



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

### RF Connectors Technical Data Sheet



TC-402-SM-LP

### Times Microwave Systems Connector Specification

#### Configuration

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

#### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- 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-SM-LP SMA 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 SMA male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our SMA male connector TC-402-SM-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			1.25:1	
Insertion Loss			0.15	dB
Operating Voltage (DC)			1,000	Vdc
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2.5	mOhms
Insulation Resistance	5,000			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: [SMA Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-SM-LP](#)



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

RF Connectors  
Technical Data Sheet



TC-402-SM-LP

**Mechanical Specifications**

<b>Size</b>	
Length	1.161 in [29.49 mm]
Width/Dia.	0.374 in [9.50 mm]
Mating Torque	9 in-lbs [1.02 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 5 µm
Insulation	PTFE	
Body	Brass	Silver 5 µm
Coupling Nut	Brass	Tri-Metal 3 µm
Gasket	Silicone Rubber	

**Environmental Specifications**

<b>Temperature</b>	
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: [SMA Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-SM-LP](#)



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

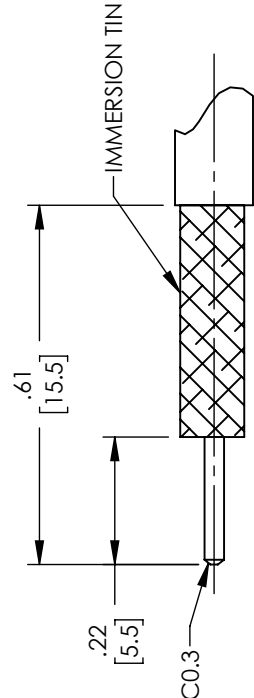
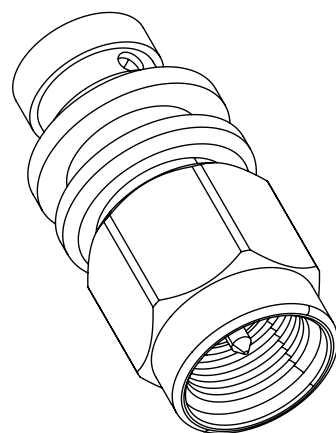
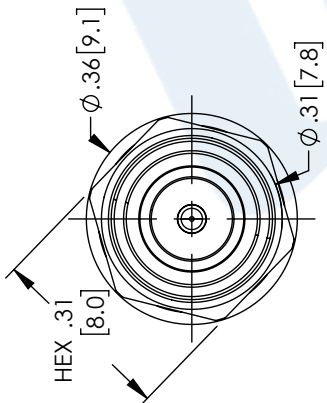
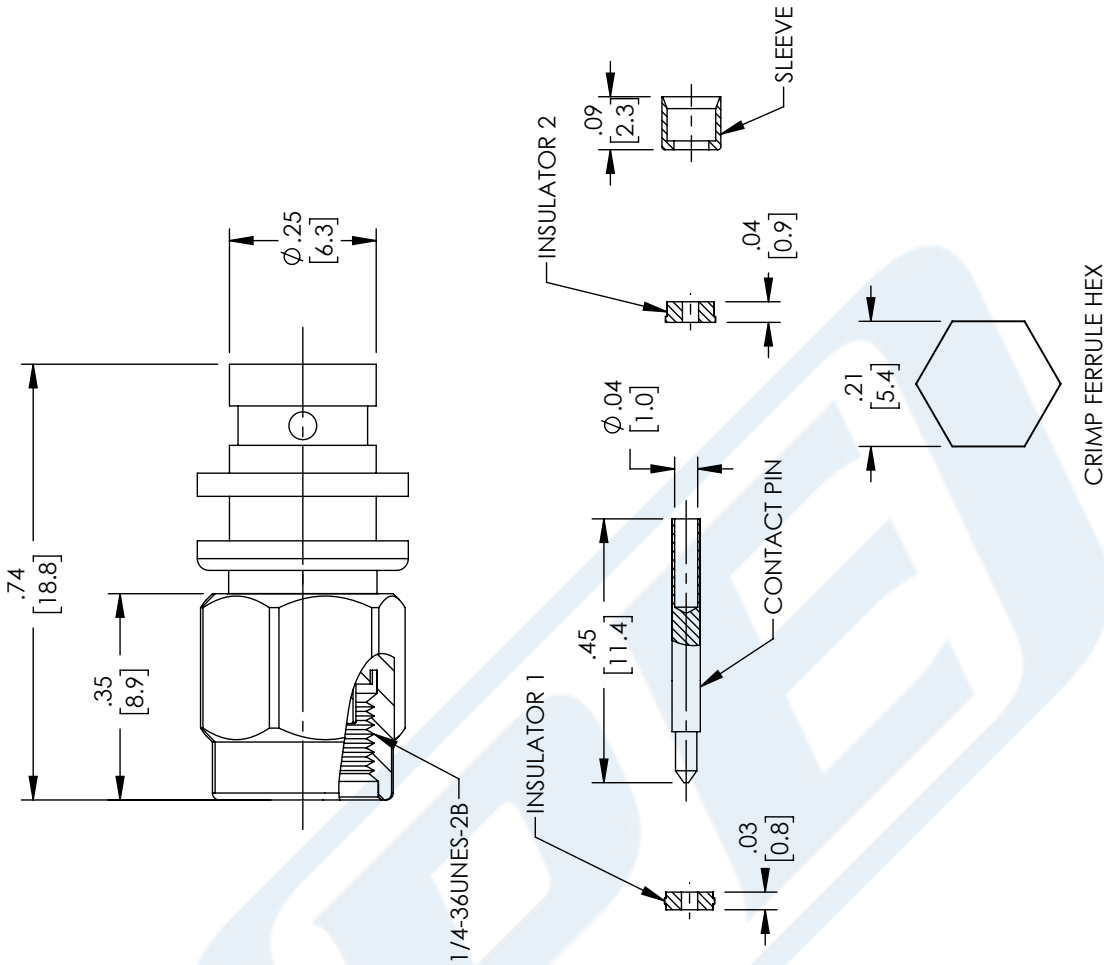
### RF Connectors Technical Data Sheet

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

URL: <https://www.pasternack.com/sma-male-tft-402-connector-tc-402-sm-lp-p.aspx>

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RECOMMENDED CABLE STRIPPING DIMS

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS  TOLERANCES: .X = ±.2 [5.08]    FRACTIONS ±.1/32 .XX = ±.02 [51]    ANGLES ± 1° .XXX = ±.005 [13]	THIRD-ANGLE PROJECTION 
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PASTERNAK Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com	ITEM NO. TC-402-SM-LP DRAWN BY DMAY REV A
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## N Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

### RF Connectors Technical Data Sheet



TC-402-NF-BH-LP

### Times Microwave Systems Connector Specification

#### Configuration

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

#### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5 µm contact plating
- IP 67 Rated

#### Applications

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

#### Description

Pasternack's TC-402-NF-BH-LP type N female bulkhead 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 female connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1. The type N female connector also has low passive intermodulation of -160 dBc. This type N 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. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our type N female bulkhead connector TC-402-NF-BH-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			1.25:1	
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 Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NF-BH-LP](#)



N Female Bulkhead Mount Low PIM Connector  
Solder Attachment for TFT-402, TFT-402-LF

RF Connectors  
Technical Data Sheet



TC-402-NF-BH-LP

Electrical Specification Notes:  
Insertion Loss is 0.1\*sqrt(FGHz)

**Mechanical Specifications**

**Size**

Length 1.358 in [34.49 mm]  
Width/Dia. 0.748 in [19.00 mm]

Mating Torque 10 in-lbs [1.13 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver 5 µm
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 3 µm
Body	Brass	Tri-Metal 3 µm
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 Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NF-BH-LP](#)



## N Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF

### RF Connectors Technical Data Sheet



TC-402-NF-BH-LP

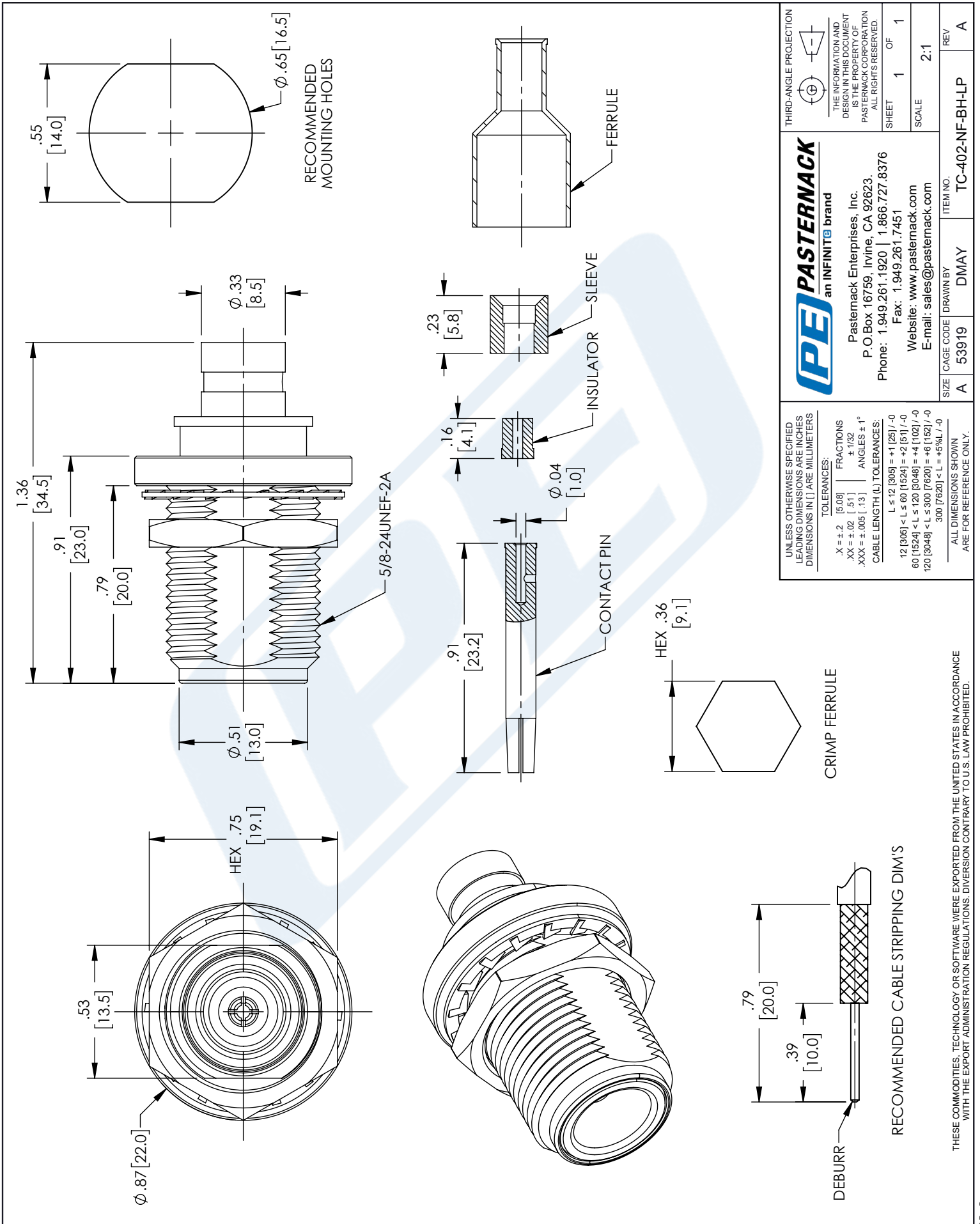
N Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Bulkhead Mount Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-NF-BH-LP](https://www.pasternack.com/n-female-tft-402-connector-tc-402-nf-bh-lp-p.aspx)

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N Female Bulkhead Mount Low PIM Connector Solder  
Attachment for TFT-402, TFT-402-LF





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

### RF Cables Technical Data Sheet

## 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



TFT-402

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +150 deg C

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

#### Plotted and Other Data

Notes:

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

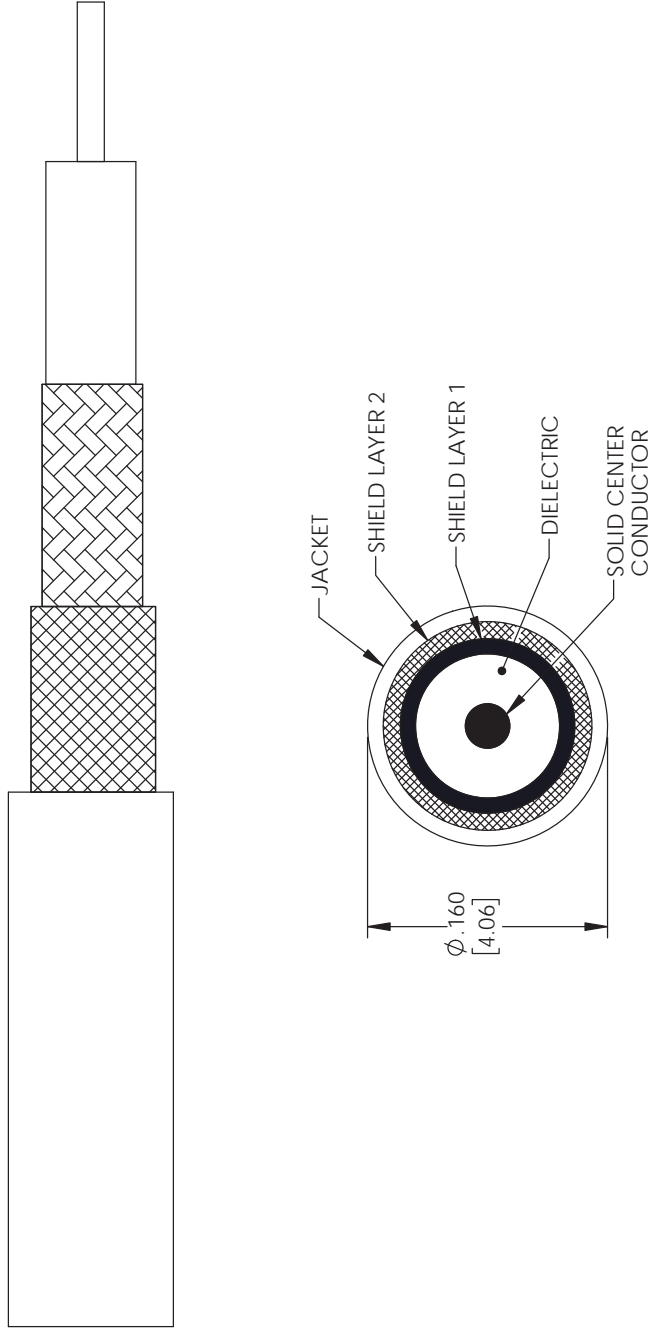
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TFT-402 Outdoor Rated Coax Cable Double Shielded with Blue FEP Jacket TFT-402](#)

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



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = +.2 [5.08]      FRACTIONS          XX = +.02 [ .51]      +.132          .XXX = ±.005 [ .13]      ANGLES ± 1°</p> <p>CABLE LENGTH (L) TOLERANCES:          L ≤ 12 [305] = +1 [25] / -0          12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0          60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0          120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0          300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p><b>PE PASTERNAK</b>          an INFINIT® brand</p> <p>Pasternack Enterprises, Inc.          P. O. Box 16759, Irvine, CA 92623.          Phone: 1.949.261.1920   1.866.727.8376          Fax: 1.949.261.7451          Website: www.pasternack.com          E-mail: sales@pasternack.com</p>	<p>THIRD-ANGLE PROJECTION</p>  <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
	<p>SIZE A    CAGE CODE 53919    DRAWN BY DFRISIELLO    ITEM NO. TTT-402</p>	<p>REV A</p>

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