

SMA Male Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable

Times Microwave Systems Connector Specification

SMA Male Low PIM Connector Solder/Solder Attachment for SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible and FM-1/4SFHC Cable, part number TC-250-SM-LP, from Times Microwave offered by Fairview Microwave is in-stock and ships same day. This SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. The SMA male connector also has low passive intermodulation (PIM) of -155 dBc.

Times Microwave's SMA male connector TC-250-SM-LP datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.35:1	
Insertion Loss			0.25	dB
Passive Intermodulation			-155	dBc
Operating Voltage (DC)			1,000	Vdc
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion Loss = $-0.1 * \text{SQRT}(F(\text{GHz}))$

Mechanical Specifications

Size	
Length	1.06 in [26.92 mm]
Width/Dia.	0.35 in [8.89 mm]
Height	0.35 in [8.89 mm]
Weight	0.024 lbs [10.89 g]
Mating Cycles	500 Cycles
Mating Torque	44.25 in-lbs [5 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 200µin
Insulation	PTFE	
Body	Brass	Tri-Metal 80 µin



Configuration:

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- SPP-250-LLPL, SPF-250, SPO-250, 1/4" Superflexible, FM-1/4SFHC Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features:

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.35:1
- PIM levels better than -155 dBc
- Silver Plated Brass Contact
- 200µin contact plating

Applications:

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

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Coupling Nut	Brass	Tri-Metal 80 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

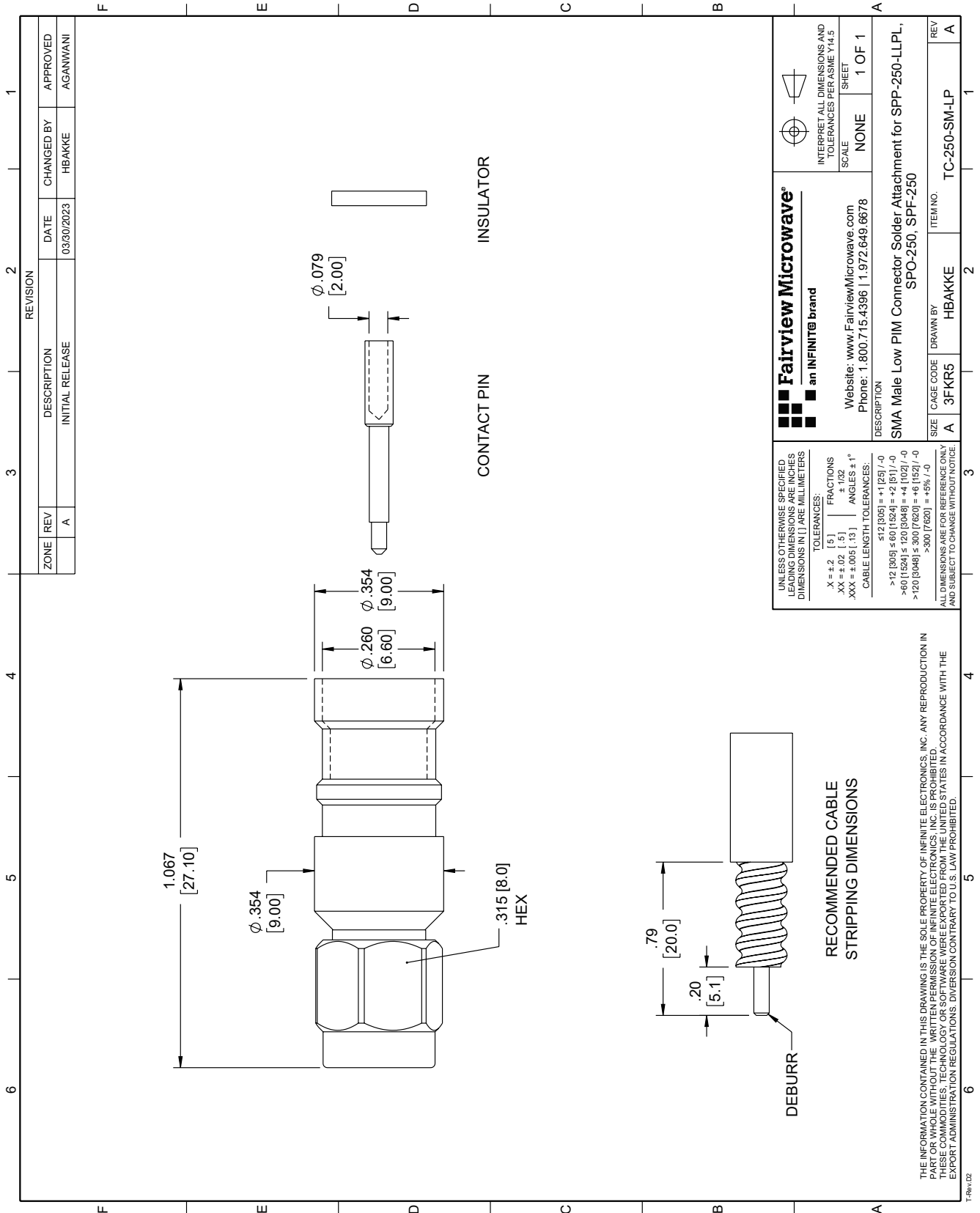
Notes:

SMA Male Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Male Low PIM Connector Solder Attachment for SPP-250-LLPL, SPO-250, SPF-250 Cable TC-250-SM-LP](#)

URL: <https://www.fairviewmicrowave.com/sma-male-spp-250-llpl-spo-250-spf-250-connector-tc-250-sm-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



RA SMA Male Low PIM Connector Solder Attachment for FM-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 Cable

RA SMA male connector with solder/solder attachment for FM-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250, part number FMCN1719, from Fairview Microwave is in-stock and ships same day. This SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. The SMA male connector also has low passive intermodulation (PIM) of -155 dBc. Its right angle body geometry facilitates connections in tight spaces.

Fairview's RA SMA male connector FMCN1719 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.35:1	
Passive Intermodulation			-155	dBc
DWV (AC)			750	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Freq. Range	DC to 3	3 to 6				GHz
VSWR, Max	1.25:1	1.35:1				

Mechanical Specifications

Size	
Length	0.77 in [19.56 mm]
Width/Dia.	0.36 in [9.14 mm]
Weight	0.02 lbs [9.07 g]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal
O-Ring	Silicone	



Configuration:

- SMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- FM-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features:

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.35:1
- PIM levels better than -155 dBc
- Silver Plated Brass Contact

Applications:

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications

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Environmental Specifications

Temperature

Operating Range -40 to +155 deg C

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

Plotted and Other Data

Notes:

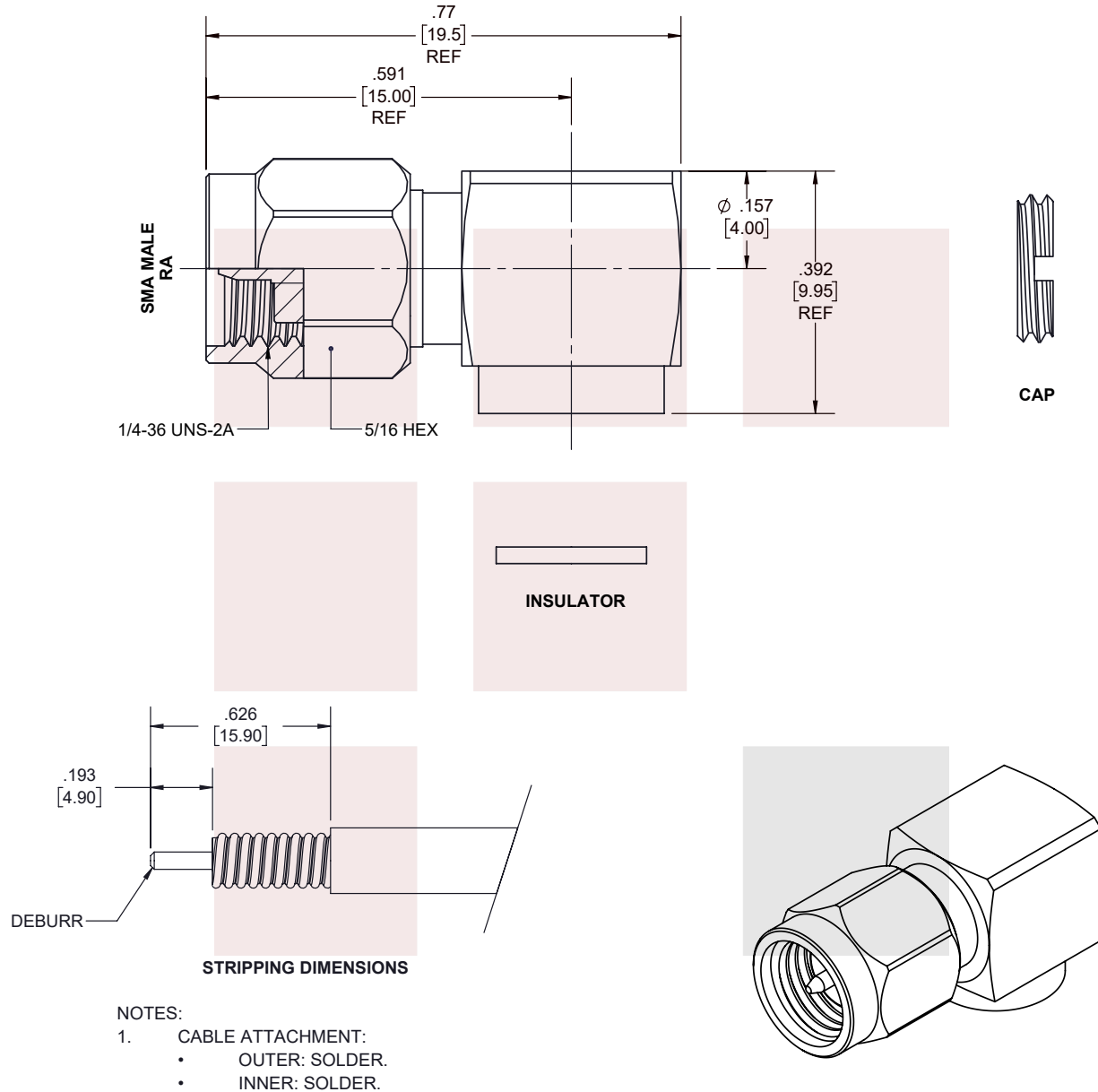
RA SMA Male Low PIM Connector Solder Attachment for FM-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [RA SMA Male Low PIM Connector Solder Attachment for FM-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 Cable FMCN1719](#)

URL: <https://www.fairviewmicrowave.com/sma-male-spp-250-llpl-spo-250-spf-250-connector-fmcn1719-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/13/2021	S.ELLIS



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TITLE
RA SMA Male Low PIM Connector Solder Attachment
for FM-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250
Cable

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

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]	ANGLES ± 1°	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.

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	FMCN1719	A

THIRD-ANGLE PROJECTION
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DESIGN IN THIS DOCUMENT
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SHEET 1 OF 1

SCALE N/A

SPO-250 Low Loss Corrugated Coax Cable Black PE Jacket Superflexible Outdoor Rated

Times Microwave Systems Coax Cable Specification

SPO-250 low loss outdoor rated coax cable by Times Microwave is part of our full line of RF components available for same-day shipping. The SPO-250 coaxial cable features a low loss dielectric with an 83% velocity of propagation (VoP), solid copper center conductor and a helically corrugated, copper outer conductor. These features combine to make the Times Microwave SPO-250 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 outdoor applications. The tough, black polyethylene jacket provides moisture and UV protection and is suitable for outdoor use.

Our datasheet specifications and drawing with dimensions for Times Microwave SPO-250 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, Fairview Microwave has the right SPO-250 cable assembly for the job. See our web site to find the right connector cable combination for your application.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		83		%
Passive Intermodulation			-160	dBc
Nominal Capacitance		24		pF/ft
		[78.74]		[pF/m]
Nominal Inductance		0.054		uH/ft
		[0.18]		[uH/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	1.5	2	2.5	5.8	GHz
Attenuation, Typ	4.1	7.8	9.13	10.33	16.65	dB/100ft
	13.45	25.59	29.95	33.89	54.63	dB/100m
Power In (CW), Max	1,110	580	500	440	280	Watts

Mechanical Specifications

Diameter	0.303 in [7.7 mm]
Weight	0.052 lbs/ft [0.08 Kg/m]
Min. Bend Radius (Installation)	1.25 in [31.75 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strands	0.075 in [1.91 mm]



Configuration:

- Low Loss Corrugated Cable
- 1 Shield(s)

Features:

- PIM < -160 dBc
- Lightweight and Super Flexible
- Low Loss Dielectric 83% VoP
- Shielding > 100 dB
- Durable Black Polyethylene Outer Jacket
- Outdoor Rated

Applications:

- Distributed Antenna Systems (DAS)
- Antenna Installations
- Small Cell
- Outdoor Applications
- Commutation Tower Install

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Conductor Type	Solid	
Dielectric	Foam PE	0.177 in [4.5 mm]
Outer Conductor	Copper Corrugated	0.252 in [6.4 mm]
Jacket	PE, Black	0.303 in [7.7 mm]

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

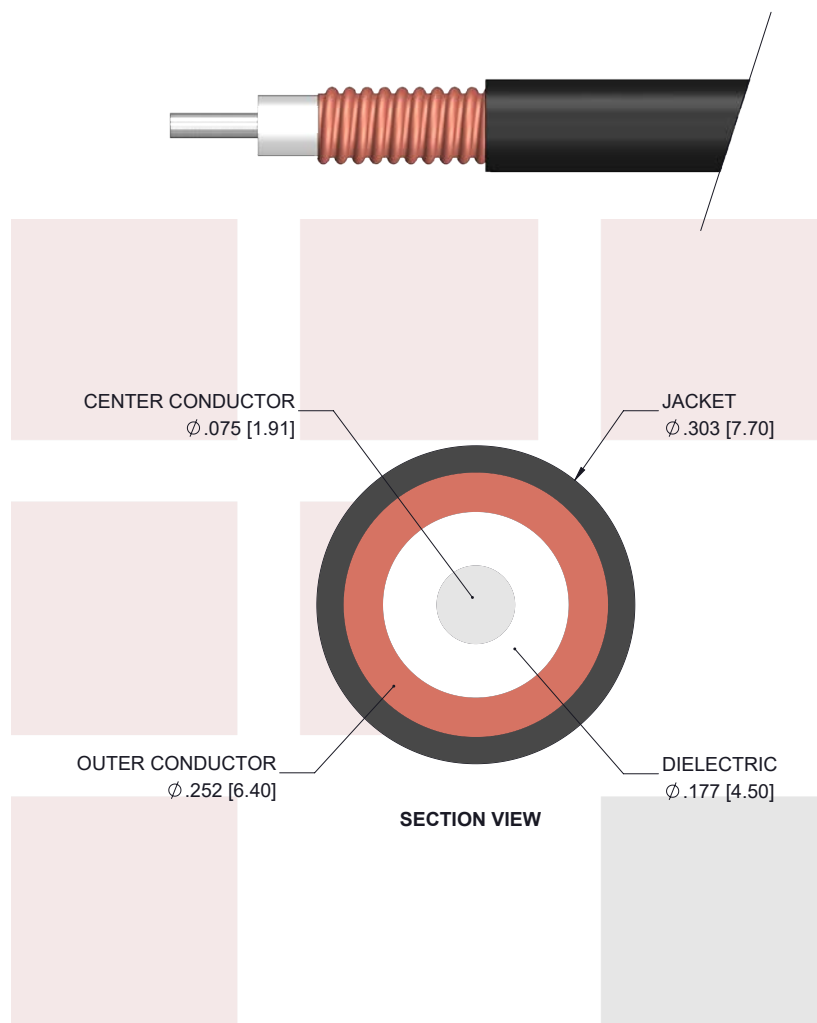
Notes:

SPO-250 Low Loss Corrugated Coax Cable Black PE Jacket Superflexible Outdoor Rated from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SPO-250 Low Loss Corrugated Coax Cable Black PE Jacket Superflexible Outdoor Rated SPO-250](#)

URL: <https://www.fairviewmicrowave.com/spo250-low-loss-corrugated-coax-cable-pe-jacket-spo-250-p.aspx>

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STANDARD TOLERANCES

.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

Fairview Microwave RF COMPONENTS ON DEMAND. <i>Done!</i>		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].				
TITLE SPO-250 Low Loss Corrugated Coax Cable Black PE Jacket Superflexible Outdoor Rated	DWG NO SPO-250			CAGE CODE 3FKR5		
	CAD FILE 03/07/19	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	