



# N Male Low PIM Connector Solder Attachment for SPP-500-LLPL

## RF Connectors Technical Data Sheet



TC-SPP500-NM-LP

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- SPP-500-LLPL Interface Type
- Solder/Solder Attachment
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- 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-SPP500-NM-LP type N male connector offered by Pasternack with solder/solder attachment for Times' SPP-500-LLPL is part of our full line of RF components available for same-day shipping. Times Microwave's type N male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1.

Times Microwave's type N male connector TC-SPP500-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			1.25:1	
Insertion Loss			0.25	dB
Operating Voltage (DC)			2,000	Vdc
Insulation Resistance	5,000			MOhms

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

#### Mechanical Specifications

<b>Size</b>	
Length	1.33 in [33.78 mm]
Mating Torque	6 to 10 in-lbs [0.68 to 1.13 Nm]

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 SPP-500-LLPL TC-SPP500-NM-LP](#)



## N Male Low PIM Connector Solder Attachment for SPP-500-LLPL

### RF Connectors Technical Data Sheet



TC-SPP500-NM-LP

#### 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	

#### Environmental Specifications

##### Temperature

Operating Range

-40 to +125 deg C

Shock

US MIL-STD 202G

Vibration

US MIL-STD 202G

Thermal Shock

US MIL-STD 202G

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

#### Plotted and Other Data

Notes:

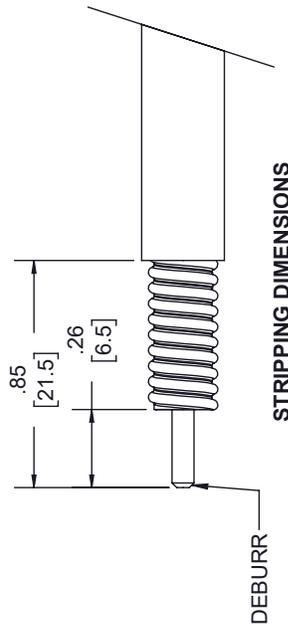
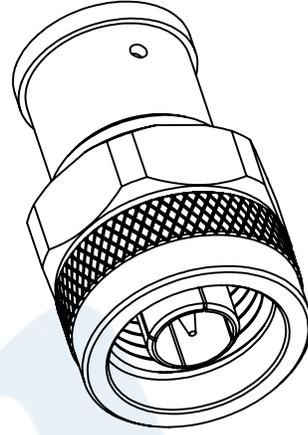
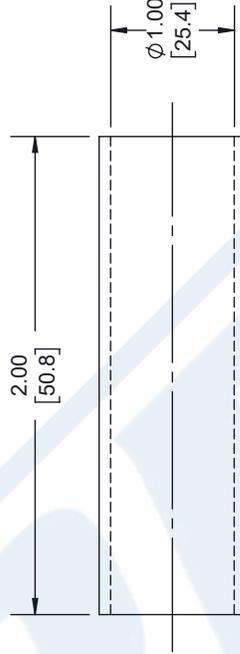
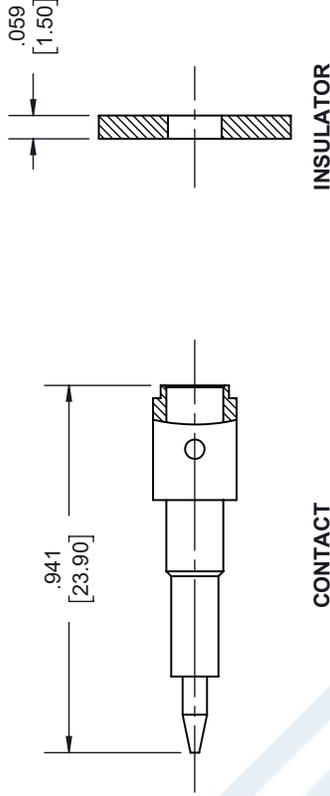
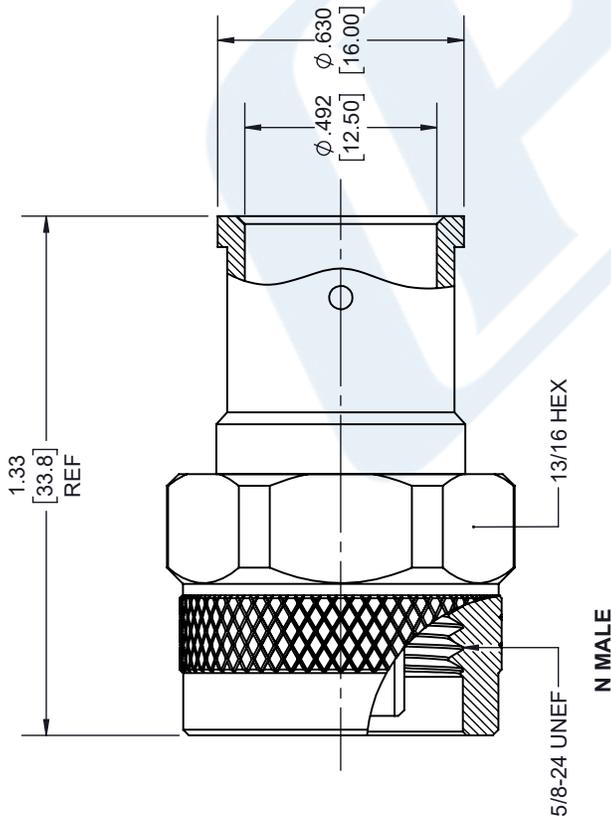
N Male Low PIM Connector Solder Attachment for SPP-500-LLPL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for SPP-500-LLPL TC-SPP500-NM-LP](#)

URL: <https://www.pasternack.com/n-male-spp-500-llpl-connector-tc-spp500-nm-lp-p.aspx>

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/07/19	S. ELLIS



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

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	+1/32
XX±.01 [ .25]	
XXX±.005 [ .13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

**PEJ 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

SCALE: N/A

SHEET 1 OF 1

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



# N Male Low PIM Connector Solder Attachment for SPP-500-LLPL

## RF Connectors Technical Data Sheet



TC-SPP500-NM-LP

### Times Microwave Systems Connector Specification

#### Configuration

- N Male Connector
- 50 Ohms
- Straight Body Geometry
- SPP-500-LLPL Interface Type
- Solder/Solder Attachment
- Low PIM Design

#### Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.25:1
- 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-SPP500-NM-LP type N male connector offered by Pasternack with solder/solder attachment for Times' SPP-500-LLPL is part of our full line of RF components available for same-day shipping. Times Microwave's type N male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.25:1.

Times Microwave's type N male connector TC-SPP500-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			1.25:1	
Insertion Loss			0.25	dB
Operating Voltage (DC)			2,000	Vdc
Insulation Resistance	5,000			MOhms

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

#### Mechanical Specifications

<b>Size</b>	
Length	1.33 in [33.78 mm]
Mating Torque	6 to 10 in-lbs [0.68 to 1.13 Nm]

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 SPP-500-LLPL TC-SPP500-NM-LP](#)



# N Male Low PIM Connector Solder Attachment for SPP-500-LLPL

## RF Connectors Technical Data Sheet



TC-SPP500-NM-LP

### 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	

### Environmental Specifications

#### Temperature

Operating Range

-40 to +125 deg C

Shock

US MIL-STD 202G

Vibration

US MIL-STD 202G

Thermal Shock

US MIL-STD 202G

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

### Plotted and Other Data

Notes:

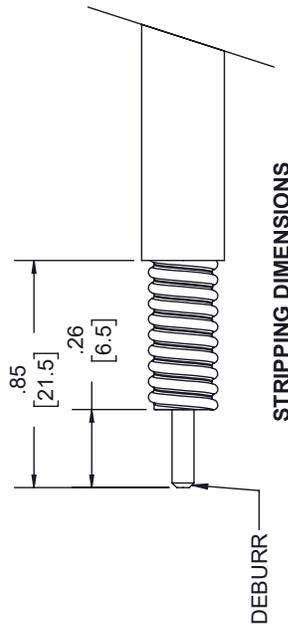
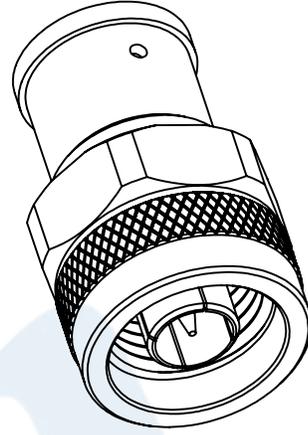
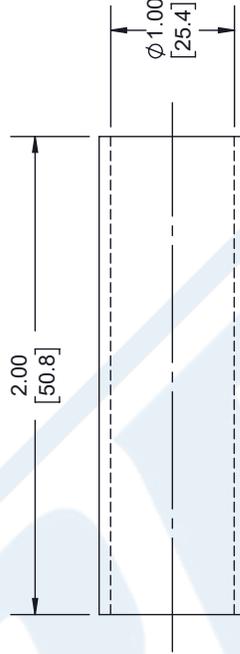
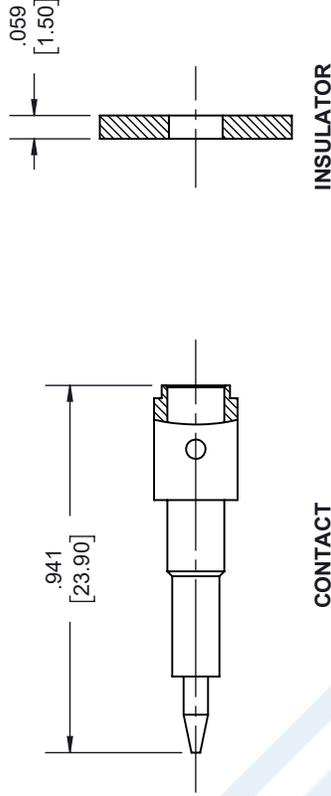
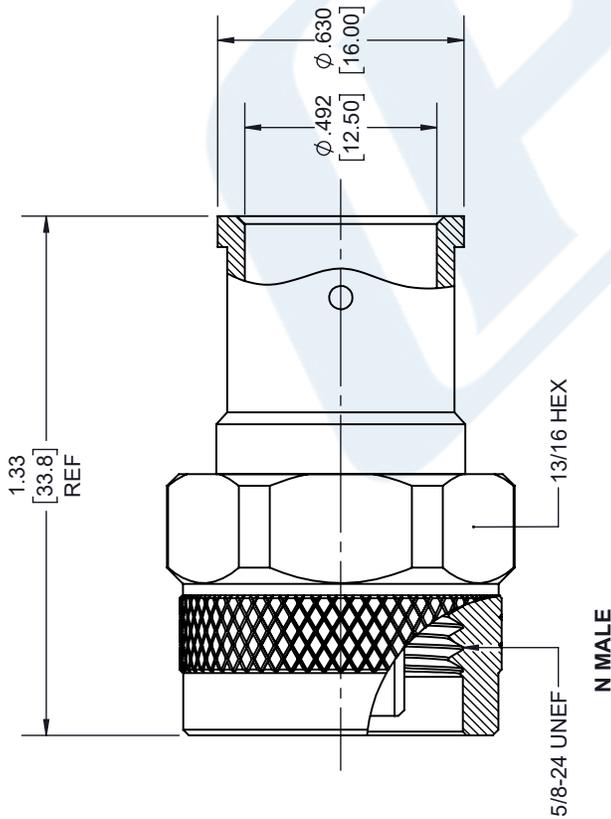
N Male Low PIM Connector Solder Attachment for SPP-500-LLPL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Solder Attachment for SPP-500-LLPL TC-SPP500-NM-LP](#)

URL: <https://www.pasternack.com/n-male-spp-500-llpl-connector-tc-spp500-nm-lp-p.aspx>

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/07/19	S. ELLIS



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

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

TOLERANCES:

X±.2	[5.08]	FRACTIONS	+1/32
XX±.01	[.25]	ANGLES ± 1°	
XXX±.005	[.13]		

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

**PEJ 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

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1  
 SCALE N/A

SIZE	CAGE	DRAWN BY	PART NUMBER	REV
A	53919	K.DANG	TC-SPP500-NM-LP	A



# Low Loss SPP-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

## Times Microwave Systems Coax Cable Specification

### Configuration

- Low Loss, Plenum Corrugated Cable
- 1 Shield(s)

### Features

- PIM < -160 dBc
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss Dielectric 76% VoP
- Shielding >100 dB
- UV Resistant FEP Jacket

### Applications

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

### Description

SPP-500-LLPL low loss, low PIM Plenum Rated coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The SPP-500-LLPL coaxial cable features a low loss dielectric with an 76% velocity of propagation (VoP), BCCAL center conductor and a helically corrugated, copper outer conductor. This cable is UL listed, type CMP (plenum) rated coax. These features combine to make the Times Microwave SPP-500-LLPL a super flexible, low PIM coax cable that is well suited for use as an antenna jumper cable, Distributed Antenna Systems (DAS), small cell, and other applications where Fire Rated material is required. The durable FEP outer jacket makes this cable appropriate for a wide range of indoor or outdoor applications.

Our datasheet specifications and drawing with dimensions for Times Microwave SPP-500-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-500-LLPL low PIM cable assembly for the job. See our web site to find the right connector cable combination for your application.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		76		%
Passive Intermodulation			-160	dBc
Nominal Capacitance		26.2 [85.96]		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 Loss SPP-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-500-LLPL](#)



Low Loss SPP-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

RF Cables  
Technical Data Sheet



SPP-500-LLPL

**Performance by Frequency Band**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	1.5	2	2.5	5.8	GHz
Attenuation, Typ	2.29	4.41	5.12	5.82	9.23	dB/100ft
	7.51	14.47	16.8	19.09	30.28	dB/100m
Input Power (CW), Max	2,500	1,340	1,150	1,020	650	Watts

**Mechanical Specifications**

Diameter	0.5 in [12.7 mm]
Weight	0.072 lbs/ft [0.11 Kg/m]
Min. Bend Radius (Installation)	1.5 in [38.1 mm]

**Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum <sup>1</sup>	0.136 in 3.45 mm
Conductor Type	Solid	
Dielectric	PTFE	0.37 in 9.4 mm
Outer Conductor	Copper Corrugated	0.472 in 11.99 mm
Jacket	FEP, Blue	0.5 in [12.7 mm]

**Environmental Specifications**

<b>Temperature</b>	
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-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-500-LLPL](#)



## Low Loss SPP-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible

### RF Cables Technical Data Sheet



SPP-500-LLPL

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

#### Plotted and Other Data

Notes:

Low Loss SPP-500-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.

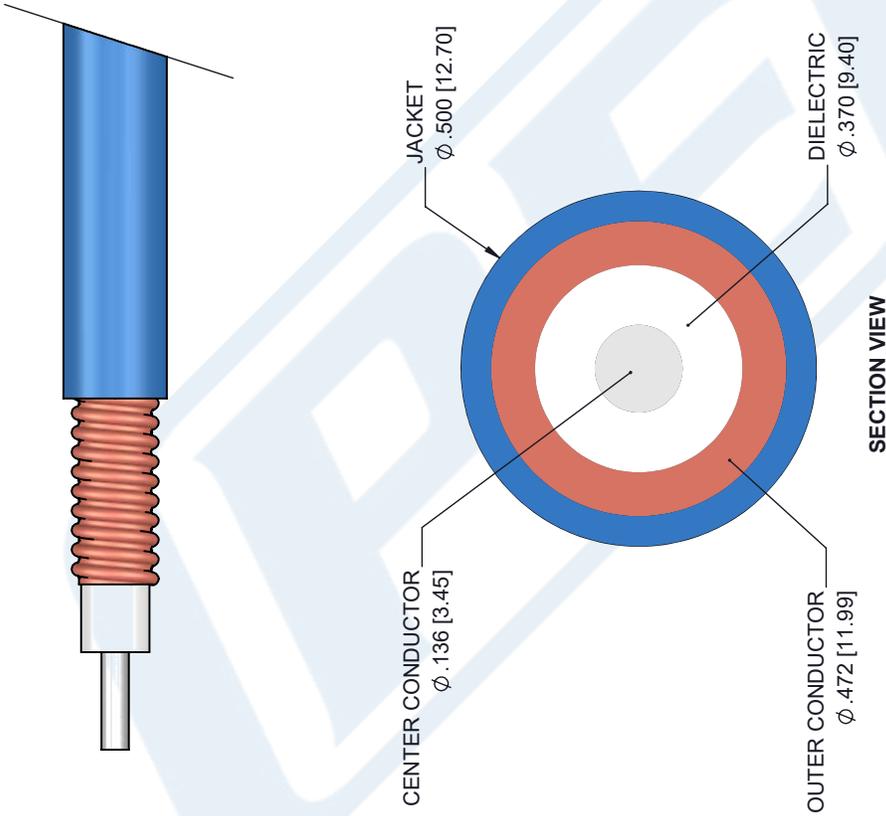
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss SPP-500-LLPL Plenum Rated Corrugated Coax Cable with Blue FEP Jacket Superflexible SPP-500-LLPL](#)

URL: <https://www.pasternack.com/low-loss-corrugated-spp500llpl-fep-jacket-spp-500-llpl-p.aspx>

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

**TIMES** MICROWAVE SYSTEMS **SPP-500-LLPL CAD Drawing**  
 Low Loss SPP-500-LLPL Plenum Rated Corrugated Coax  
 Cable with Blue FEP Jacket Superflexible

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/04/19	S. ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	+1/32
XX±.01 [.25]	
XXX±.005 [0.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

**(PE) PASTERNAK**  
 an INFINITO 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

SIZE CAGE DRAWN BY PART NUMBER  
 A 53919 K.DANG SPP-500-LLPL

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.	
SHEET 1	OF 1
SCALE	N/A
REV A	

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.