



TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316

RF Connectors Technical Data Sheet

PE1964

Configuration

- TNC Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG188, RG316
- Bulkhead

Features

- Max. Operating Frequency 4.5 GHz
- Excellent VSWR of 1.2:1
- Gold Plated Phosphor Bronze Contact
- Hermetically Sealed

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE1964, TNC, Hermetically Sealed, Connector is part of our full line of RF components available for same-day shipping. Our TNC female connector operates up to a maximum frequency of 4.5 GHz and offers excellent VSWR of 1.2:1. This TNC bulkhead connector 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.

Our TNC female bulkhead connector PE1964 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector 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		4.5	GHz
VSWR			1.2:1	
Insertion Loss			0.212	dB
Operating Voltage (AC)			500	Vrms
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Inner Conductor DC Resistance			1.5	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	5,000			MOhms

Mechanical Specifications

Size

Length
Width

1.19 in [30.23 mm]
0.69 in [17.53 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 PE1964](#)



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RF Connectors Technical Data Sheet

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Height	0.69 in [17.53 mm]
Weight	0.01 lbs [3.63 g]
Mating Cycles	500 Cycles
Mating Torque	4.1 to 6.1 in-lbs [0.46 to 0.69 Nm]
Cable Retention Force	6.1 lbs 2.77 kg

Material Specifications

Description	Material	Plating
Contact	Phosphor Bronze	Gold
Insulation	PTFE	
Body	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range	-65 to +165 deg C
Humidity	MIL-STD-202, Method106
Thermal Shock	MIL-STD-202, Method107, Condition B
Salt Spray	MIL-STD-202, Method101, Condition B
Hermetic Seal	1*10-6cc/sec helium at 1atm

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

Plotted and Other Data

Notes:

TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG316 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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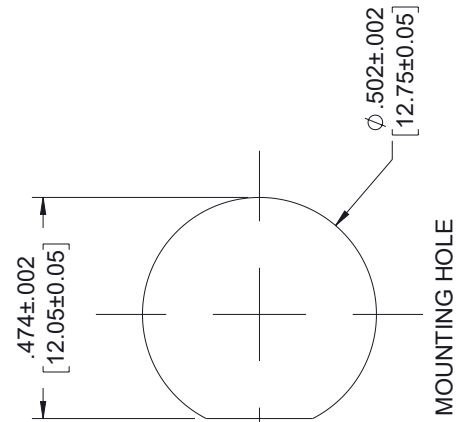
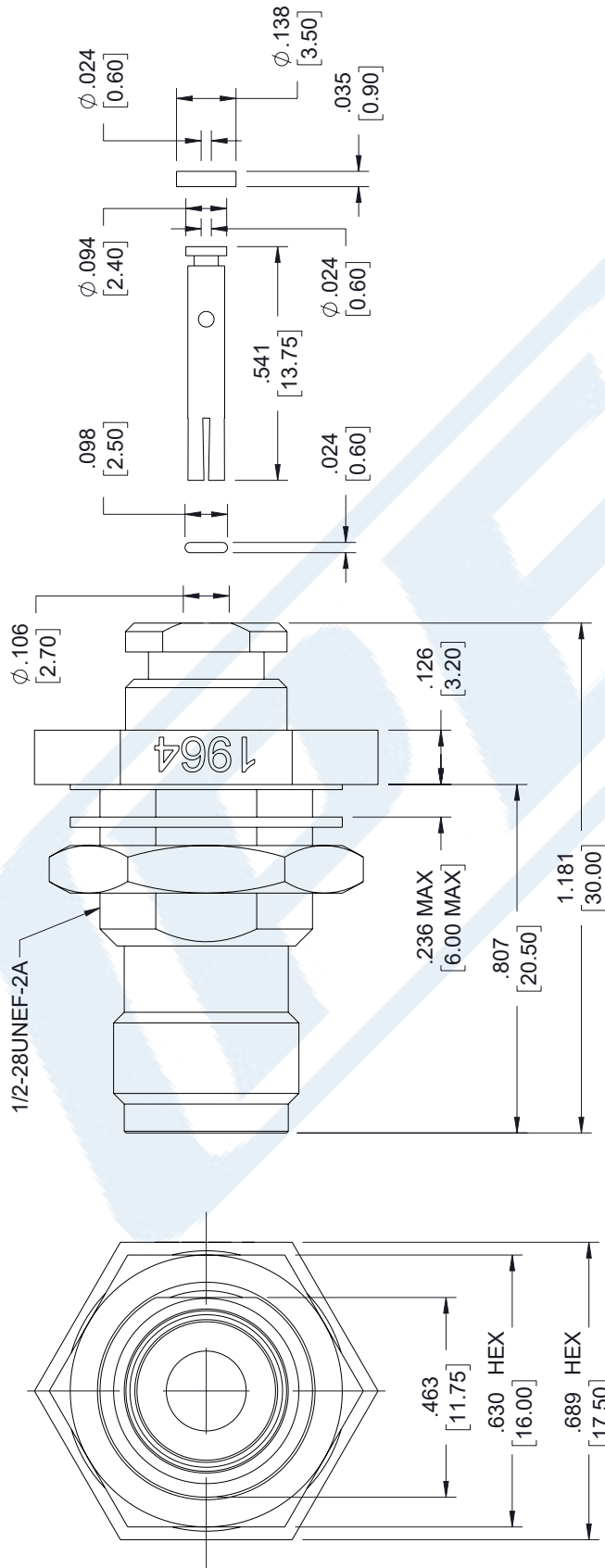
URL: <https://www.pasternack.com/tnc-female-rg174-rg188-rg316-connector-pe1964-p.aspx>

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PE1964 CAD Drawing

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Clamp/Solder Attachment for RG174, RG188, RG316

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12/13/2022	AGANWANI



THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

PE PASTERNAK
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E-mail: sales@pasternack.com

SIZE A CAGE CODE 53919 DRAWN BY HBAKKE ITEM NO. PE1964 REV A

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

TOLERANCES:

X = ± .2	[5.08]	FRACTIONS
XX = ± .02	[.51]	± 1/32
XXX = ± .005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	= +1 [25] / -0
12 [305] < L ≤ 60 [1524]	= +2 [51] / -0
60 [1524] < L ≤ 120 [3048]	= +4 [102] / -0
120 [3048] < L ≤ 300 [7620]	= +6 [152] / -0
300 [7620] < L	= +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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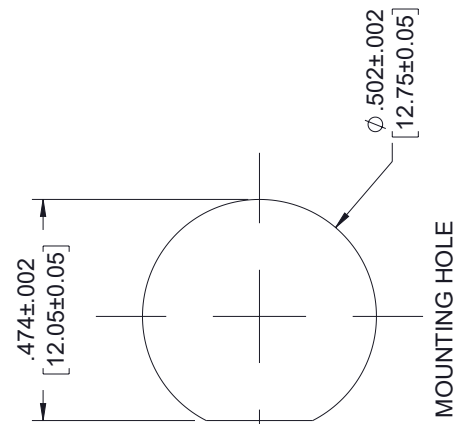
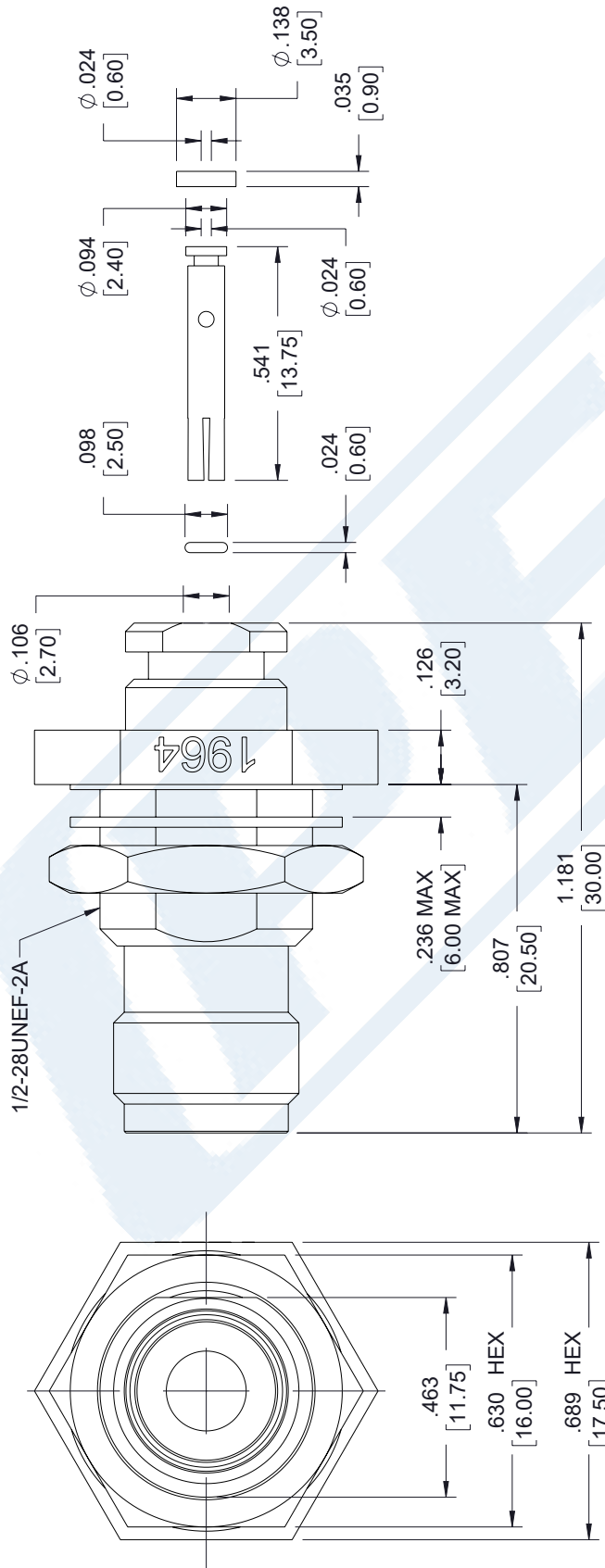
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T-Rev.D

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

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 PECX007 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 34 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, PECX007 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		34	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 .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX007](#)

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	18	GHz
Attenuation, Typ	7.5	10.5	24	34	46	dB/100ft
	24.61	34.45	78.74	111.55	150.92	dB/100m
Input Power (CW), Max	820	580	240	170	130	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	20					GHz
Attenuation, Typ	52					dB/100ft
	170.6					dB/100m
Input Power (CW), Max	115					Watts

Mechanical Specifications

Min. Bend Radius (Installation) 0.5 in [12.7 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand ASTM B-298	0.04 in 1.02 mm
Conductor Type	Solid	
Dielectric	Microporous PTFE	0.118 in [3 mm]
Outer Conductor	Copper	0.141 in 3.58 mm

Environmental Specifications

Temperature

Operating Range -65 to +200 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX007](#)

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

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

Plotted and Other Data

Notes:

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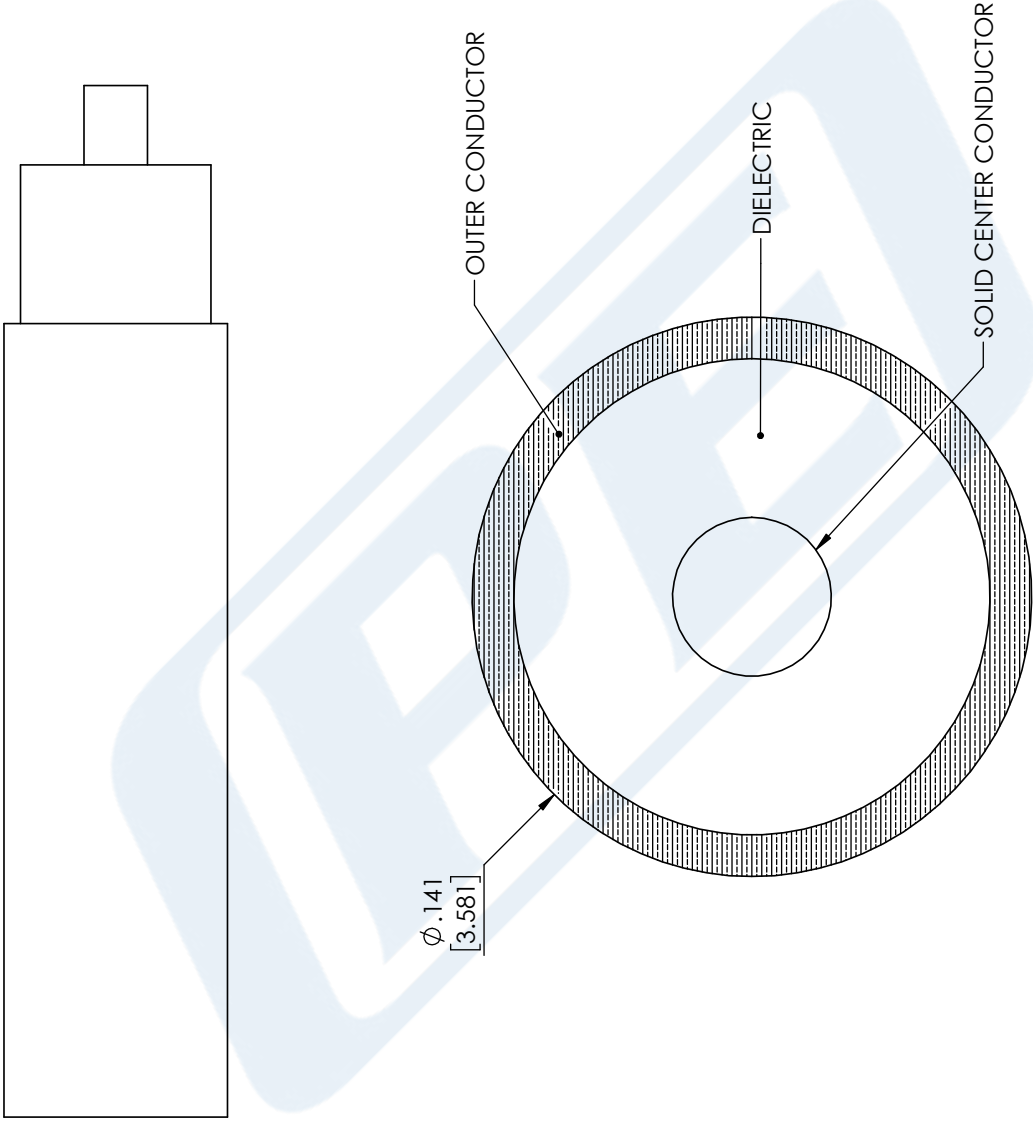
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URL: <https://www.pasternack.com/low-loss-semirigid-141-coax-cable-copper-straight-pecx007-p.aspx>

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PECX007 CAD Drawing

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor,
Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections



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

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PECX007

CAGE CODE 53919

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].

CAD FILE 06/14/18

SCALE N/A

SIZE A

CN2245