

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402



TC-402-4195M-LP



Times Microwave Systems Connector Specification

Configuration

- 4.1/9.5 Mini DIN Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: TFT-5G-402
- Low PIM Design

Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.15:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5 µm contact plating
- IP 67 Rated

Applications

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

Description

Pasternack's TC-402-4195M-LP , 4.1/9.5 Mini DIN, Low PIM, Connector is part of our full line of RF components available for same-day shipping. Our 4.1/9.5 Mini DIN male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.15:1. The 4.1/9.5 Mini DIN male connector also has low passive intermodulation of -160 dBc. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our 4.1/9.5 Mini DIN male connector TC-402-4195M-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 | | 3 | GHz |
| VSWR | | | 1.15:1 | |
| Insertion Loss | | | 0.1 | dB |
| Passive Intermodulation | | | -160 | dBc |
| Operating Voltage (DC) | | | 2,000 | Vdc |
| Inner Conductor DC Resistance | | | 1 | mOhms |
| Outer Conductor DC Resistance | | | 0.5 | mOhms |
| Insulation Resistance | 5,000 | | | MOhms |
| Impedance | | 50 | | Ohms |

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

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402



TC-402-4195M-LP

Mechanical Specifications

| | |
|-----------------------|-------------------------|
| Size | |
| Length | 0.964 in [24.49 mm] |
| Width | 0.866 in [22.00 mm] |
| Height | 0.866 in [22 mm] |
| Weight | 0.03 lbs [13.61 g] |
| Mating Torque | 106 in-lbs [[11.98 Nm]] |
| Cable Retention Force | 33 lbs [14.97 kg] |

Material Specifications

| Description | Material | Plating |
|--------------|-----------------|-------------------|
| Contact | Brass | Silver 5 µm |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal 2 µm |
| Coupling Nut | Brass | Nickel 5 µm |
| Gasket | Silicone Rubber | |

Environmental Specifications

| | |
|--------------------------------|--------------------|
| Temperature | |
| Operating Range | -40 to +85 deg C |
| Ingress Protection (IP) Rating | IP 67 Rated |
| Shock | IEC 60068 -2-27 |
| Vibration | IEC 60068 -2-6-Fc |
| Thermal Shock | IEC 60068 -2-14-Na |

Environmental Specification Notes:
Weather Standard: IEC 60068 40/085/21

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

Plotted and Other Data

Notes:

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402



TC-402-4195M-LP

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402 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.

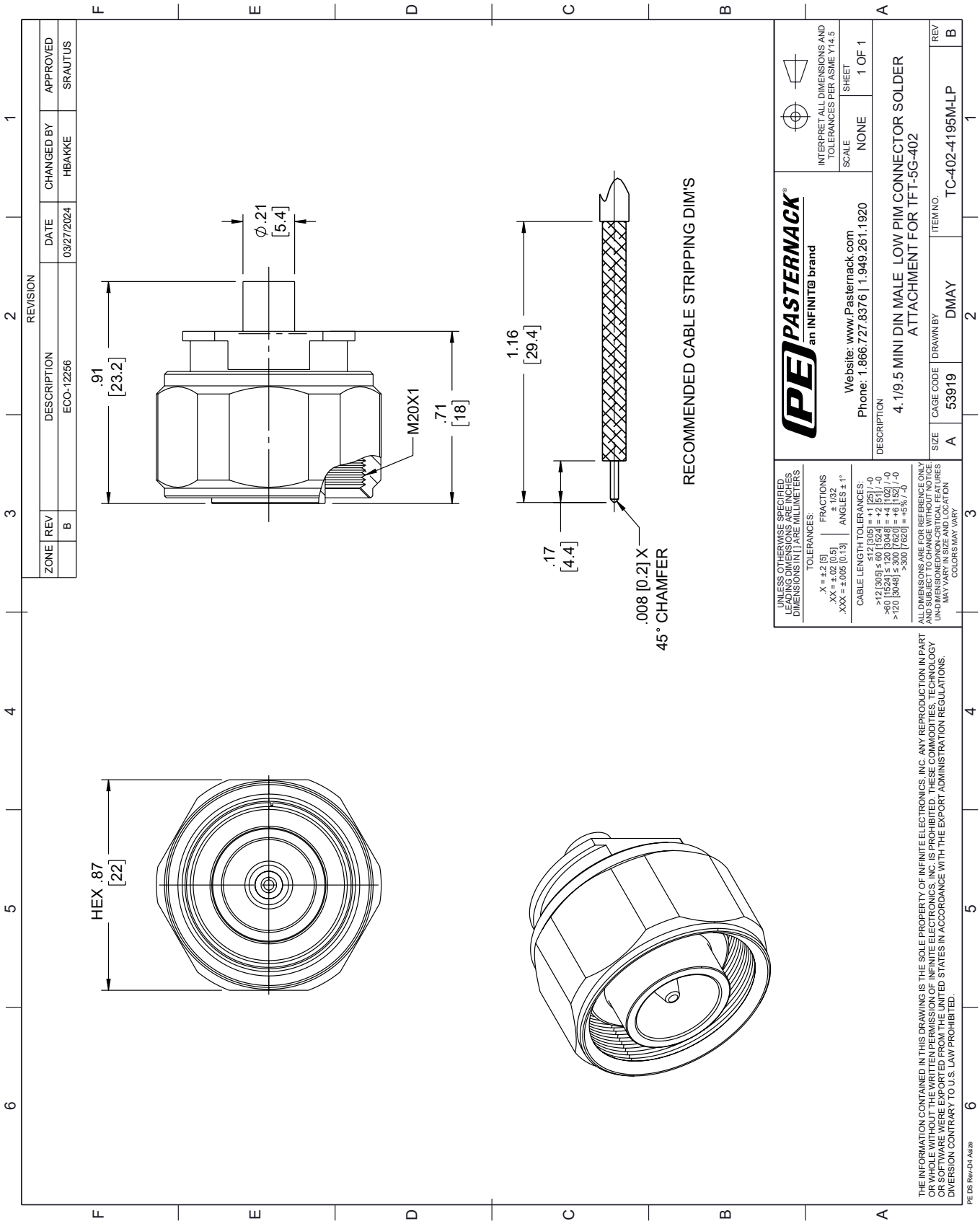
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402 TC-402-4195M-LP](https://www.pasternack.com/4.1-9.5-mini-din-male-tft-402-connector-tc-402-4195m-lp-p.aspx)

URL: <https://www.pasternack.com/4.1-9.5-mini-din-male-tft-402-connector-tc-402-4195m-lp-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

TC-402-4195M-LP CAD Drawing

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-5G-402



1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-5G-402



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-5G-402
- 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, Low PIM, Connector 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 |
| Impedance | | 50 | | Ohms |

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

Mechanical Specifications

Size

| | |
|--------|--------------------|
| Length | 0.93 in [23.62 mm] |
| Width | 0.33 in [8.38 mm] |
| Height | 0.33 in [8.38 mm] |
| Weight | 0.03 lbs [13.61 g] |

1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-5G-402



TC-402-1023M-LP

| | |
|-----------------------|-------------------|
| Mating Cycles | 500 Cycles |
| Cable Retention Force | 112 lbs [50.8 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 |

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:

1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-5G-402 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.

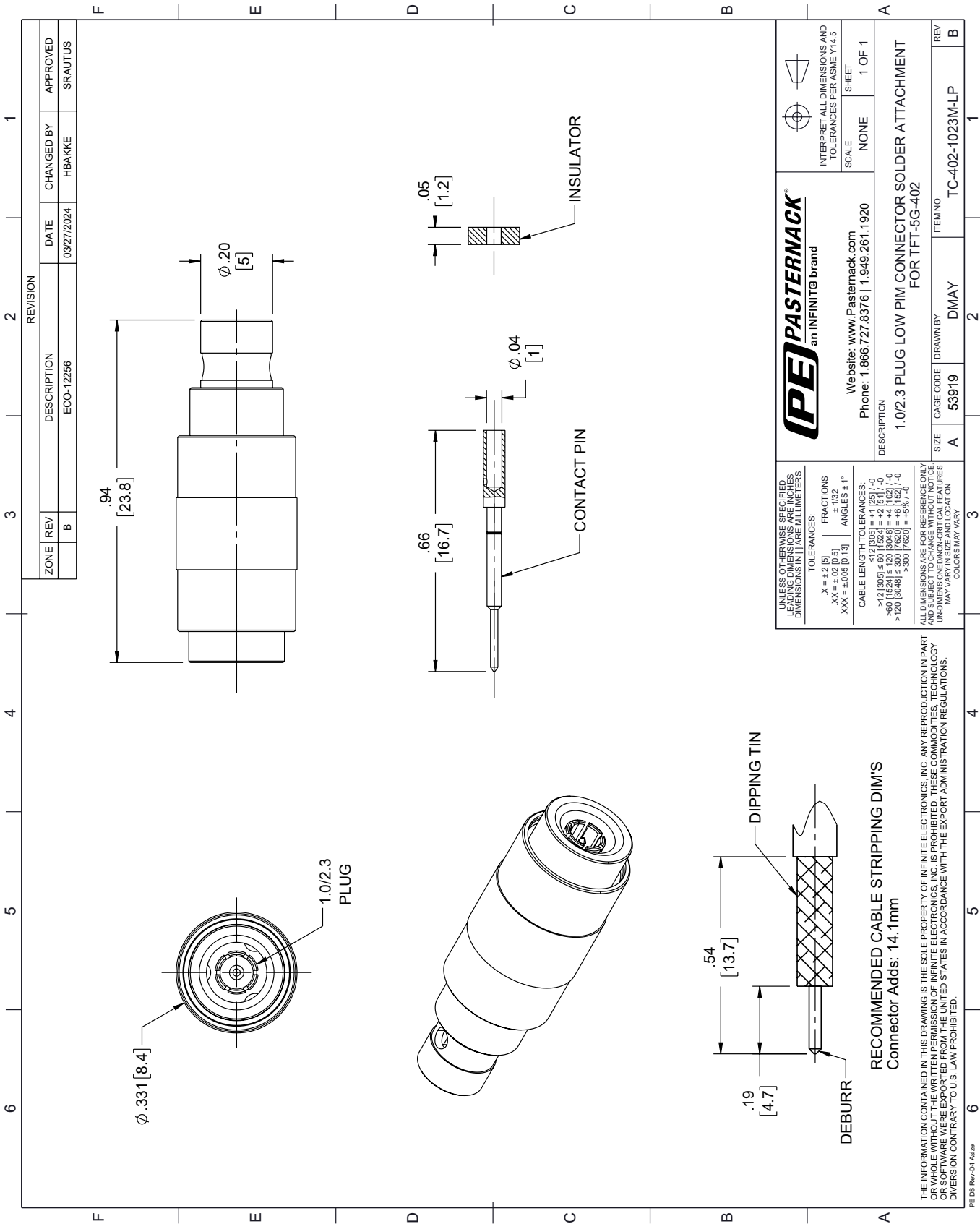
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0/2.3 Plug Low PIM Connector Solder Attachment for TFT-5G-402 TC-402-1023M-LP](#)

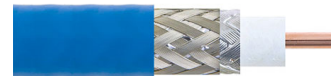
URL: <https://www.pasternack.com/1.0-2.3-plug-tft-402-tft-402-lf-connector-tc-402-1023m-lp-p.aspx>

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TC-402-1023M-LP CAD Drawing

1.0/2.3 Plug Low PIM Connector Solder Attachment for 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

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

Description

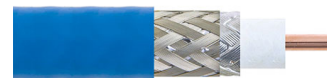
TFT-5G-402 low pim flexible coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The TFT-5G-402 plenum rated coaxial cable features a taped PTFE dielectric, solid copper center conductor and a dual-braid outer conductor. These features combine to make 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 pigtails 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.

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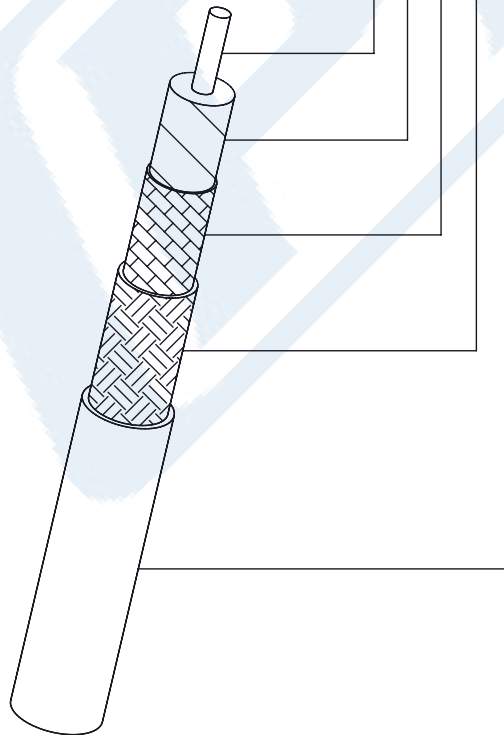
URL: <https://www.pasternack.com/low-pim-flexible-tft-5g-402-fep-jacket-tin-outer-conductor-double-shielded-tft-5g-402-p.aspx>

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TFT-5G-402 CAD Drawing

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

| REVISIONS | | | |
|-----------|-----------------|------------|------------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 09/13/2022 | A. GANWANI |



| 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 |

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

TOLERANCES:

| | | |
|---------------|--------|-------------|
| X = ± .2 | [.008] | 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%L / -0 |

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

| | | | |
|------|-----------|----------|------------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | K.DANG | TFT-5G-402 |

REV A

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