

SMA Male to SMA Female Bulkhead Low Loss Space Cable Using PE-R200LL Coax



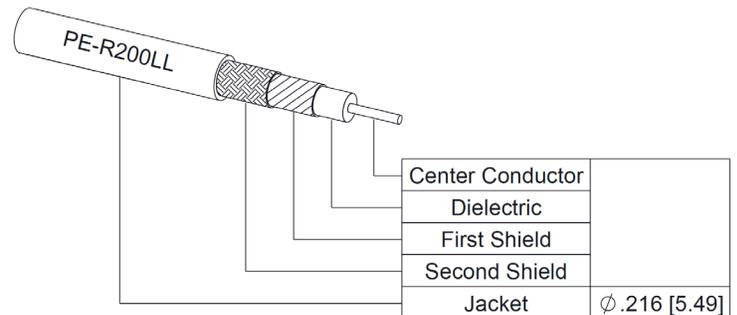
PE3C100012

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female Bulkhead
- Cable Type: PE-R200LL
- Coax Flex Type: Flexible

Features

- Max Frequency 26 GHz
- Shielding Effectivity > 100 dB
- 82% Phase Velocity
- Double Shielded
- ETFE Jacket
- Up to 300 Mrad of Radiation Resistance
- Low Outgassing (TML <1%, CVCM <1%) per ASTM E-595
- Operating Temperature -65 to +150 Deg C
- Built in a Facility with < 100,000 Particles/sq ft
- Built to IPC-A-620 Class 3



Applications

- General Purpose
- Laboratory Use
- Vacuum Environments
- Low Earth Orbit (LEO)
- Space (Exploration, Launches, Maintenance, Stations)
- Ground Systems
- Satellites

Description

Pasternack's PE3C100012 SMA male to SMA female bulkhead cable using PE-R200LL 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 PE-R200LL coax. The PE3C100012 SMA male to SMA female cable assembly operates to 26 GHz. Our RF cable assembly with SMA 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 Pasternack cable assembly provides excellent shielding effectiveness of better than 100 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		26	GHz
VSWR			1.4:1	
Velocity of Propagation		82		%
RF Shielding	100			dB

SMA Male to SMA Female Bulkhead Low Loss
Space Cable Using PE-R200LL Coax



PE3C100012

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C100012	Custom Lengths Available	Insertion Loss (Typ.)	0.068	0.098	0.15	0.22	0.409	dB/ft	
			0.23	0.33	0.5	0.73	1.35	dB/m	
PE3C100012-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.35	0.42	0.61	dB	0.11
PE3C100012-18	18 Inch	Insertion Loss (Typ.)	0.31	0.35	0.43	0.53	0.82	dB	0.134
PE3C100012-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.5	0.64	1.02	dB	0.158
PE3C100012-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.53	0.7	0.93	1.55	dB	0.22
PE3C100012-200CM	200 CM	Insertion Loss (Typ.)	0.65	0.85	1.19	1.65	2.89	dB	0.377

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:	0.11 pounds
Additional Weight per Inch:	0.004 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.437 in [11.1 mm]
Weight	0.11 lbs [49.9 g]

Cable

Cable Type	PE-R200LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver plated copper
Shield Layer 2	Silver plated copper
Jacket Material	ETFE, Black
Jacket Diameter	0.216 in [5.49 mm]
One Time Minimum Bend Radius	1.08 in [27.43 mm]

SMA Male to SMA Female Bulkhead Low Loss
Space Cable Using PE-R200LL Coax



PE3C100012

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female Bulkhead
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Stainless Steel, Passivated	Stainless Steel, Passivated

Environmental Specifications

Operating Range Temperature -65 to +150 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

SMA Male to SMA Female Bulkhead Low Loss Space Cable Using PE-R200LL Coax



PE3C100012

Typical Performance Data

How to Order

Part Number Configuration:

PE3C100012

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C100012-12 = 12 inches long cable
PE3C100012-100cm = 100 cm long cable

SMA Male to SMA Female Bulkhead Low Loss Space Cable Using PE-R200LL 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.

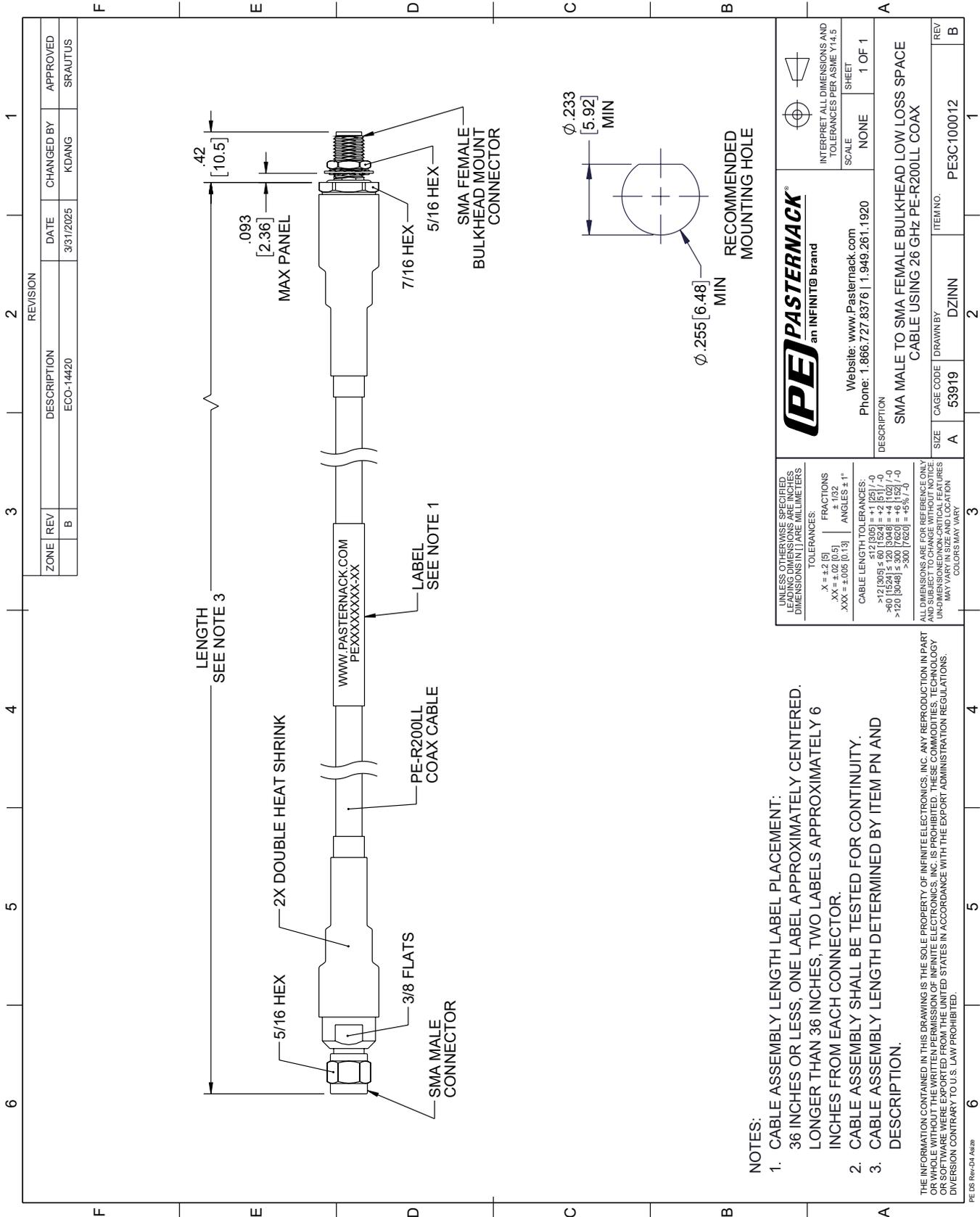
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Bulkhead Low Loss Space Cable Using PE-R200LL Coax PE3C100012](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-bulkhead-low-loss-space-cable-using-pe-r200ll-pe3c100012-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. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C100012 CAD Drawing

SMA Male to SMA Female Bulkhead Low Loss Space Cable Using PE-R200LL Coax



- NOTES:**
- 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.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
 - 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 ARE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

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 (304.8) ≤ 60 (1524) = ±.1 (2.5) / -0
 >60 (1524) ≤ 120 (3048) = ±.4 (10.2) / -0
 >120 (3048) ≤ 300 (7620) = ±.6 (15.2) / -0
 >300 (7620) = ±.8 (20.3) / -0

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

PE PASTERNAK®
 an INFINIT® brand

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	SIZE	CAGE CODE	DRAWN BY	ITEM NO.
SMA MALE TO SMA FEMALE BULKHEAD LOW LOSS SPACE CABLE USING 26 GHZ PE-R200LL COAX	A	53919	DZINN	PE3C100012