

Fire Rated N Male Right Angle to Reverse Polarity SMA Plug Low Loss Cable Using LMR-400-FR Coax



PE3W16207

Configuration

- Connector 1: N Male Right Angle
- Connector 2: SMA Plug Reverse Polarity
- Cable Type: LMR-400-FR
- Coax Flex Type: Flexible

Features

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

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W16207 type N male right angle to reverse polarity SMA plug cable using LMR-400-FR 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 type N to reverse polarity SMA cable assembly has a male to plug gender configuration with 50 ohm flexible LMR-400-FR coax. The PE3W16207 type N male to reverse polarity SMA plug cable assembly operates to 6 GHz. The right angle type N interface on the LMR-400-FR cable allows for easier connections in tight spaces. 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.

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		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W16207	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3W16207-12	12 In	Insertion Loss (Typ.)	0.32	0.33	0.35	0.37	0.41	dB	0.351
PE3W16207-24	24 In	Insertion Loss (Typ.)	0.34	0.36	0.39	0.44	0.52	dB	0.432
PE3W16207-36	36 In	Insertion Loss (Typ.)	0.36	0.39	0.43	0.51	0.63	dB	0.513
PE3W16207-48	48 In	Insertion Loss (Typ.)	0.38	0.42	0.47	0.58	0.74	dB	0.594
PE3W16207-60	60 In	Insertion Loss (Typ.)	0.4	0.44	0.51	0.64	0.84	dB	0.675

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:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.351 pounds
Additional Weight per Inch:	0.00675 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.351 lbs [159.21 g]

Cable

Cable Type	LMR-400-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	FRPE, Black
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	SMA Plug Reverse Polarity
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	1.27 µm minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Gold
Body Plating Specification	2 µm minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Gold
Coupling Nut Plating Specification	2 µm minimum	
Hex Size		5/16 inch
Torque	44 in-lbs 4.97 Nm	3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

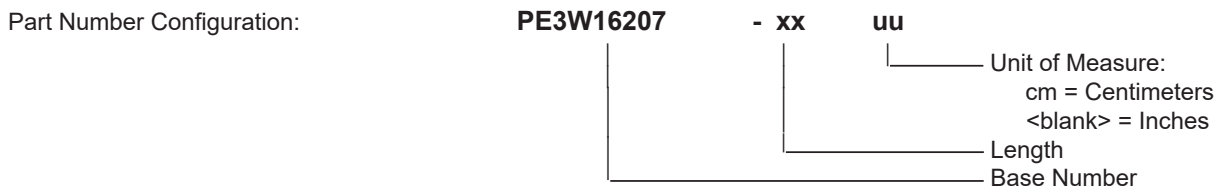
Fire Rated N Male Right Angle to Reverse Polarity SMA Plug Low Loss Cable Using LMR-400-FR Coax



PE3W16207

Typical Performance Data

How to Order



Example: PE3W16207-12 = 12 inches long cable
 PE3W16207-100cm = 100 cm long cable

Fire Rated N Male Right Angle to Reverse Polarity SMA Plug Low Loss Cable Using LMR-400-FR 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.

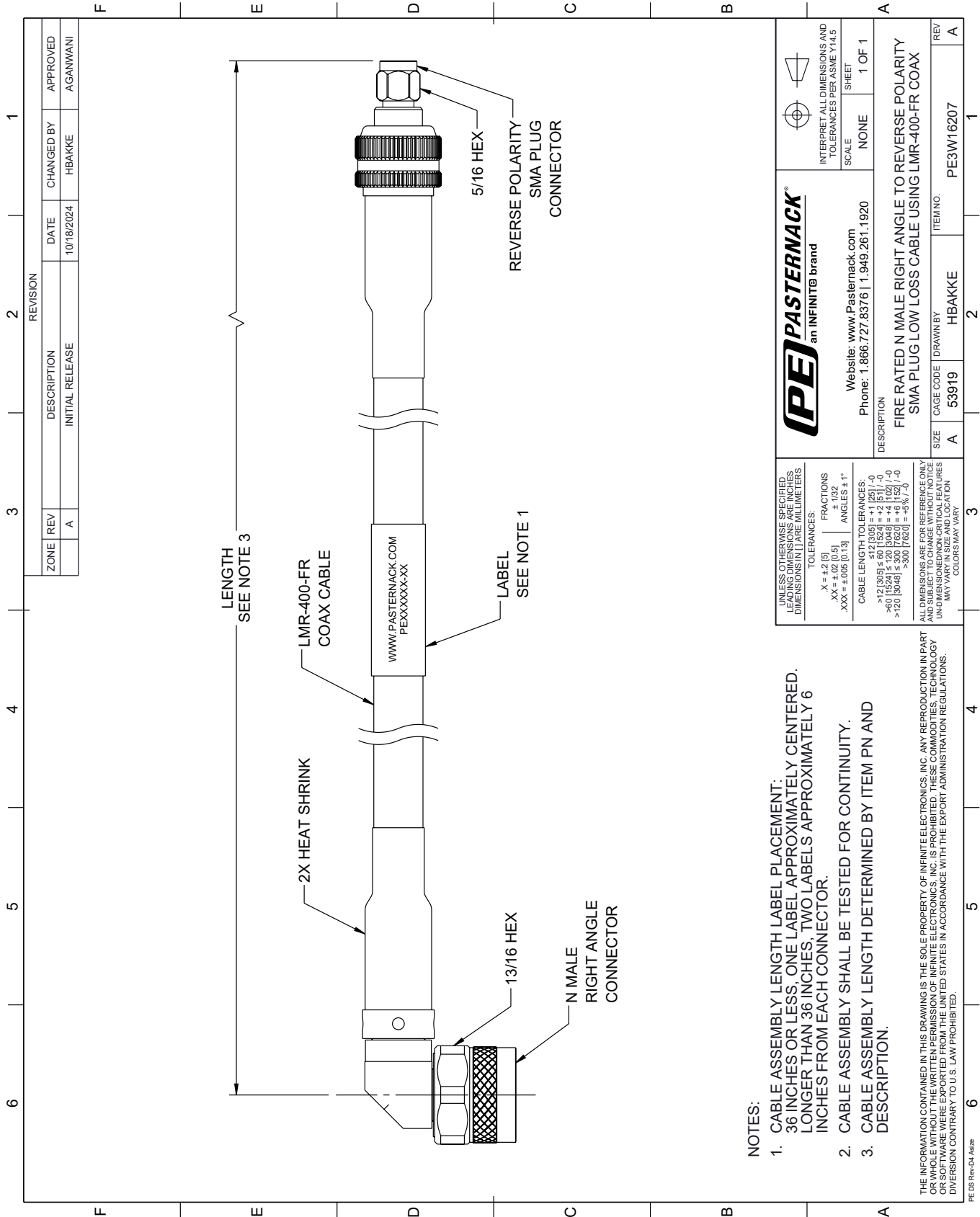
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male Right Angle to Reverse Polarity SMA Plug Low Loss Cable Using LMR-400-FR Coax PE3W16207](https://www.pasternack.com/fire-rated-n-male-right-angle-to-reverse-polarity-sma-plug-low-loss-cable-using-lmr-400-fr-pe3w16207-p.aspx)

URL: <https://www.pasternack.com/fire-rated-n-male-right-angle-to-reverse-polarity-sma-plug-low-loss-cable-using-lmr-400-fr-pe3w16207-p.aspx>

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PE3W16207 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 ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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

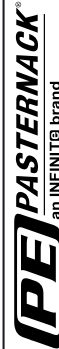
TOLERANCES:

X = +.2 [5] ±.132
 .XX = ±.02 [0.5] ±.132
 .XXX = ±.005 [0.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524] = +.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = +.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +.6 [15] / -0

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



Website: www.Pasternack.com
 Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
 SCALE NONE
 SHEET 1 OF 1

DESCRIPTION		REV	
FIRE RATED N MALE RIGHT ANGLE TO REVERSE POLARITY SMA PLUG LOW LOSS CABLE USING LMR-400-FR COAX		SIZE	A
CAGE CODE	53919	DRAWN BY	HBAKKE
ITEM NO.	PE3W16207	REV	A