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

## RF Cables Technical Data Sheet

**PECX004** 

## Configuration

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

### **Features**

- Continuous Copper Outer Conductor
- Low Density Microporous Dielectric
- Phase Stability vs. Temperature

### Applications

- Low Loss Cabling
- Phase Matched Microporous
- Cables
- High Isolation Interconnects
- Surface Mount Cabling

Mechanical Stability vs. Temperature

Supplied in 5 foot maximum straight lengths

**High Isolation** 

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		%

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

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Frequency         0.5         1         5         10         18         GHz           Attenuation, Typ         14         20         45         64         87         dB/1001           Attenuation, Typ         14         20         45         64         87         dB/1001           Input Power (CW), Max         265         188         83         58         43         Watts           Chanical Specifications         0.25 in [6.35 mm]         O.25 in [6.35 mm]         Ocnstruction Specifications         O.25 in [6.35 mm]           Construction Specifications         0.25 in [6.35 mm]         O.02 in 0.51 mm         ASTM B-298           Conductor         Copper, Silver, 1 Strand ASTM B-298         0.02 in 0.51 mm         O.02 in 0.51 mm           Conductor Type         Solid         0.07 in 1.78 mm         ASTM B545           Outer Conductor         Copper, Tin ASTM B545         0.07 in 1.78 mm         ASTM B545	Description	F1	F2	F3	F4	F5	Units	
45.93       65.62       147.64       209.97       285.43       dB/100r         Input Power (CW), Max       265       188       83       58       43       Watts         Chanical Specifications Min. Bend Radius (Installation)       0.25 in [6.35 mm]         Construction Specifications         Description       Material and Plating       Diameter         Inner Conductor       Copper, Silver, 1 Strand ASTM B-298       0.02 in 0.51 mm         Conductor Type       Solid       0.02 in 0.51 mm         Dielectric       Microporous PTFE       0.059 in [1.5 mm]         Outer Conductor       Copper, Tin ASTM B545       0.07 in 1.78 mm	Frequency	0.5	1	5	10	18	GHz	
Input Power (CW), Max 265 188 83 58 43 Watts thanical Specifications Min. Bend Radius (Installation) Construction Specifications Description Material and Plating Diameter Inner Conductor Copper, Silver, 1 Strand ASTM B-298 Conductor Type Solid Dielectric Microporous PTFE 0.059 in [1.5 mm] Outer Conductor Copper, Tin ASTM B545	Attenuation, Typ						dB/100ft	
chanical Specifications       0.25 in [6.35 mm]         Construction Specifications       Description       Material and Plating       Diameter         Inner Conductor       Copper, Silver, 1 Strand ASTM B-298       0.02 in 0.51 mm       0.02 in 0.51 mm         Conductor Type       Solid       0.059 in [1.5 mm]       0.07 in 1.78 mm         Dielectric       Copper, Tin ASTM B545       0.07 in 1.78 mm								
Min. Bend Radius (Installation)       0.25 in [6.35 mm]         Construction Specifications       Description       Material and Plating       Diameter         Inner Conductor       Copper, Silver, 1 Strand ASTM B-298       0.02 in 0.51 mm       0.02 in 0.51 mm         Conductor Type       Solid       0.059 in [1.5 mm]       0.059 in [1.5 mm]         Dielectric       Microporous PTFE       0.07 in 1.78 mm         Outer Conductor       Copper, Tin ASTM B545       0.07 in 1.78 mm	Input Power (CW), Max	265	188	83	58	43	Watts	
DescriptionMaterial and PlatingDiameterInner ConductorCopper, Silver, 1 Strand ASTM B-2980.02 in 0.51 mmConductor TypeSolidDielectricMicroporous PTFE0.059 in [1.5 mm]Outer ConductorCopper, Tin ASTM B5450.07 in 1.78 mmironmental Specifications Temperature	Min. Bend Radius (Instal	lation)		0.	25 in [6.35 mr	n]		
Inner Conductor       Copper, Silver, 1 Strand ASTM B-298       0.02 in 0.51 mm         Conductor Type       Solid       0.059 in [1.5 mm]         Dielectric       Microporous PTFE       0.059 in [1.5 mm]         Outer Conductor       Copper, Tin ASTM B545       0.07 in 1.78 mm		tions	Motorio	Lond Plating	A	Diamoto		
Dielectric       Microporous PTFE       0.059 in [1.5 mm]         Outer Conductor       Copper, Tin ASTM B545       0.07 in 1.78 mm         ironmental Specifications Temperature       Figure 100 mm		Copper, Silver, 1 Strand 0.02 in 0.51 mm						
Outer Conductor Copper, Tin ASTM B545	Conductor Type	Solid						
ASTM B545	Dielectric	Microporous PTFE 0.059 in [1.5 mm]						
Temperature	Outer Conductor							
	Temperature	tions		-6	5 to +250 deg	۱C		

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

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**PECX004** 

Compliance Certifications (see product page for current document)

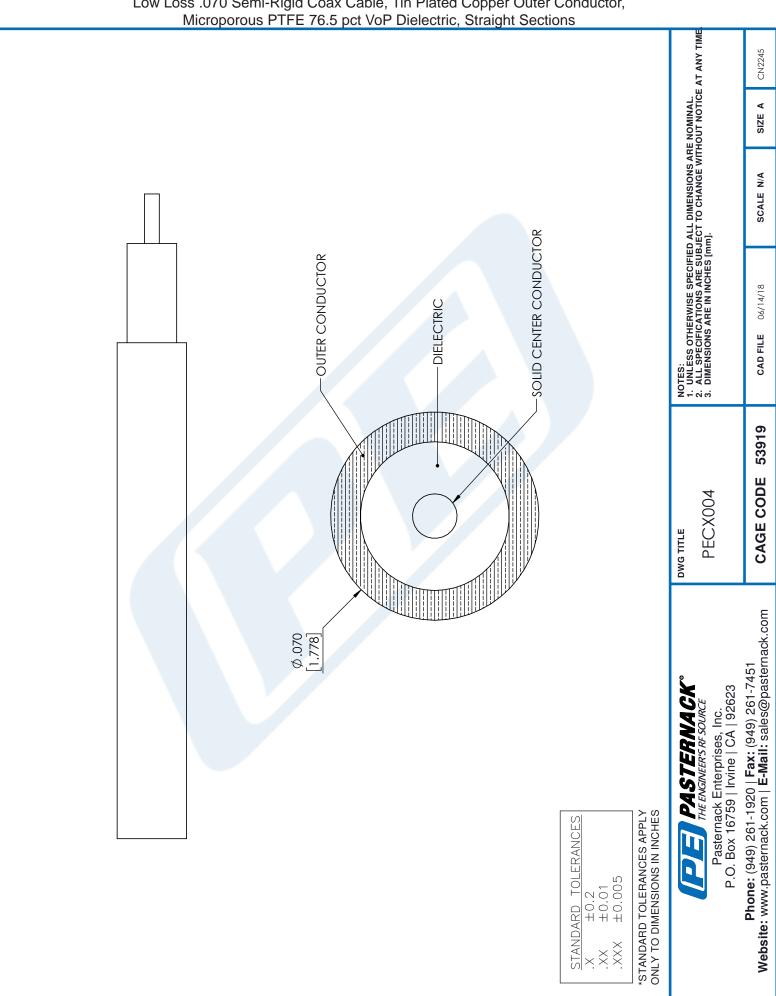
#### Plotted and Other Data Notes:

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.

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

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.



# PECX004 CAD Drawing

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