



TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG317

RF Connectors Technical Data Sheet

PE1965

Configuration

- TNC Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG188, RG317
- 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 PE1965, TNC, Standard, 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 PE1965 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	1.17 in [29.72 mm]
Width	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, RG317 PE1965](#)



TNC Female Bulkhead Mount Hermetically Sealed Connector
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RF Connectors
Technical Data Sheet

PE1965

Height	0.69 in [17.53 mm]
Weight	0.02 lbs [9.98 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, RG317 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: [TNC Female Bulkhead Mount Hermetically Sealed Connector Clamp/Solder Attachment for RG174, RG188, RG317 PE1965](#)

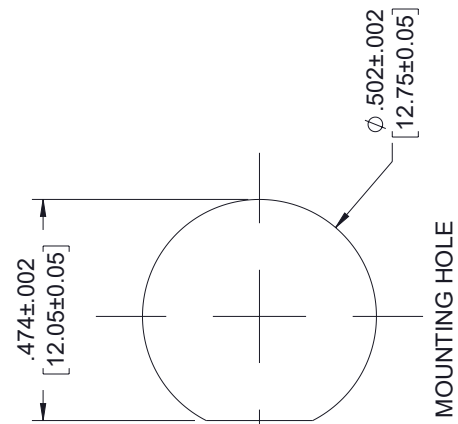
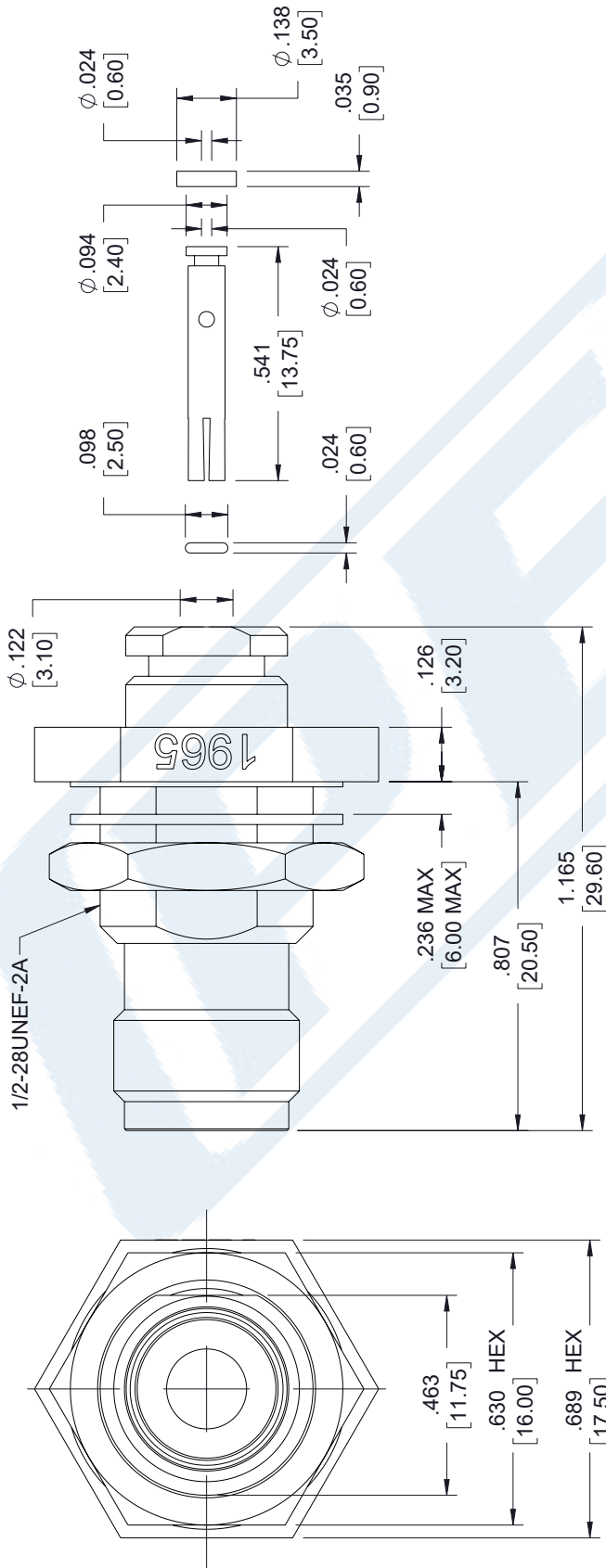
URL: <https://www.pasternack.com/tnc-female-rg174-rg188-rg317-connector-pe1965-p.aspx>

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.

PE1965 CAD Drawing

TNC Female Bulkhead Mount Hermetically Sealed Connector
Clamp/Solder Attachment for RG174, RG188, RG317

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
an INFINITE brand

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SIZE A CAGE CODE 53919 DRAWN BY HBAKKE ITEM NO. PE1965 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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SMP Female Right Angle Push-On Connector Crimp/
Solder Attachment for RG316, RG174, LMR-100

RF Connectors Technical Data Sheet

PE45128

Configuration

- Push-On SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG316, RG174, LMR-100 Interface Type
- Crimp/Solder Attachment

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.3:1	
Operating Voltage (AC)			350	Vrms

Mechanical Specifications

Size

Length	0.295 in [7.49 mm]
Width/Dia.	0.157 in [3.99 mm]
Height	0.311 in [7.9 mm]
Weight	0.00736 lbs [3.34 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold 30μ in. minimum
Insulation	Teflon	
Outer Conductor	Beryllium Copper	Gold 3μ in. minimum
Body	Brass	Gold 3μ in. minimum

Environmental Specifications

Temperature

Operating Range	-65 to 165 deg C
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45128](#)



SMP Female Right Angle Push-On Connector Crimp/ Solder Attachment for RG316, RG174, LMR-100

RF Connectors Technical Data Sheet

PE45128

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

Plotted and Other Data

Notes:

SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

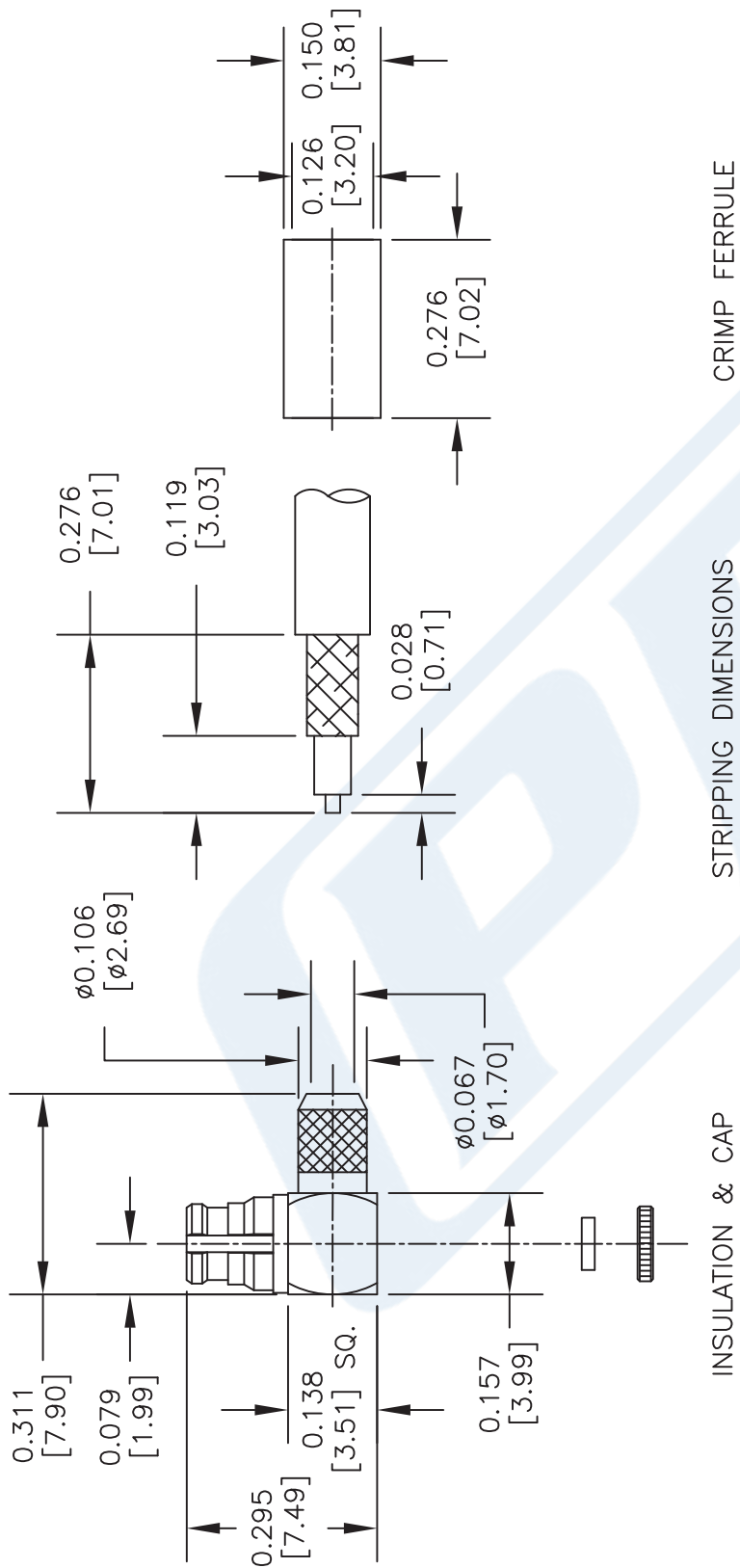
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45128](#)

URL: <https://www.pasternack.com/smp-female-push-on-rg316-rg174-lmr-100-connector-pe45128-p.aspx>

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PE45128 CAD Drawing

SMP Female Right Angle Push-On Connector Crimp/
Solder Attachment for RG316, RG174, LMR-100



ASSEMBLY PROCEDURES

1. STRIP THE CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE FERRULE ONTO THE CABLE.
3. FLARE THE BRAID, INSERT THE CONTACT AND SOLDER TO INTERNAL CONTACT.
4. SLIDE FERRULE OVER BRAID AND CRIMP WITH .130" [3.3] HEX. CRIMP TOOL.
5. INSERT THE INSULATION AND THE CAP.

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].

DWG TITLE

PE45128

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FSCM NO. 53919

CAD FILE 021015

SCALE N/A

SIZE A

200

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax



LMR-100A-UF

Times Microwave Systems Coax Cable Specification

Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 8 GHz
- Phase Velocity 66% VoP
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 0.25 inches

Applications

- RF Test Systems
- Antenna Installs
- Laboratory Applications
- General Purpose RF Interconnect
- Jumper Assemblies

Description

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-100-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-100-UF is constructed with a 0.110 inch diameter and Black TPE jacket.

LMR-100-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.110 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-100-UF TPE coax is constructed with PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-100-UF coax cable provides specs for this wire on its RF coax cable LMR-100-UF datasheet.

LMR-100-UF cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss ultra flexible LMR-100-UF coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Time Delay		1.54 [5.05]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance			81	Ohms/1000ft
Outer Conductor DC Resistance			9.5	Ohms/1000ft
Nominal Capacitance		30.8 [101.05]		pF/ft [pF/m]

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax



LMR-100A-UF

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Nominal Inductance		0.077 [0.25]		uH/ft [uH/m]
Input Power (Peak)			600	Watts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	5.1	8.9	10.9	15.8	22.8	dB/100ft
	16.73	29.2	35.76	51.84	74.8	dB/100m
Input Power (CW), Max	180	100	83	57	39	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	30.1	33.2	35.2	39.8	64.1	dB/100ft
	98.75	108.92	115.49	130.58	210.3	dB/100m
Input Power (CW), Max	29	27	25	22	13	Watts

Mechanical Specifications

Diameter	0.11 in [2.79 mm]
Weight	0.008 lbs/ft [0.01 kg/m]
Min. Bend Radius (Installation)	0.25 in [6.35 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Tensile Strength	15 lbs [6.8 kg]
Flat Plate Crush	10 lbs/in [0.18 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.018 in [0.46 mm]
Conductor Type	Stranded	
Dielectric	PE	0.06 in [1.52 mm]
First Shield	Aluminum Tape	0.068 in [1.73 mm]
Second Shield	Tinned Copper	0.083 in [2.11 mm]
Jacket	TPE, Black	0.11 in [2.79 mm]

Environmental Specifications

Temperature Operating Range	-40 to +85 deg C
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LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax



LMR-100A-UF

Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

Plotted and Other Data

Notes:

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URL: <https://www.pasternack.com/low-loss-flexible-lmr-100a-uf-tpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-uf-p.aspx>

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LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax