N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250



TC-250-NF-LP

TIMES MICROWAVE SYSTEMS An Amphenol Company

Times Microwave Systems Connector Specification

Configuration

- N Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, PE-1/4SFHC
- 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 µin contact plating

Applications

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

Description

Times Microwave's TC-250-NF-LP type N , N, Low PIM, Connector is part of our full line of RF components available for same-day shipping. Times Microwave's type N female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The Times type N female connector also has low passive intermodulation of -160 dBc.

Times Microwave's type N female connector TC-250-NF-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			0.25	dB
Passive Intermodulation			-160	
Operating Voltage (AC)			4,000	Vrms
Insulation Resistance	10,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:
Insertion Loss= -0.1*SQRT(F(GHz))

Mechanical Specifications

Size

Length	1.33 in [33.78 mm]
Width	0.94 in [23.88 mm]
Height	0.94 in [23.88 mm]
Weight	0.0765 lbs [34.7 g]

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N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250



TC-250-NF-LP

Mating Cycles	500 Cycles
Mating Torque	9.74 to 15 in-lbs [1.10 to 1.70 Nm]
Cable Retention Force	200 lbs 90.72 kg

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200 µin
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 100 µin
Body	Brass	Tri-Metal 100 µin
Gasket	Silicone Rubber	

Environmental Specifications

Temperature	
Operating Range	-40 to +125 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:

N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 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 Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 TC-250-NF-LP

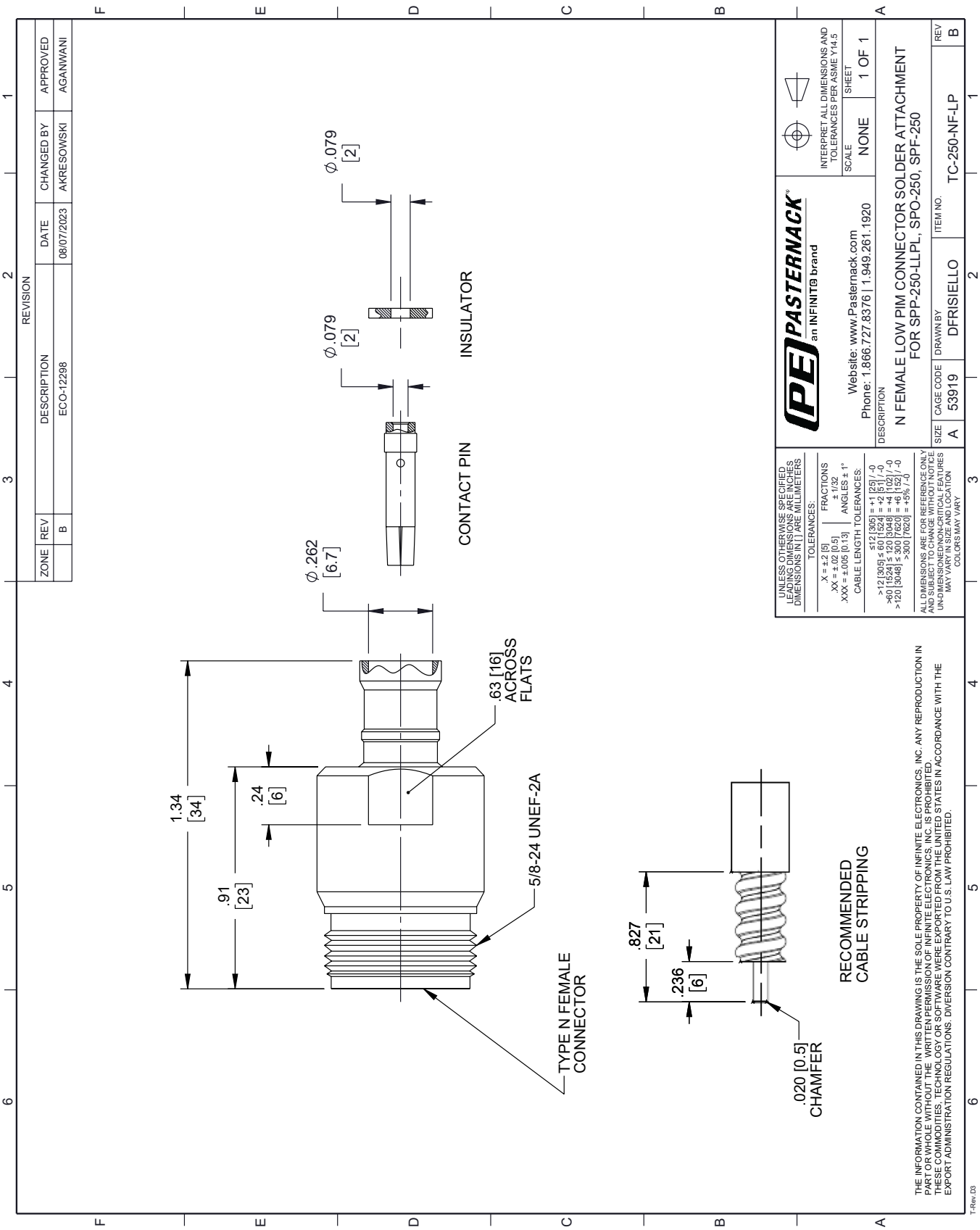
URL: https://www.pasternack.com/n-female-spp-250-llpl-spf-250-connector-tc-250-nf-lp-p.aspx

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TC-250-NF-LP CAD Drawing

N Female Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250



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QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM

RF Connectors Technical Data Sheet PE45431

Configuration

- QMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- SPP-250-LLPL Interface Type
- Solder/Solder Attachment

Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1
- PIM levels lower than -145 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 PE45431 QMA male right angle connector with solder/solder attachment for SPP-250-LLPL is part of our full line of RF components available for same-day shipping. Our QMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. The QMA male connector also has low passive intermodulation of -145 dBc. Its right angle body geometry allows for easier connections in tight spaces.

Our QMA male right angle connector PE45431 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			0.1	dB
Passive Intermodulation			-145	dBc
Operating Voltage (AC)			250	Vrms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion Loss is 0.04*sqrt(FGHz)

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45431

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QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM

Material Specifications

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Outer Conductor	Phosphor Bronze	Tri-Metal
Body	Brass	Tri-Metal
Coupling Nut	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:

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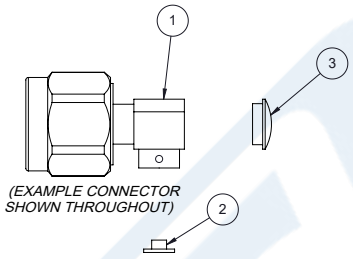
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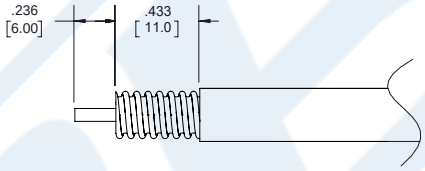


QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM

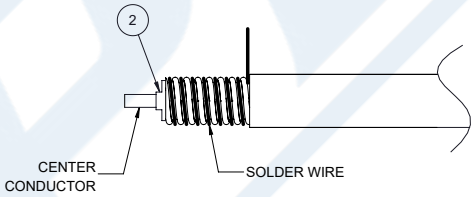
Assembly Instruction



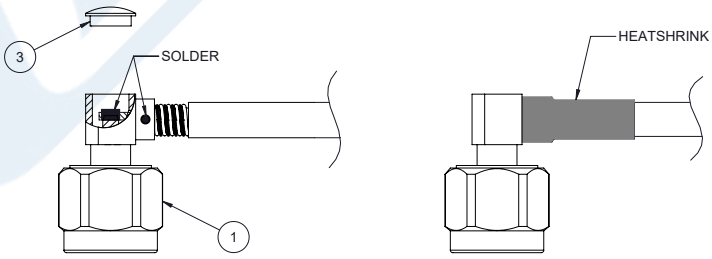
1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR AND DEBURR CABLE.



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



3. PUSH THE CONNECTOR BODY INTO THE CABLE, UNTIL IT STOPS. SOLDER THE CONNECTOR BODY WITH CABLE. SOLDER THE INNER CONDUCTOR. PRESS THE CAP ③ INTO BODY 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: QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45431

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QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM

RF Connectors Technical Data Sheet PE45431

QMA Male Right Angle 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: QMA Male Right Angle Connector Solder Attachment for SPP-250-LLPL, Low PIM PE45431

URL: https://www.pasternack.com/qma-male-spp-250-llpl-connector-pe45431-p.aspx

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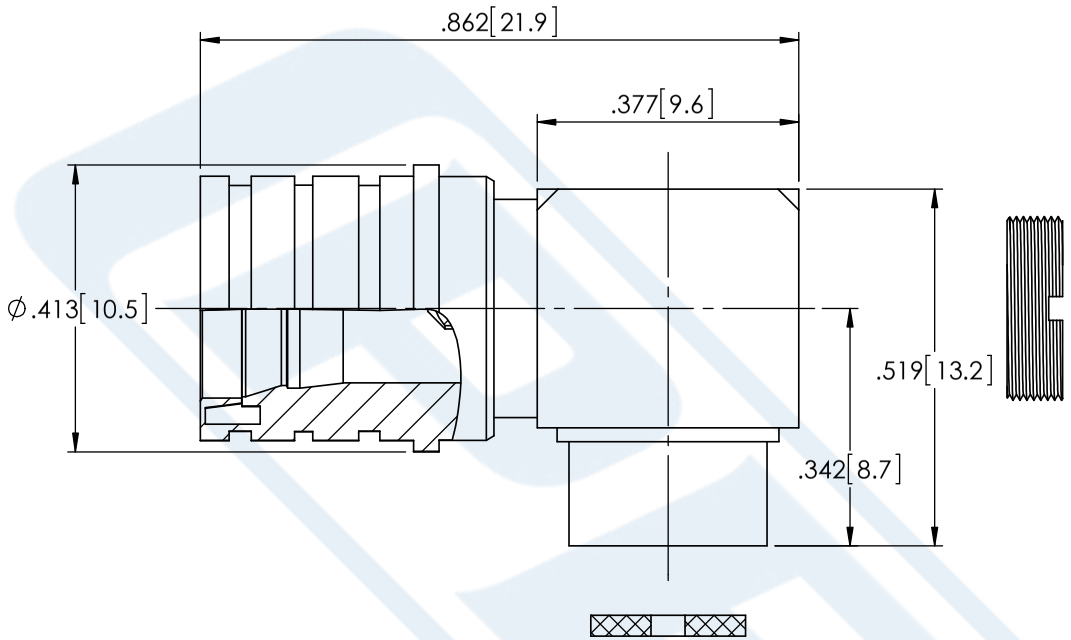
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PE45431 CAD Drawing

QMA Male Right Angle 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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DWG TITLE

PE45431

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

CAGE CODE 53919	CAD FILE 11/22/17	SCALE N/A	SIZE A	CN2245

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

RF Cables
Technical Data Sheet

TIMES MICROWAVE SYSTEMS An Amphenol Company

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

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RF Cables
Technical Data Sheet

TIMES MICROWAVE SYSTEMS An Amphenol Company

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

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

Compliance Certifications (see product page for current document)

Plotted and Other Data

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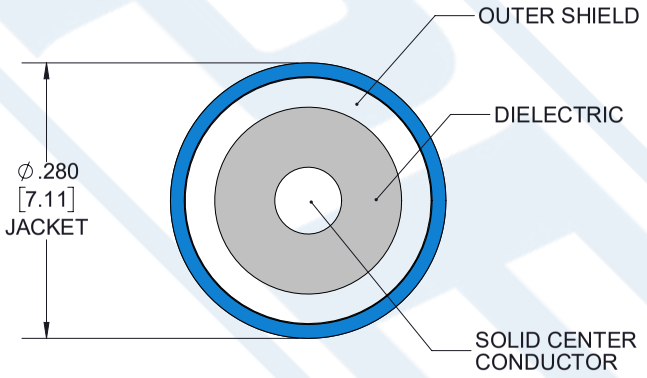
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SECTION VIEW

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

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SECTION VIEW

DWG TITLE

SPP-250-LLPL

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SPP-250-LLPL CAD Drawing

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