

Low Loss .070 Semi-Rigid Coax Cable, Tin Plated Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections



PECX004-BULK

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 PECX004 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 72 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, PECX004 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 | | 72 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 76.5 | | % |
| Power@ 1GHz | | | 188 | Watts |

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|-------|-------|--------|--------|----------|
| Frequency | 0.5 | 1 | 5 | 10 | 18 | GHz |
| Attenuation, Typ | 13.2 | 18.6 | 42 | 60 | 81 | dB/100ft |
| | 43.31 | 61.02 | 137.8 | 196.85 | 265.75 | dB/100m |
| Input Power (CW), Max | 265 | 188 | 83 | 58 | 43 | Watts |

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| Description | F6 | F7 | F8 | F9 | F10 | Units |
|------------------|-------|--------|--------|--------|-----|----------|
| Frequency | 26.5 | 40 | 50 | 65 | | GHz |
| Attenuation, Typ | 99 | 123 | 138.8 | 160 | | dB/100ft |
| | 324.8 | 403.54 | 455.38 | 524.93 | | dB/100m |

Mechanical Specifications

| | |
|---------------------------------|--------------------------|
| Weight | 0.008 lbs/ft [0.01 kg/m] |
| Min. Bend Radius (Installation) | 0.25 in [6.35 mm] |

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|--------------------------|-------------------|
| Inner Conductor | Copper, Silver, 1 Strand | 0.02 in [0.51 mm] |
| | ASTM B-298 | |
| Conductor Type | Solid | |
| Dielectric | Microporous PTFE | 0.059 in [1.5 mm] |
| Outer Conductor | Copper, Tin | 0 in [0 mm] |
| | ASTM B545 | |

Environmental Specifications

| | |
|-----------------|-------------------|
| Temperature | |
| Operating Range | -65 to +250 deg C |

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

Plotted and Other Data

Notes:

Low Loss .070 Semi-Rigid Coax Cable, Tin Plated 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss .070 Semi-Rigid Coax Cable, Tin Plated Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX004-BULK](#)

URL: <https://www.pasternack.com/low-loss-semirigid-070-coax-cable-tin-plated-copper-straight-pecx004-bulk-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.

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