



4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL

RF Connectors Technical Data Sheet



TC-SPP250-4310MS-LP

Times Microwave Systems Connector Specification

Configuration

- Snap-On 4.3-10 Male Connector
- 50 Ohms
- Straight Body Geometry
- SPP-250-LLPL Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1
- 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

Times Microwave's TC-SPP250-4310MS-LP 4.3-10 male snap-on connector offered by Pasternack with solder/solder attachment for Times' SPP-250-LLPL is part of our full line of RF components available for same-day shipping. Times Microwave's 4.3-10 male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. The Times 4.3-10 male connector also has low passive intermodulation of -160 dBc.

Times Microwave's 4.3-10 male connector TC-SPP250-4310MS-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 | | | 1.35:1 | |
| Insertion Loss | | | 0.25 | dB |
| Passive Intermodulation | | | -160 | dBc |
| Operating Voltage (DC) | | | 1,000 | Vdc |
| 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: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL TC-SPP250-4310MS-LP](#)



4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL

RF Connectors Technical Data Sheet



TC-SPP250-4310MS-LP

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------|---------|--------|----|----|----|-------|
| Frequency Range | DC to 3 | 3 to 6 | | | | GHz |
| VSWR, Max | 1.15:1 | 1.35:1 | | | | |

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

Mechanical Specifications

Size

| | |
|---------------|------------------------|
| Length | 1.13 in [28.7 mm] |
| Width/Dia. | 0.99 in [25.15 mm] |
| Mating Torque | 44.25 in-lbs [5.00 Nm] |

Material Specifications

| Description | Material | Plating |
|--------------|----------|--------------------------|
| Contact | Brass | Silver 200 μ in |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal 80 μ in |
| Coupling Nut | Brass | Tri-Metal 80 μ in |
| Gasket | Silicone | |

Environmental Specifications

Temperature

| | |
|-----------------|---------------------------------------|
| Operating Range | -55 to +85 deg C |
| Shock | MIL-STD 202G, Method 213, Condition I |
| Vibration | MIL-STD 202G, Method 204, Condition B |
| Thermal Shock | MIL-STD 202G, Method 107, Condition B |

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: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL TC-SPP250-4310MS-LP](#)



4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL

RF Connectors Technical Data Sheet



TC-SPP250-4310MS-LP

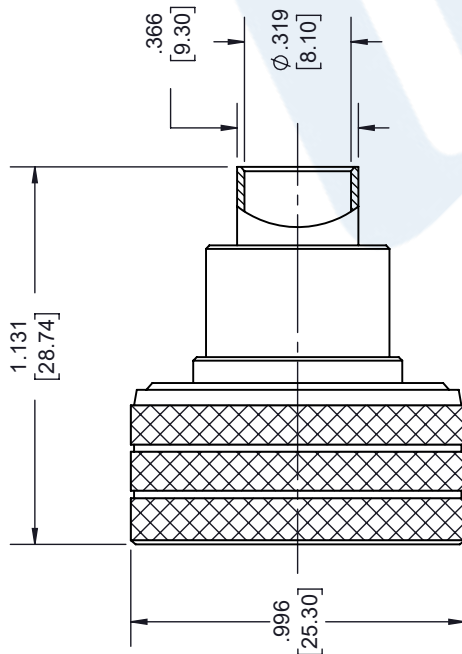
4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.3-10 Male Low PIM Snap-On Connector Solder Attachment for SPP-250-LLPL TC-SPP250-4310MS-LP](https://www.pasternack.com/4.3-10-male-snap-on-spp-250-llpl-connector-tc-spp250-4310ms-lp-p.aspx)

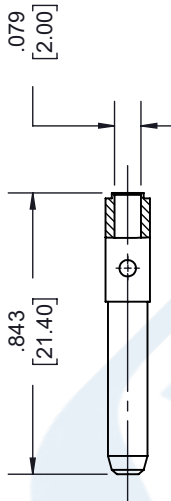
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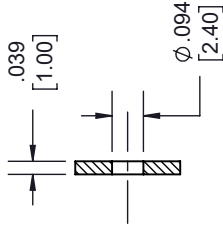
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|-----------|-----------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 03/05/19 | S. ELLIS |



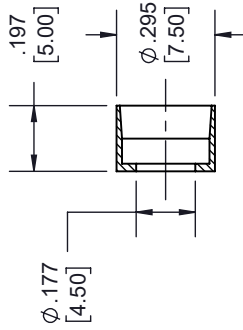
**4.3-10 SNAP ON
MALE**



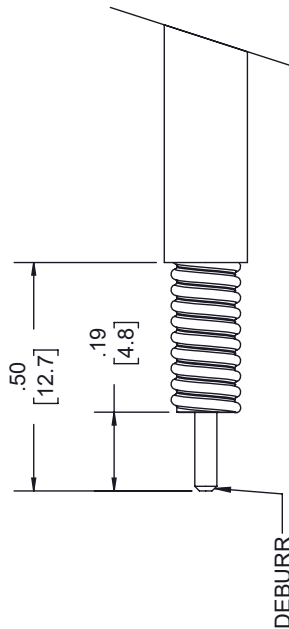
CONTACT



INSULATOR

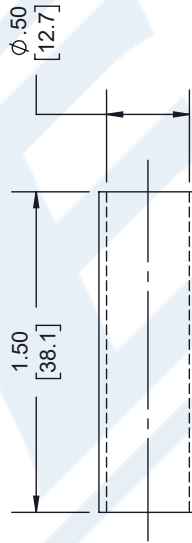


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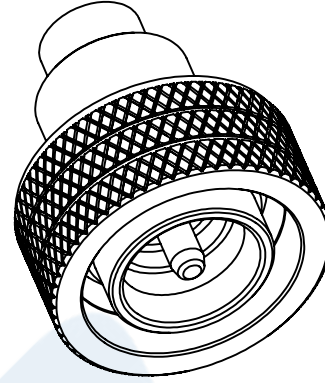


STRIPPING DIMENSIONS

- NOTES:
- CABLE ATTACHMENT:
• OUTER: SOLDER.
• INNER: SOLDER.



HEAT SHRINK TUBE



| | |
|--|-----------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | FRACTIONS |
| X±.2 | [5.08] |
| XX±.01 | [.25] |
| XXX±.005 | [.13] |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | |
| THIRD-ANGLE PROJECTION | |

| | |
|---|------------------------------------|
| PE PASTERNAK an INFINITI brand | |
| Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com | |
| CAGE A 53919 | DRAWN BY K.DANG |
| SIZE | PART NUMBER TC-SPP250-4310MS-LP |
| SHEET 1 OF 1 | |
| SCALE N/A | |
| REV A | |

| | |
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4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM

RF Connectors Technical Data Sheet

PE45421

Configuration

- 4.1/9.5 Mini DIN Male Connector
- 50 Ohms
- Straight Body Geometry
- SPP-250-LLPL Interface Type
- Solder/Solder Attachment

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.2:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact

Applications

- General Purpose Test
- Custom Cable Assemblies
- Low PIM Interconnects
- Distributed Antenna Systems (DAS)
- Low PIM Jumpers
- Low PIM Testing
- Low PIM Connections

Description

Pasternack's PE45421 4.1/9.5 Mini DIN male connector with solder/solder attachment for SPP-250-LLPL 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 6 GHz and offers excellent VSWR of 1.2:1. The 4.1/9.5 Mini DIN male connector also has low passive intermodulation of -160 dBc.

Our 4.1/9.5 Mini DIN male connector PE45421 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 | | | 1.2:1 | |
| Insertion Loss | | | 0.1 | dB |
| Passive Intermodulation | | | -160 | dBc |
| Operating Voltage (AC) | | | 250 | Vrms |
| Insulation Resistance | 5,000 | | | MOhms |

Electrical Specification Notes:
Insertion Loss is $0.04 \cdot \sqrt{F(\text{GHz})}$

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45421](#)



4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM

RF Connectors Technical Data Sheet

PE45421

Material Specifications

| Description | Material | Plating |
|-------------|-----------------|-----------|
| Contact | Brass | Silver |
| Insulation | PTFE | |
| Body | Brass | Tri-Metal |
| Gasket | Silicone Rubber | |

Environmental Specifications

Temperature

Operating Range -55 to +165 deg C

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: [4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45421](#)

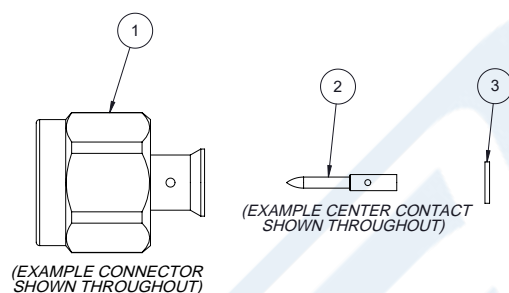


4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM

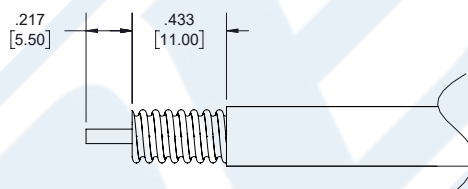
RF Connectors Technical Data Sheet

PE45421

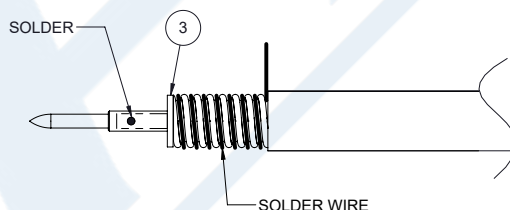
Assembly Instruction



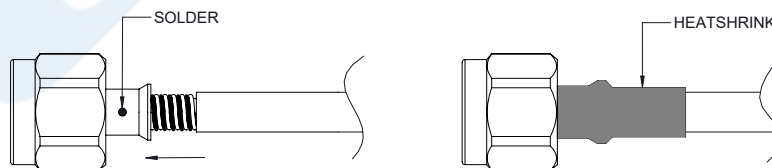
1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR AND DEBURR CABLE.



2. SLIDE INSULATOR ③ OVER CABLE CENTER CONDUCTOR. INSERT CENTER CONTACT AND SOLDER. WRAP THE CABLE BY SOLDER WIRE.



3. PUSH THE CONNECTOR BODY INTO THE CABLE, UNTIL IT STOPS. SOLDER THE CONNECTOR BODY WITH CABLE AND COVER HEATSHRINK SLEEVE.



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 Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45421](#)



4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM

RF Connectors Technical Data Sheet

PE45421

4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM 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.

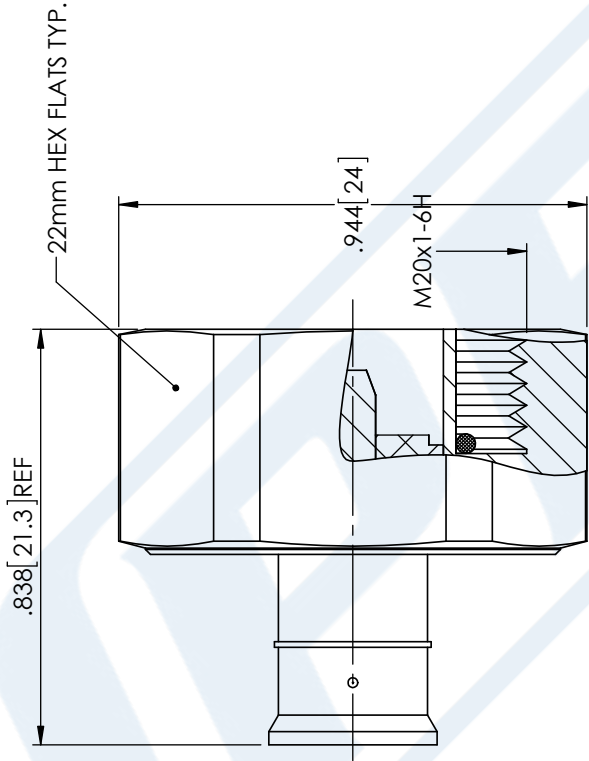
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PE45421 CAD Drawing

4.1/9.5 Mini DIN Male Connector Solder Attachment for SPP-250-LLPL, Low PIM



| STANDARD TOLERANCES | |
|---------------------|--------|
| .X | ±0.2 |
| .XX | ±0.01 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE45421

CAGE CODE 53919

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

CAD FILE 11/20/17

SCALE N/A

SIZE A

CN2245



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet


SPP-250-LLPL

Times Microwave Systems Coax Cable Specification Configuration

- Low Loss, Plenum Corrugated Cable

Features

- PIM < -160 dBc
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss
- Great Shielding >100 dB
- UV Resistant Jacket

Applications

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

Description

SPP-250-LLPL low loss plenum rated coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The SPP-250-LLPL coaxial cable features a low loss dielectric, solid copper center conductor and a helically corrugated, copper outer conductor. These features combine to make the Times Microwave SPP-250-LLPL an extremely flexible, low PIM coax cable that is well suited for Distributed Antenna Systems (DAS), plenum installations or small cells. The tough, FEP jacket provides moisture and UV protection.

Our datasheet specifications and drawing with dimensions for Times Microwave SPP-250-LLPL coax cable are shown below in this PDF. Whether the need is to provide a low PIM jumper connection, low PIM feeder cable or simply create a custom cable assembly configuration, Pasternack has the right SPP-250-LLPL 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 | 100 | | | dB |
| Passive Intermodulation | | | -160 | dBc |
| Inner Conductor DC Resistance | | | 3 | Ohms/1000ft |
| Nominal Capacitance | | 27 [88.58] | | pF/ft [pF/m] |
| Nominal Inductance | | 0.067 [0.22] | | uH/ft [uH/m] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-250-LLPL](#)



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet


SPP-250-LLPL

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 | 3.8 | 8.1 | 9 | 13.5 | 14.8 | dB/100ft |
| | 12.47 | 26.57 | 29.53 | 44.29 | 48.56 | dB/100m |
| Input Power (CW), Max | 1,010 | 470 | 430 | 280 | 260 | Watts |

Mechanical Specifications

| | |
|---------------------------------|--------------------------|
| Diameter | 0.28 in [7.11 mm] |
| Weight | 0.072 lbs/ft [0.11 Kg/m] |
| Min. Bend Radius (Installation) | 1.25 in [31.75 mm] |
| Bending Moment | 0.8 lbs-ft [1.08 N-m] |

Construction Specifications

| Description | Material and Plating | Diameter |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper, 1 Strands | 0.068 in [1.73 mm] |
| Conductor Type | Solid | |
| Dielectric | PTFE | 0.19 in [4.83 mm] |
| Outer Conductor | Copper Corrugated | 0.25 in [6.35 mm] |
| Jacket | FEP, Blue | 0.28 in [7.11 mm] |

Environmental Specifications

| | |
|--------------------------------|-------------------|
| Temperature Operating Range | -55 to +200 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 Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-250-LLPL](#)



Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables Technical Data Sheet

**SPP-250-LLPL**

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

Plotted and Other Data

Notes:

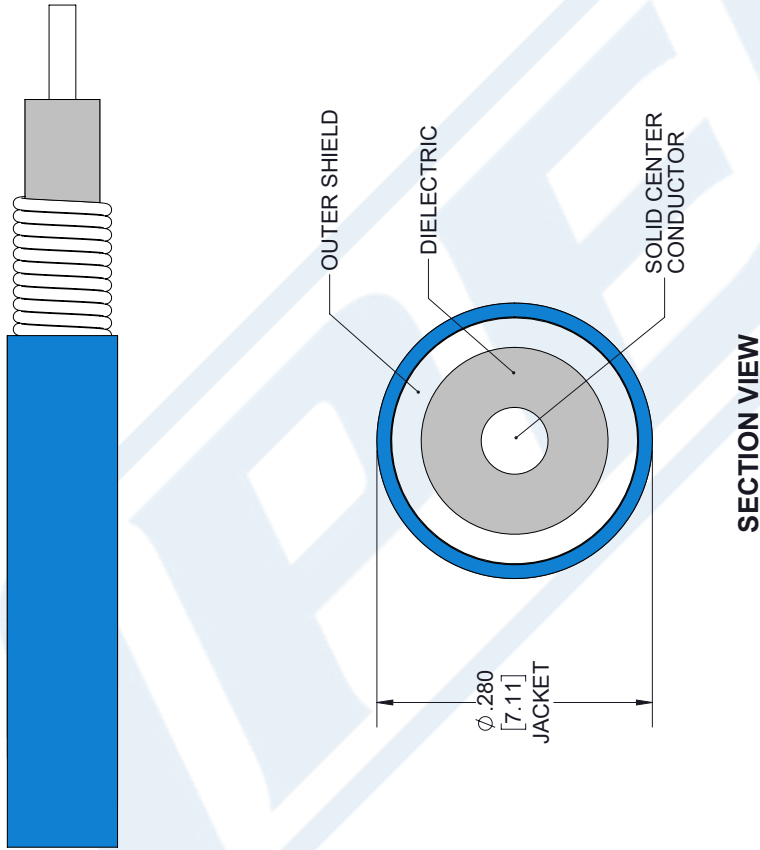
Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/low-loss-corrugated-spp250llpl-fep-jacket-spp-250-llpl-p.aspx>

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TIMES MICROWAVE SYSTEMS **SPP-250-LLPL CAD Drawing**
 Low Loss SPP-250-LLPL Plenum Rated Corrugated Coax
 Cable with Blue FEP Jacket Superflexible



| STANDARD TOLERANCES | |
|---------------------|--------|
| .X | ±0.2 |
| .XX | ±0.01 |
| .XXX | ±0.005 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| | | | | |
|--|----------------------------------|-----------------|---|-------------|
|  PASTERNAK® THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com | DWG TITLE SPP-250-LLPL | | NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm]. | |
| | CAGE CODE 53919 | CAD FILE 022118 | SCALE N/A | SIZE A 7361 |