Low Loss .047 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables
Technical Data Sheet

PECX001

Configuration

- Low Loss Semi-Rigid Cable
- 1 Shield(s)

Features

- Continuous Copper Outer Conductor
- Low Density Microporous Dielectric
- Phase Stability vs. Temperature
- Mechanical Stability vs. Temperature
- High Isolation
- Supplied in 5 foot maximum straight lengths

Applications

- Low Loss Cabling
- Phase Matched Microporous Cables
- High Isolation Interconnects
- Surface Mount Cabling
- Semi-Rigid Cable Assemblies

Description

Pasternack's PECX001 low loss semi-rigid coax with copper outer conductor and microporous dielectric is part of our full line of RF components available for same-day shipping. This low loss semi-rigid coaxial cable operates to a maximum frequency range of 115 GHz. The outer conductor is served by a continuous copper tube which provides extremely high levels of RF shielding and low attenuation. The low density microporous dielectric of this semi rigid coax reduces the dielectric losses and also provides more phase stability over temperature when compared to solid PTFE dielectric. An additional benefit of the microporous dielectric is its mechanical stability over temperature. Unlike solid PTFE, this low density PTFE material can handle soldering heat with minimal or no measurable extrusion on the ends of the cable. This minimizes stress on connectors and allows for more predictable termination on PCB, surface mount applications.

Our microporous dielectric low loss semi-rigid coax cable, PECX001 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave interconnects allows designers to configure and customize their signal connections however they like. Whether the need is to provide a high isolation, phase stable signal path or simply create a custom cable assembly configuration, Pasternack has the right cable for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		115	GHz
Impedance		50 2		Ohms
Velocity of Propagation		76.5		%

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Low Loss .047 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX001

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
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Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	5	10	18	26.5	GHz
Attenuation, Typ	21	68	96	130	160	dB/100ft
	68.9	223.1	314.96	426.51	524.93	dB/100m
Input Power (CW), Max	110	32	21	16	13	Watts

Mechanical Specifications

Min. Bend Radius (Installation) 0.125 in [3.18 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand ASTM B-298	0.013 in 0.33 mm
Conductor Type	Solid	
Dielectric	Microporous PTFE	0.037 in [0.94 mm]
Outer Conductor	Copper	0.047 in 1.19 mm

Environmental Specifications

Temperature

Operating Range -65 to +225 deg C

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Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Low Loss .047 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections 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.

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URL: https://www.pasternack.com/low-loss-semirigid-047-coax-cable-copper-straight-pecx001-p.aspx

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PECX001 CAD Drawing

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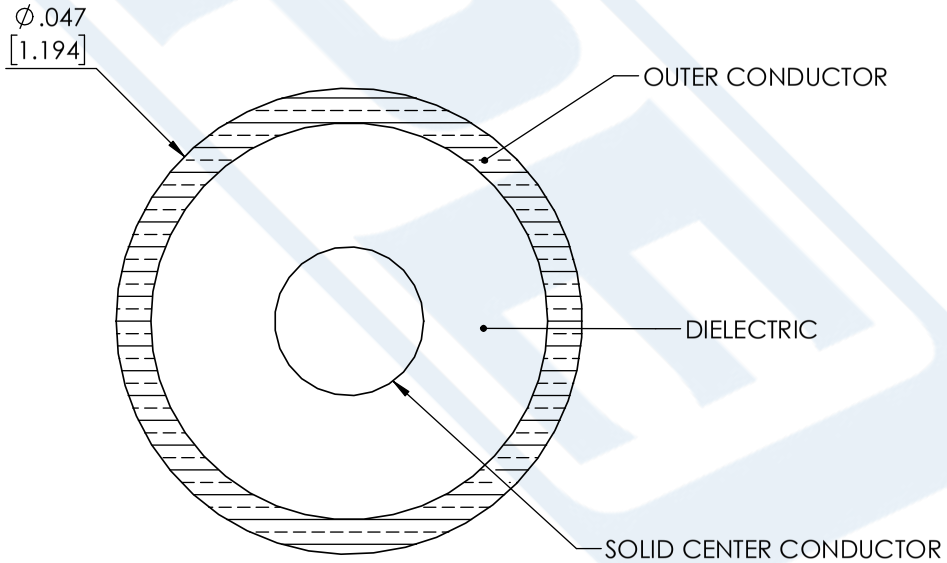

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

PASTERNACK® THE ENGINEER'S RF SOURCE
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DWG TITLE
PECX001

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

CAGE CODE 53919	CAD FILE 06/14/18	SCALE N/A	SIZE A	CN2245