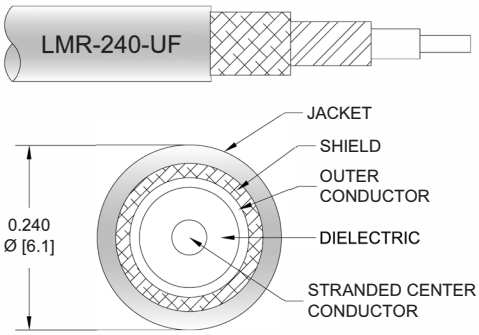
TECHNICAL DATA SHEET PE3C1589/HS

Configuration

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

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1589/HS 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/HS SMA male to SMA female cable assembly operates to 5.8 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 Cable Using LMR-240-UF Coax with HeatShrink PE3C1589/HS

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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	250	500	1000	2500	6000	MHz	
PE3C1589/HS	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/HS-12	12 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.36	0.45	dB	0.057
PE3C1589/HS-24	24 inch	Insertion Loss (Typ.)	0.3	0.34	0.4	0.51	0.69	dB	0.09
PE3C1589/HS-36	36 inch	Insertion Loss (Typ.)	0.34	0.4	0.49	0.67	0.94	dB	0.122
PE3C1589/HS-60	60 inch	Insertion Loss (Typ.)	0.43	0.53	0.68	0.98	1.42	dB	0.186
PE3C1589/HS-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	0.025 lbs [11.34 g]

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TECHNICAL DATA SHEET PE3C1589/HS

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/HS

How to Order

Part Number Configuration: **PE3C1589/HS - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C1589/HS — Base Number

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

SMA Male to SMA Female Cable Using LMR-240-UF Coax with HeatShrink 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 Cable Using LMR-240-UF Coax with HeatShrink PE3C1589/HS

URL: https://www.pasternack.com/sma-male-to-sma-female-cable-using-lmr-240-uf-with-heatshrink-pe3c1589-hs-p.aspx

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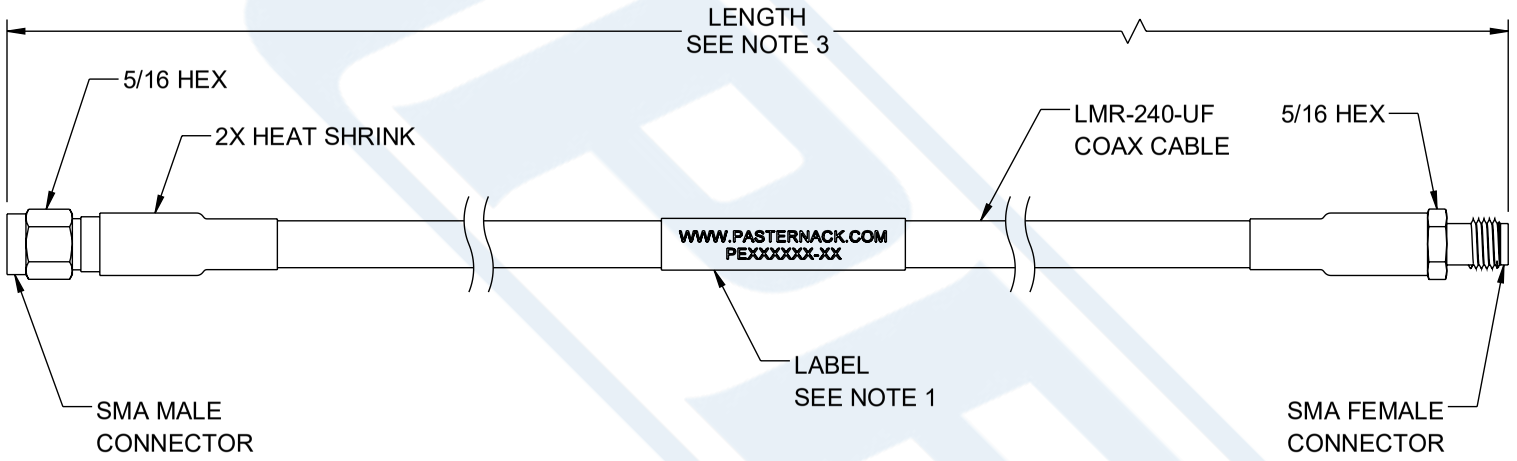
REVISION					
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/09/2023	HBAKKE	AGANWANI

PE3C1589/HS CAD Drawing

SMA Male to SMA Female Cable Using LMR-240-UF Coax with HeatShrink



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.

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

TOLERANCES:

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

CABLE LENGTH TOLERANCES:
≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.
UN-DIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION
SMA MALE TO SMA FEMALE LOW LOSS CABLE USING LMR-240-UF COAX WITH HEATSHRINK

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	HBAKKE	PE3C1589/HS	A