



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

RF Connectors Technical Data Sheet



TC-402-SM-RA-LP

Times Microwave Systems Connector Specification

Configuration

- SMA 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
- Silver Plated Brass Contact
- 5 μm contact plating

Applications

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

Description

Pasternack's TC-402-SM-RA-LP SMA 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 SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector TC-402-SM-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 | | | 0.15 | 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 $0.1 \cdot \sqrt{FGHz}$

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



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

RF Connectors
Technical Data Sheet

Mechanical Specifications

| | |
|---------------|-----------------------|
| Size | |
| Length | 0.807 in [20.5 mm] |
| Width/Dia. | 0.37 in [9.40 mm] |
| Mating Torque | 9.73 in-lbs [1.10 Nm] |

Material Specifications

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

Environmental Specifications

| | |
|--------------------|------------------------------------|
| Temperature | |
| Operating Range | -55 to +155 deg C |
| 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:

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

RF Connectors Technical Data Sheet



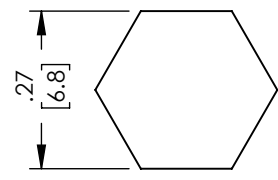
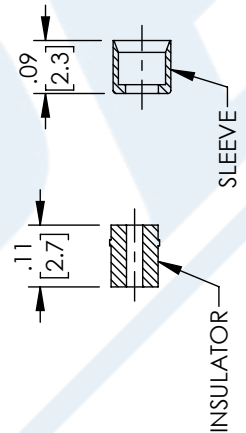
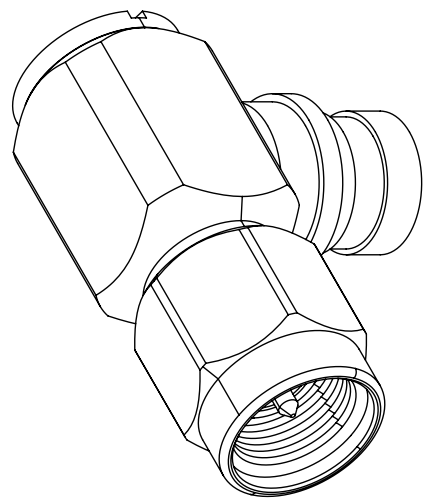
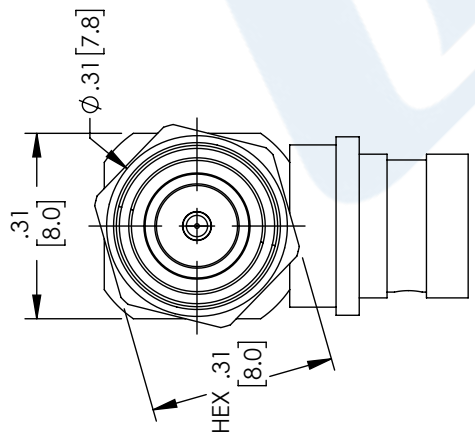
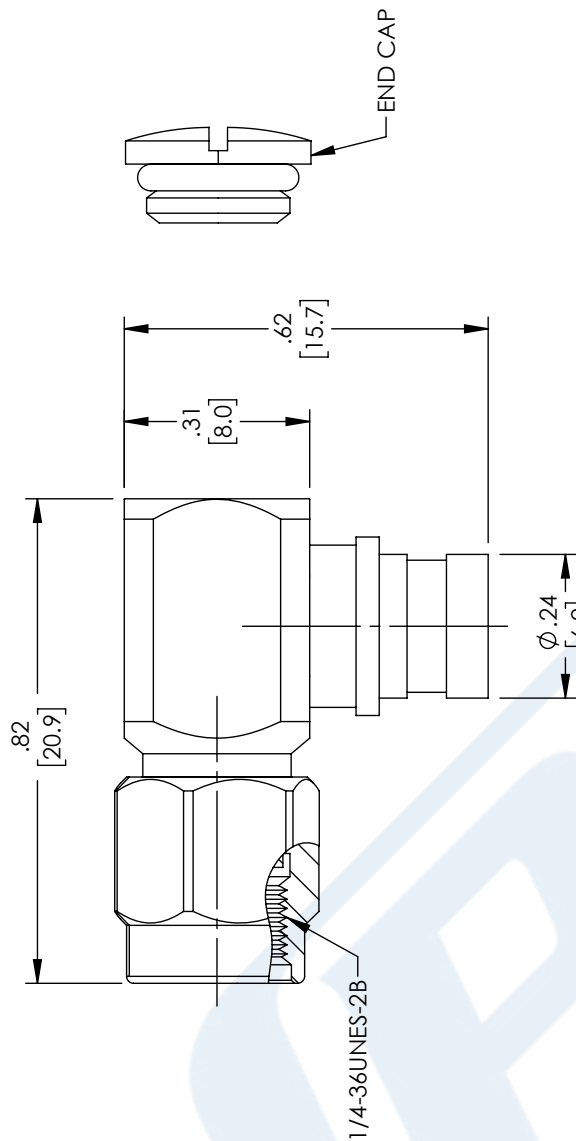
TC-402-SM-RA-LP

SMA Male Right Angle 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.

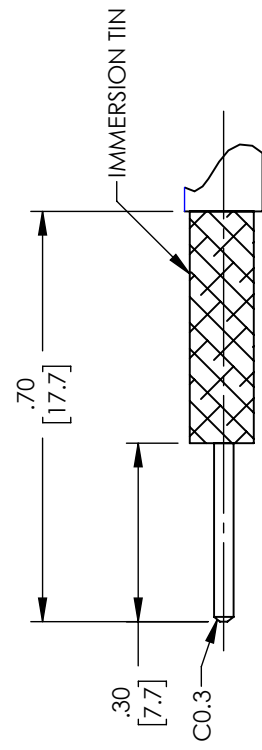
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URL: <https://www.pasternack.com/sma-male-tft-402-connector-tc-402-sm-ra-lp-p.aspx>

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RECOMMENDED CABLE STRIPPING DIM'S

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] 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
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SIZE A CAGE CODE 53919 DRAWN BY DMAY ITEM NO. TC-402-SM-RA-LP

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE 3:1
REV A



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 μ m 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

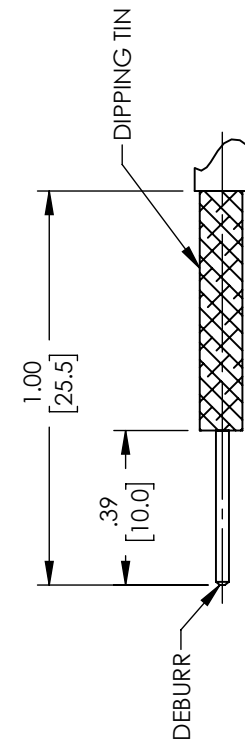
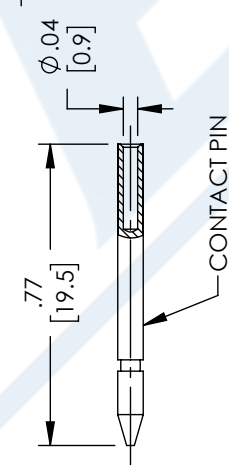
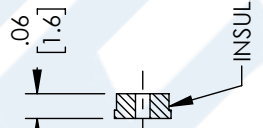
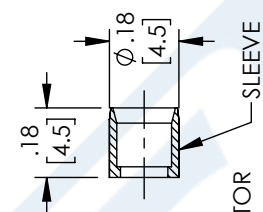
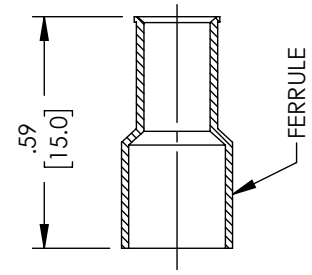
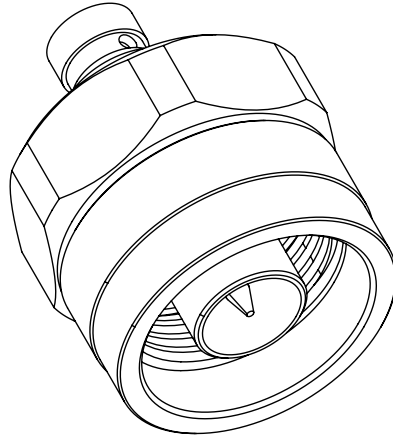
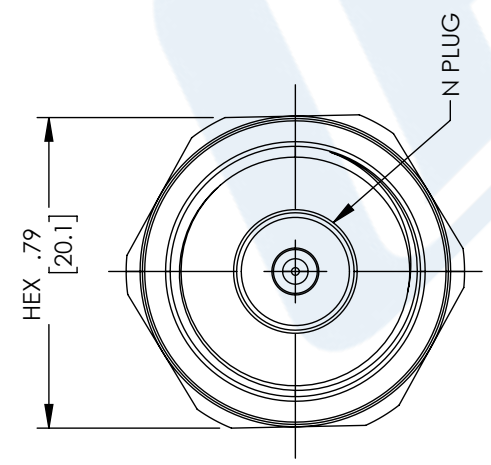
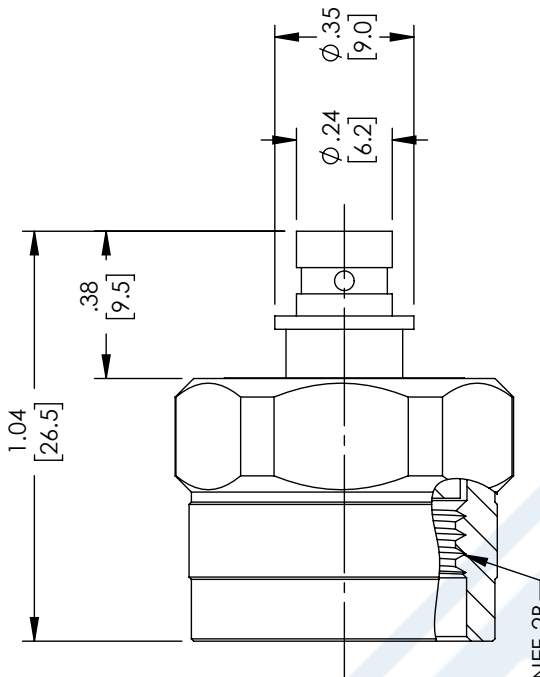
RF Connectors Technical Data Sheet

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)

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

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RECOMMENDED CABLE STRIPPING DIM'S
 Connector add: 17 mm

| | |
|---|--|
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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 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.

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](#)

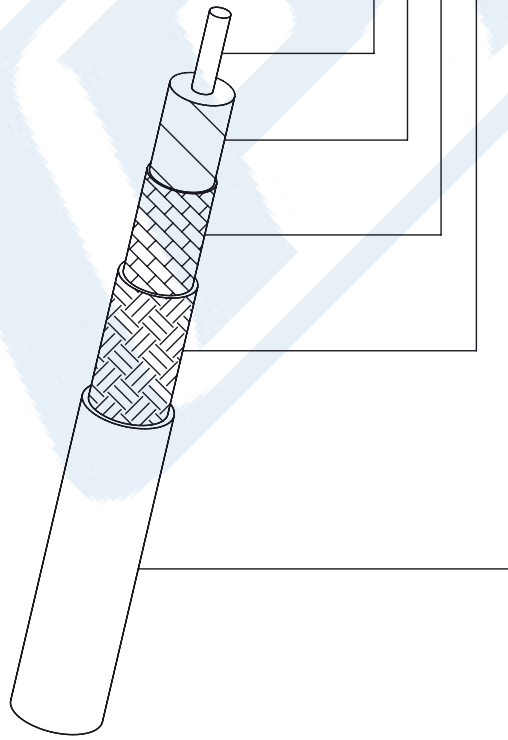
URL: <https://www.pasternack.com/low-pim-flexible-tft-5g-402-fep-jacket-tin-outer-conductor-double-shielded-tft-5g-402-p.aspx>

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TFT-5G-402 CAD Drawing

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

| 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 [5.08] FRACTIONS ± 1/32
 .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
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SIZE [CAGE CODE] DRAWN BY ITEM NO.
 A 53919 K.DANG TFT-5G-402

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

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