

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



### RF Connectors Technical Data Sheet

### 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

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

#### 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 $\mu\text{m}$
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 3 $\mu\text{m}$
Body	Brass	Tri-Metal 3 $\mu\text{m}$
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 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



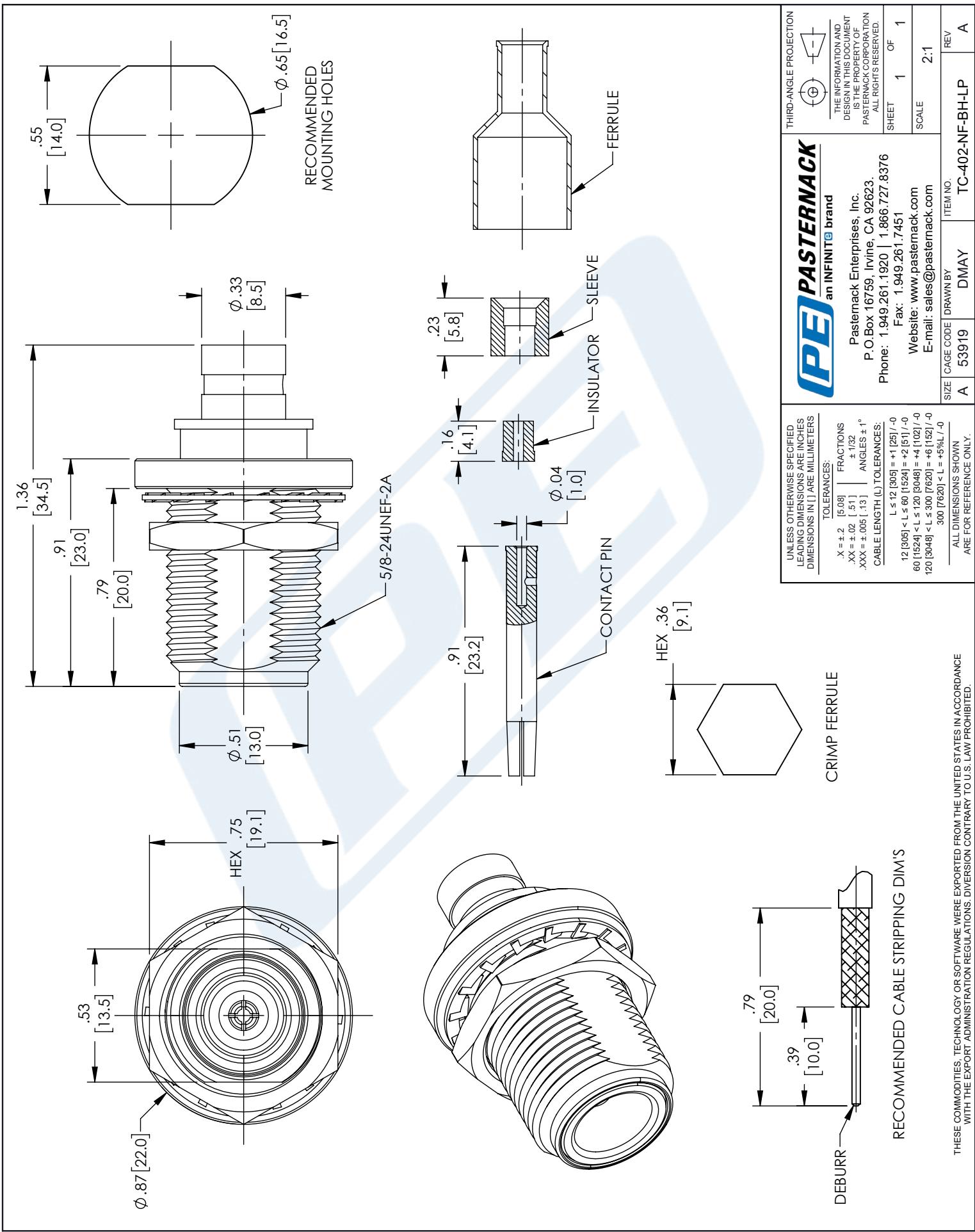
TC-402-NF-BH-LP

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](#)

URL: <https://www.pasternack.com/n-female-tft-402-connector-tc-402-nf-bh-lp-p.aspx>

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## 1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF



### RF Connectors Technical Data Sheet


**TIMES** MICROWAVE SYSTEMS  
An Amphenol Company

**TC-402-1023M-LP**

#### Times Microwave Systems Connector Specification

##### Configuration

- 1.0/2.3 Plug 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 -150 dBc

- Silver Plated Brass Contact
- 200 µin contact plating

##### Applications

- General Purpose Test
- Wireless Communications

- Custom Cable Assemblies
- Low PIM Applications

- Distributed Antenna Systems (DAS)

##### Description

Pasternack's TC-402-1023M-LP 1.0/2.3 plug 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 1.0/2.3 plug connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The 1.0/2.3 plug connector also has low passive intermodulation of -150 dBc.

Our 1.0/2.3 plug connector TC-402-1023M-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			-150	dBc
Operating Voltage (DC)			2,500	Vdc
Insulation Resistance	10,000			MOhms

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-1023M-LP](#)

# 1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF



## RF Connectors Technical Data Sheet


**TC-402-1023M-LP**

### Mechanical Specifications

Size	
Length	0.93 in [23.62 mm]
Width/Dia.	0.33 in [8.38 mm]
Mating Cycles	500 Cycles
Cable Retention Force	112 lbs [50.8 kg]

### Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 $\mu$ in
Insulation	PTFE	
Body	Brass	Tri-Metal 80 $\mu$ in
Coupling Nut	Brass	Tri-Metal 80 $\mu$ in

### 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: [1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-1023M-LP](#)

## 1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF



### RF Connectors Technical Data Sheet

**T** **TIMES** An Amphenol Company MICROWAVE SYSTEMS

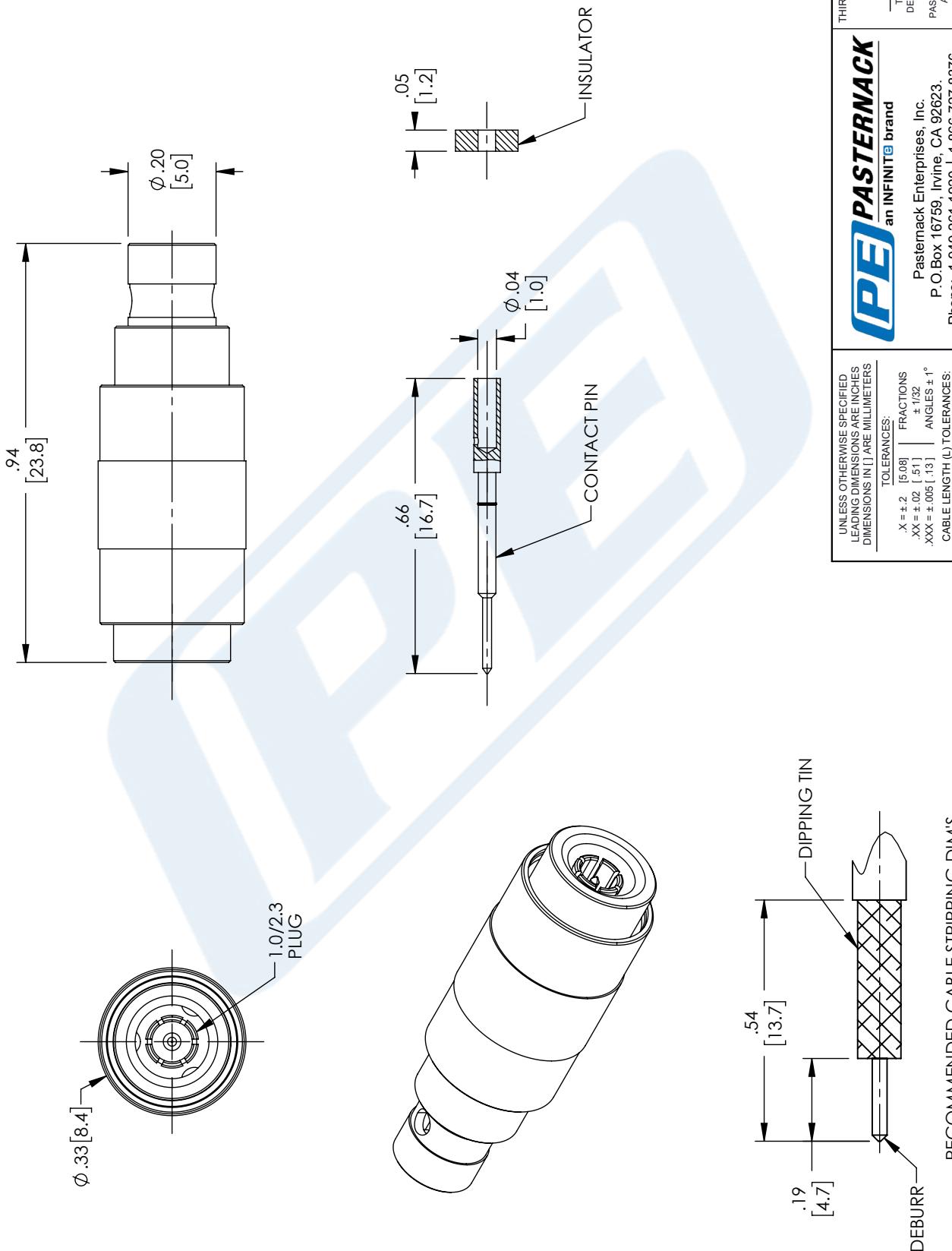
**TC-402-1023M-LP**

1.0/2.3 Plug 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: [1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF TC-402-1023M-LP](https://www.pasternack.com/1.0-2.3-plug-tft-402-connector-tc-402-1023m-lp-p.aspx)

URL: <https://www.pasternack.com/1.0-2.3-plug-tft-402-connector-tc-402-1023m-lp-p.aspx>

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<b>PASTERACK</b> an INFINITE brand	Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Website: www.pasternack.com E-mail: sales@pasternack.com	SHEET 1 OF 1 SCALE 3:1 REV A

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

FRACTIONS:  
 $X = \pm .2$  [5.08]       $\pm 1/32$   
 $XXX = \pm .02$  [5.1]      ANGLES  $\pm 1^\circ$   
 CABLE LENGTH (L) TOLERANCES:  
 $L \leq 12$  [305]  $= +1[28] / -0$   
 $12 [305] < L \leq 60 [1524] = +2[51] / -0$   
 $60 [1524] < L \leq 120 [3048] = +4[102] / -0$   
 $120 [3048] < L \leq 300 [7620] = +6[152] / -0$   
 $300 [7620] < L = +5[6] / -0$   
 - ALL DIMENSIONS SHOWN  
 ARE FOR REFERENCE ONLY.

RECOMMENDED CABLE STRIPPING DIMS  
 Connector Adds: 14.1mm

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## Low PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

**TFT-5G-402**

#### Times Microwave Systems Coax Cable Specification

##### Configuration

- Low PIM Flexible Cable
- 2 Shield(s)

##### Features

- PIM < -160 dBc
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible

- Low Loss
- Good Shielding >80 dB
- UV Resistant Jacket

##### Applications

- Base Stations
- Antenna Pigtailed
- Distributed Antenna Systems

- (DAS)
- Plenum Installations
- Small Cells

- Multi-Carrier Communication Systems

##### Description

TFT-5G-402 low pim flexible coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The TFT-5G-402 plenum rated coaxial cable features a taped PTFE dielectric, solid copper center conductor and a dual-braid outer conductor. These features combine to make the Times Microwave TFT-5G-402 an extremely flexible, low loss and low PIM coax cable that is well suited for Distributed Antenna Systems (DAS), plenum installations or small cells. The tough, FEP jacket provides moisture, UV protection and resistance to corrosive environments.

Our datasheet specifications and drawing with dimensions for Times Microwave TFT-5G-402 coax cable are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM antenna pigtailed or simply create a custom cable assembly configuration, Pasternack has the right TFT-5G-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
Passive Intermodulation			-160	dBc
Nominal Capacitance	26.7 [87.6]			pF/ft [pF/m]

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-5G-402 Coax Cable Double Shielded with Blue FEP Jacket TFT-5G-402](#)



## Low PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

**TFT-5G-402**

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	1.9	2.3	4.9	5.8	GHz
Attenuation, Typ	7.9	16.4	18.2	27	29.5	dB/100ft
	25.92	53.81	59.71	88.58	96.78	dB/100m
Input Power (CW), Max	430	200	180	120	110	Watts

#### Mechanical Specifications

Diameter	0.16 in [4.06 mm]
Weight	0.028 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, 1 Strand	0.037 in [0.94 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.113 in [2.87 mm]
First Shield	Tin	0.121 in [3.07 mm]
Outer Conductor	Copper, Tin	0 in [0 mm]
Jacket	FEP, Blue	0.16 in [4.06 mm]

#### Environmental Specifications

Temperature	
Operating Range	-55 to +150 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 PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket TFT-5G-402](#)



## Low PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

**TFT-5G-402**

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

#### Plotted and Other Data

Notes:

Low PIM Flexible TFT-5G-402 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.

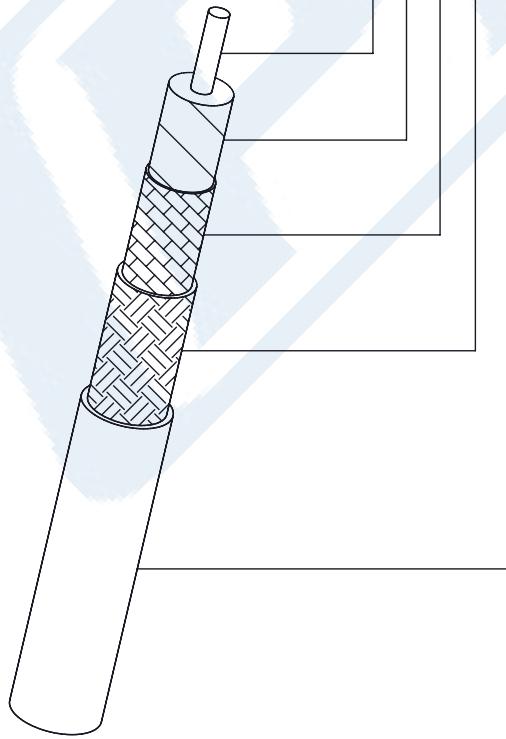
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket TFT-5G-402](#)

URL: <https://www.pasternack.com/low-pim-flexible-tft-5g-402-fep-jacket-tin-outer-conductor-double-shielded-tft-5g-402-p.aspx>

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# TFT-5G-402 CAD Drawing

Low PIM Flexible TFT-5G-402 Coax Cable Double Shielded with Blue FEP Jacket

REV. A					DESCRIPTION INITIAL RELEASE		DATE 09/13/2022	APPROVED A. GANWANI															
REV. A					DESCRIPTION INITIAL RELEASE		DATE 09/13/2022	APPROVED A. GANWANI															
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Center Conductor</td> <td style="width: 10%;">.037 [0.94]</td> <td style="width: 10%;">Bare Copper</td> </tr> <tr> <td>Dielectric</td> <td>.113 [2.87]</td> <td>Taped PTFE</td> </tr> <tr> <td>Shield</td> <td>.121 [3.07]</td> <td>Tin Plated Flat Braid</td> </tr> <tr> <td>Outer Braid</td> <td>.138 [3.51]</td> <td>Tin Plated Copper Braid</td> </tr> <tr> <td>Jacket</td> <td>.160 [4.06]</td> <td>Blue FEP</td> </tr> </table>									Center Conductor	.037 [0.94]	Bare Copper	Dielectric	.113 [2.87]	Taped PTFE	Shield	.121 [3.07]	Tin Plated Flat Braid	Outer Braid	.138 [3.51]	Tin Plated Copper Braid	Jacket	.160 [4.06]	Blue FEP
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