



# N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

## RF Connectors Technical Data Sheet



TC-402-NM-LP

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TFT-402, TFT-402-LF
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 200 μin contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Distributed Antenna Systems (DAS)
- Wireless Communications
- Low PIM Applications

#### Description

Pasternack's TC-402-NM-LP type N male connector with solder/solder attachment for TFT-402 and TFT-402-LF is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The type N male connector also has low passive intermodulation of -160 dBc.

Our type N male connector TC-402-NM-LP 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		6	GHz
VSWR			1.3:1	
Insertion Loss			0.24	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			2,500	Vdc
Insulation Resistance	10,000			MOhms

Electrical Specification Notes:  
Insertion Loss is  $0.1 \cdot \sqrt{f(\text{GHz})}$

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NM-LP](#)



N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

RF Connectors  
Technical Data Sheet

**Mechanical Specifications**

**Size**

Length 1.043 in [26.49 mm]  
Width/Dia. 0.808 in [20.52 mm]

Mating Cycles 500 Cycles  
Mating Torque 15 in-lbs [1.70 Nm]  
Cable Retention Force 56 lbs [25.4 kg]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 200 µin
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin
Coupling Nut	Brass	Tri-Metal 80 µin
Gasket	Silicone Rubber	

**Environmental Specifications**

**Temperature**

Operating Range -40 to +125 deg C  
Shock MIL-STD 202G, Meth. 213, Cond. I  
Vibration MIL-STD 202G, Meth. 204, Cond. B  
Thermal Shock MIL-STD 202G, Meth. 107, Cond. B

Environmental Specification Notes:  
Climatic Class: IEC 60068 55/155/56

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NM-LP](#)



## N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

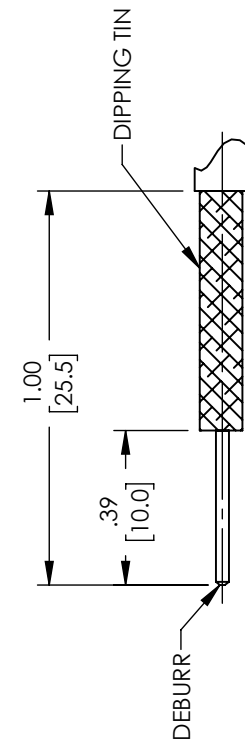
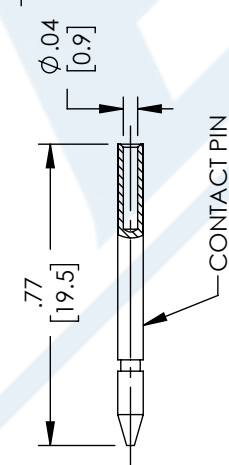
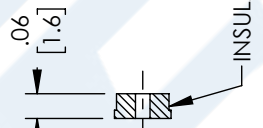
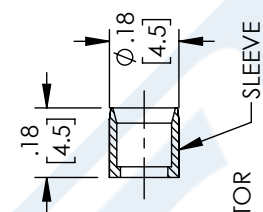
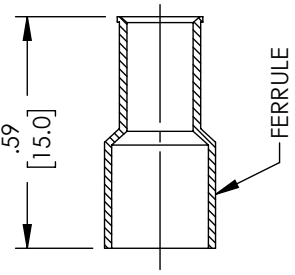
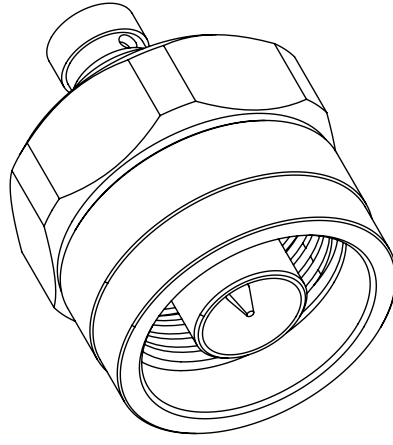
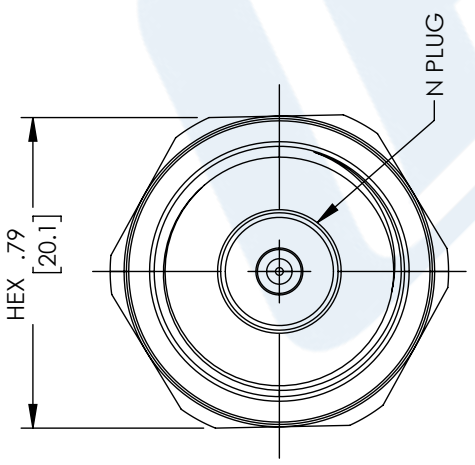
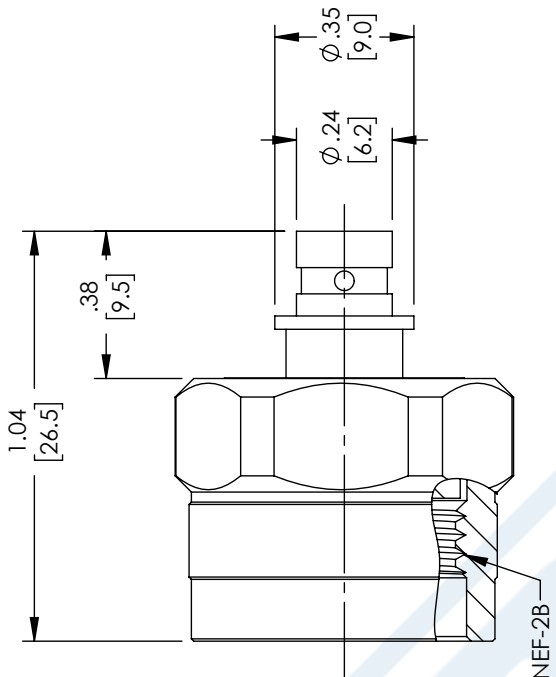
### RF Connectors Technical Data Sheet

N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF 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: [N Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NM-LP](https://www.pasternack.com/n-male-tft-402-connector-tc-402-nm-lp-p.aspx)

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SIZE A    CAGE CODE 53919    DRAWN BY DMAY    ITEM NO. TC-402-NM-LP	REV A

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## N Male Right Angle Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

### RF Connectors Technical Data Sheet


**TC-402-NM-RA-LP**

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: TFT-402, TFT-402-LF
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5  $\mu$ m contact plating
- IP 67 Rated

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Distributed Antenna Systems (DAS)
- Wireless Communications
- Low PIM Applications

#### Description

Pasternack's TC-402-NM-RA-LP type N male right angle connector with solder/solder attachment for TFT-402 and TFT-402-LF is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The type N male connector also has low passive intermodulation of -160 dBc. Its right angle body geometry allows for easier connections in tight spaces. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our type N male right angle connector TC-402-NM-RA-LP 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		6	GHz
VSWR			1.3:1	
Insertion Loss			0.1	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			1,000	Vdc
Inner Conductor DC Resistance			1	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NM-RA-LP](#)



N Male Right Angle Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

RF Connectors  
Technical Data Sheet

Electrical Specification Notes:  
Insertion Loss is  $0.1 \cdot \sqrt{f(\text{GHz})}$

**Mechanical Specifications**

**Size**

Length 1.094 in [27.79 mm]  
Width/Dia. 0.37 in [9.40 mm]

Mating Torque 10 in-lbs [1.13 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 5 $\mu$ m
Insulation	PTFE	
Body	Brass	Tri-Metal 3 $\mu$ m
Coupling Nut	Brass	Tri-Metal 3 $\mu$ m
Gasket	Silicone Rubber	

**Environmental Specifications**

**Temperature**

Operating Range -55 to +155 deg C  
Ingress Protection (IP) Rating IP 67 Rated  
Shock US MIL-STD 202, Meth. 213, Cond. I  
Vibration US MIL-STD 202, Meth. 204, Cond. B  
Thermal Shock US MIL-STD 202, Meth. 107, Cond. B

Environmental Specification Notes:  
Weather Standard: TEC 60068 55/155/21

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NM-RA-LP](#)



## N Male Right Angle Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

### RF Connectors Technical Data Sheet



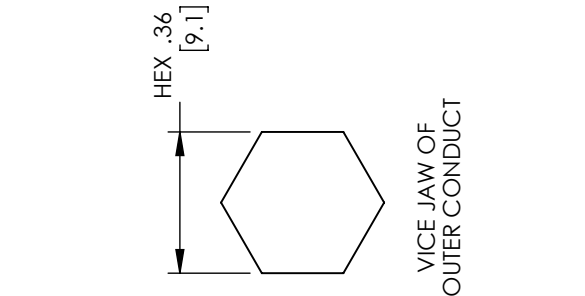
TC-402-NM-RA-LP

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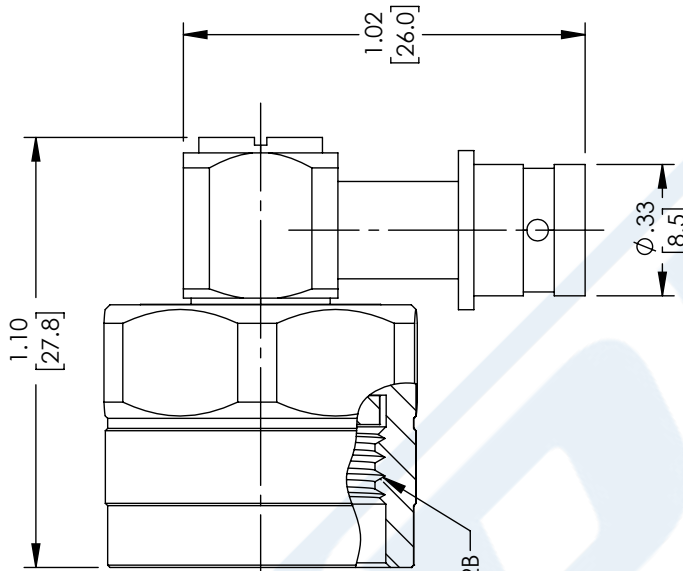
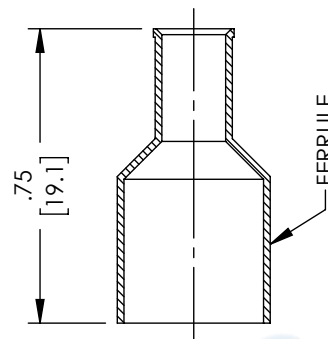
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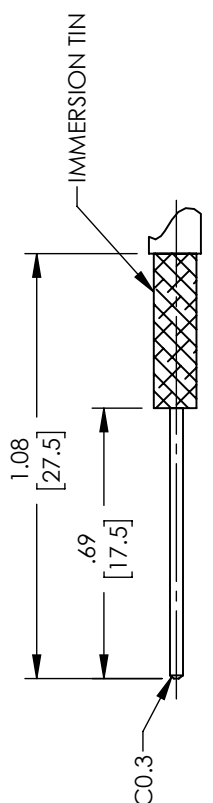
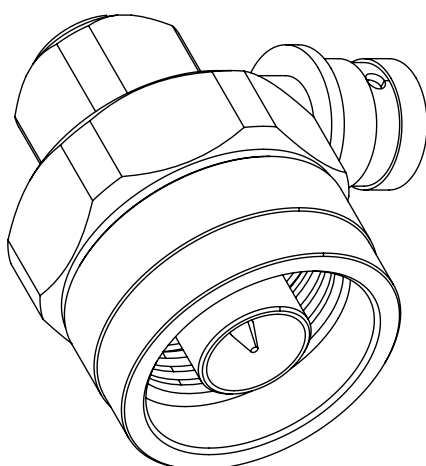
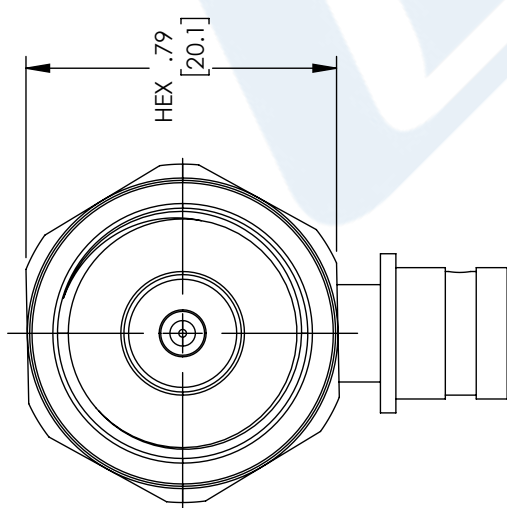
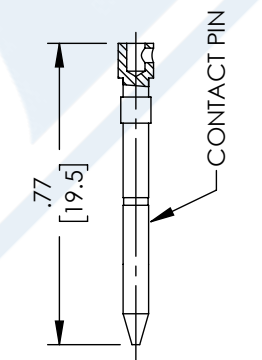
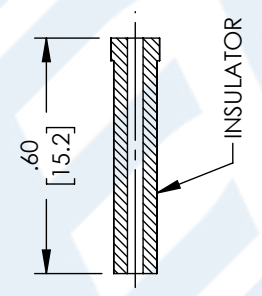
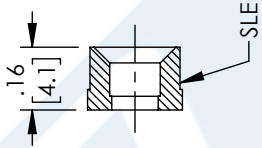
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5/8-24UNEF-2B



RECOMMENDED CABLE STRIPPING DIM'S

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ±.1032  
 .XX = ±.02 [51] ANGLES ± 1°  
 .XXX = ±.005 [13] 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

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SHEET 1 OF 1

SCALE 2:1

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ITEM NO. TC-402-NM-RA-LP

SIZE A CAGE CODE 53919 DRAWN BY DMAY

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## Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet



TFT-402

## Times Microwave Systems Coax Cable Specification

### Configuration

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

### Features

- PIM < -160 dBc
- Low Loss
- UL910 Plenum Rated Cable
- Good Shielding >80 dB
- Lightweight and Extremely Flexible
- Durable FEP Jacket

### Applications

- Base Stations
- Antenna Pigtails
- Distributed Antenna Systems
- (DAS)
- Plenum Installations
- Small Cells
- Multi-Carrier Communication Systems

### Description

TFT-402 low PIM flexible coax by Time Microwave is part of our full line of RF components available for same-day shipping. The TFT-402 plenum rated coaxial cable features a taped PTFE dielectric, a silver-plated copper center conductor, and a Flat Braid outer conductor. These features combine to make the Times Microwave TFT-402 an extremely flexible, low loss, low PIM coax cable that is well suited for Distributed Antenna Systems (DAS), plenum installations, or small cells. The durable FEP jacket makes this cable suitable for both indoor and outdoor use.

Our datasheet specifications and drawing with dimensions for Times Microwave TFT-402 coax cable are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM antenna pigtails or simply create a custom assembly configuration, Pasternack has the right TFT-402 cable assemblies for the job.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		76		%
Shielding Effectiveness	-80			dB
Inner Conductor DC Resistance			8.5	Ohms/1000ft
Outer Conductor DC Resistance			5.6	Ohms/1000ft
Nominal Capacitance		26.7 [87.6]		pF/ft [pF/m]
Input Power (Peak)			3	kWatts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket TFT-402](#)



## Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet



TFT-402

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.03	0.15	0.45	0.9	2	GHz
Attenuation, Typ	1.9	4.1	7.2	10.3	15.4	dB/100ft
	6.23	13.45	23.62	33.79	50.52	dB/100m
Input Power (CW), Max	3,000	1,340	770	550	370	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	2.5	5.8				GHz
Attenuation, Typ	17.3	26.7				dB/100ft
	56.76	87.6				dB/100m
Input Power (CW), Max	330	210				Watts

#### Mechanical Specifications

Diameter	0.16 in 4.06 mm
Weight	0.03 lbs/ft [0.04 Kg/m]
Min. Bend Radius (Installation)	0.75 in [19.05 mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand	0.037 in [0.94 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.113 in [2.87 mm]
First Shield	Silver Plated Copper Braid	0.121 in [3.07 mm]
Second Shield	Tinned Copper Braid	0.138 in [3.51 mm]
Jacket	FEP, Blue	0.16 in [4.06 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket TFT-402](#)



## Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +150 deg C

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

#### Plotted and Other Data

Notes:

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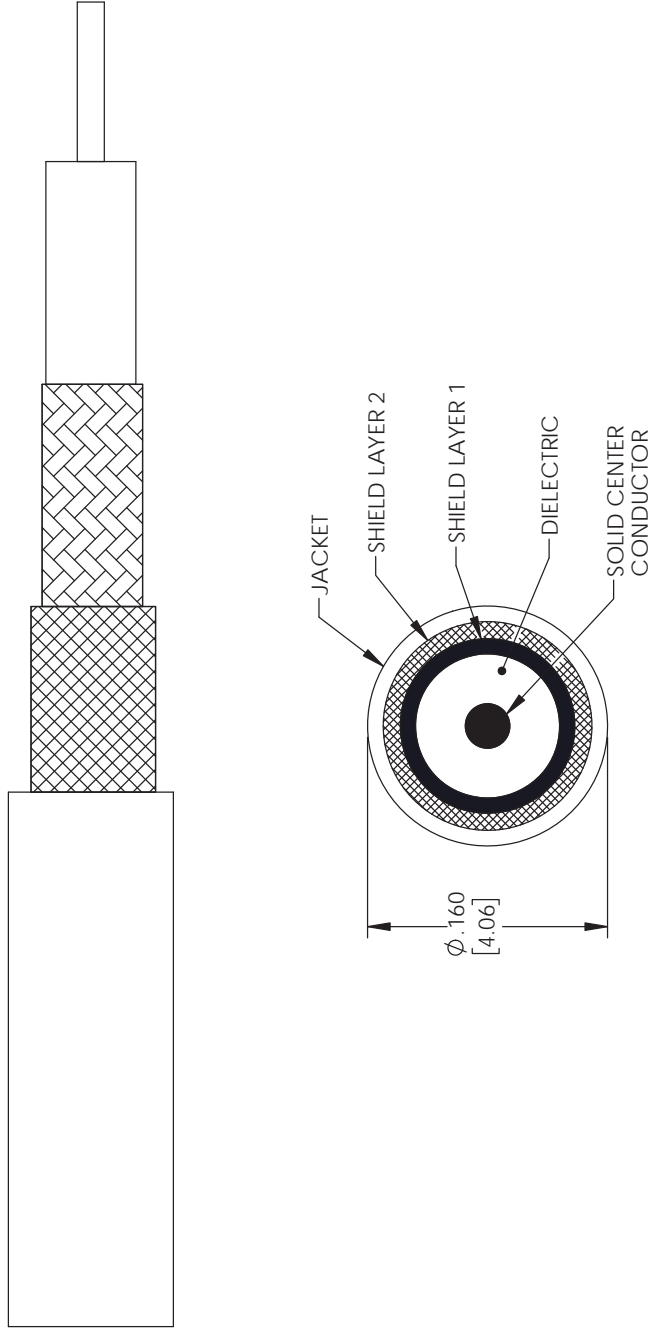
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URL: <https://www.pasternack.com/low-loss-flexible-tft-402-fep-jacket-silver-plated-copper-braid-over-tinned-copper-braid-outer-conductor-double-shielded-tft-402-p.aspx>

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**TFT-402 CAD Drawing**  
 Low PIM Flexible TFT-402 Outdoor Rated Coax Cable  
 Double Shielded with Blue FEP Jacket

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/15/21	S.ELLIS



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		<p>SIZE A    CAGE CODE 53919    DRAWN BY DFRISIELLO    ITEM NO. TTT-402</p>

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