

Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR Cable

Mini SMP female connector with solder attachment for RG405, RG405 Tinned and .086 SR, part number SC5431, from Fairview Microwave is in-stock and ships same day. This Mini SMP female connector operates up to a maximum frequency of 26.5 GHz and offers excellent VSWR of 1.15:1. This blind mate connector is ideal for applications without direct visual or tactile access to the connection point, for example, when two circuit boards need to be mated.

Fairview's Mini SMP female connector SC5431 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		26.5	GHz
VSWR			1.15:1	

Mechanical Specifications

Size	
Length	0.29 in [7.37 mm]
Width/Dia.	0.125 in [3.18 mm]
Weight	0.0007 lbs [0.32 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold MIL-G-45204

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:



Configuration:

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- RG405, RG405 Tinned, .086 SR Interface Type
- Solder Attachment

Features:

- Operating Frequency of 26.5 GHz Max.
- Excellent VSWR of 1.15:1
- Blind Mate Connector
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

Applications:

- General Purpose Test
- Custom Cable Assemblies

Fairview Microwave
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Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR 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.

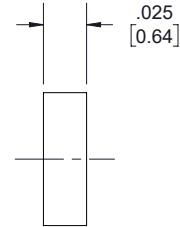
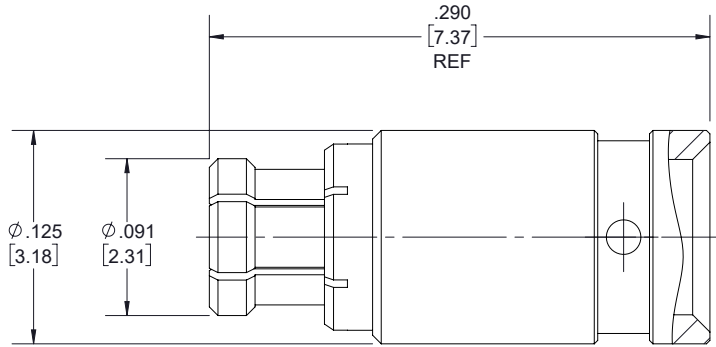
For additional information on this product, please click the following link: [Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR Cable SC5431](#)

URL: <https://www.fairviewmicrowave.com/mini-smp-female-rg405-connector-sc5431-p.aspx>

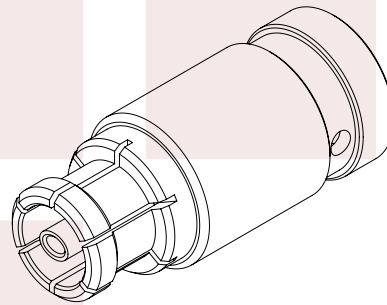
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR PE44974 SC5431 20200916	09/30/20	SRAUTUS

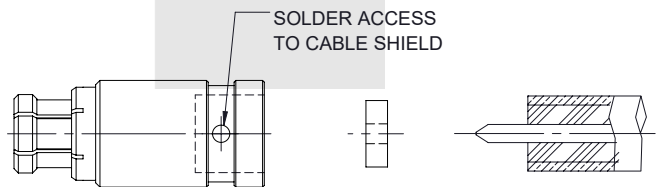
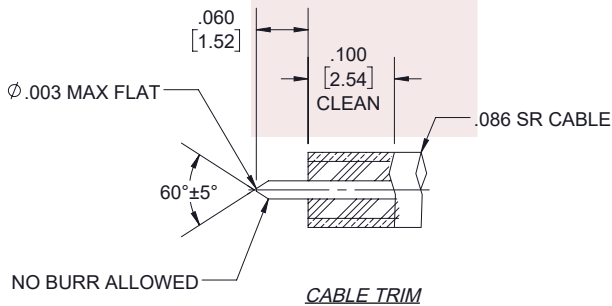


**Mini SMP
FEMALE**



ASSEMBLY PROCEDURES:

1. TRIM CABLE OUTER CONDUCTOR AND DIELECTRIC TO DIMENSION SHOWN, DO NOT NICK CENTER CONDUCTOR.
2. CLEAN CABLE OUTER CONDUCTOR USING FINE GRAIN SANDPAPER OR STEEL WOOL AS SHOWN.
3. SLIDE DIELECTRIC BEAD ONTO CENTER CONDUCTOR UNTIL IT SEATS AGAINST CABLE.
4. FULLY INSTALL CABLE SUBASSEMBLY INTO BODY AND SOLDER IN PLACE. ENSURE THE CABLE JACKET IS AGAINST CABLE STOP PRIOR TO SOLDERING.



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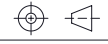
Mini SMP Female Connector Solder Attachment for
RG405, RG405 Tinned, .086 SR Cable

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

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY SLI	ITEM NO. SC5431	REV A
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T-Rev.D

3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

3.5mm male connector with clamp/solder attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN and RG405, part number FMCN1827, from Fairview Microwave is in-stock and ships same day.

Fairview's 3.5mm male connector FMCN1827 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.

Mechanical Specifications

Size	
Length	0.94 in [23.88 mm]
Width/Dia.	0.312 in [7.92 mm]
Height	0.5 in [12.7 mm]
Weight	0.016 lbs [7.26 g]
Mating Torque	8 to 10 in-lbs [0.90 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PCTFE	
Body	Passivated Stainless Steel	SAE-AMS-2700
Coupling Nut	Passivated Stainless Steel	SAE-AMS-2700

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

Plotted and Other Data

Notes:



Configuration:

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

Features:

- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications:

- General Purpose Test
- Custom Cable Assemblies

Fairview Microwave
 301 Leora Ln., Suite 100
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3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 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.

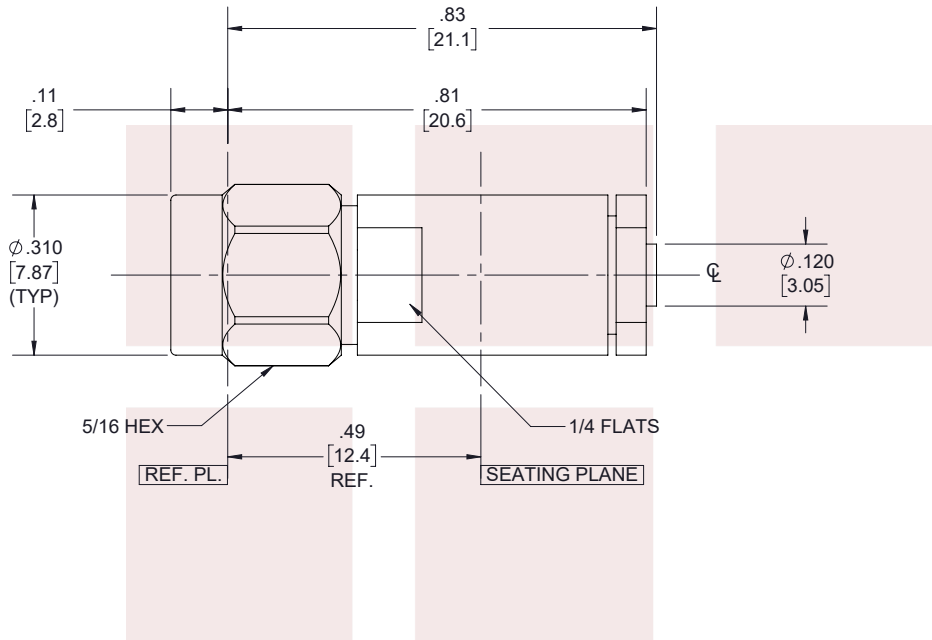
For additional information on this product, please click the following link: [3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 FMCN1827](#)

URL: <https://www.fairviewmicrowave.com/3.5mm-male-fm-sr086altn-fm-sr086tb-fm-sr086tbj-fm-sr086cutn-rg405-connector-fmcn1827-p.aspx>

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A	INITIAL RELEASE	02/11/2022	A.GANWANI



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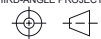
TITLE
3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

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

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
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THIRD-ANGLE PROJECTION



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SHEET 1 OF 2

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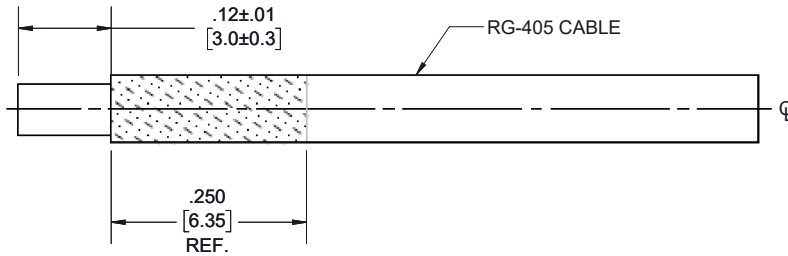
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SIZE A	CAGE CODE 3FKR5	DRAWN BY K.GLEBOVA	ITEM NO. FMCN1827	REV A
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T-Rev.D

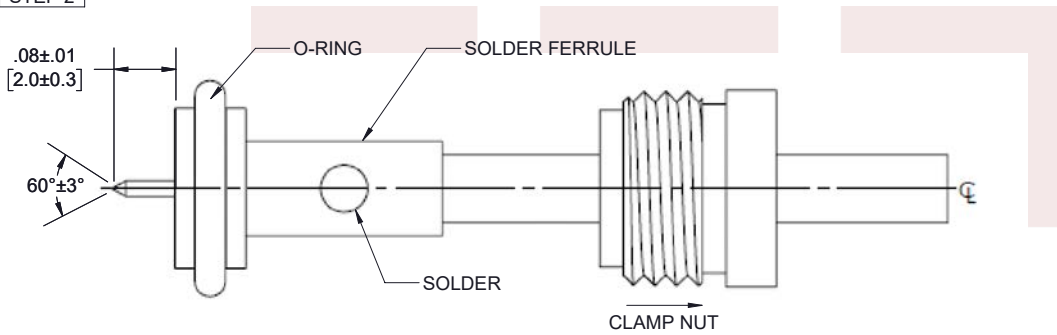
ASSEMBLY PROCEDURES

STEP 1



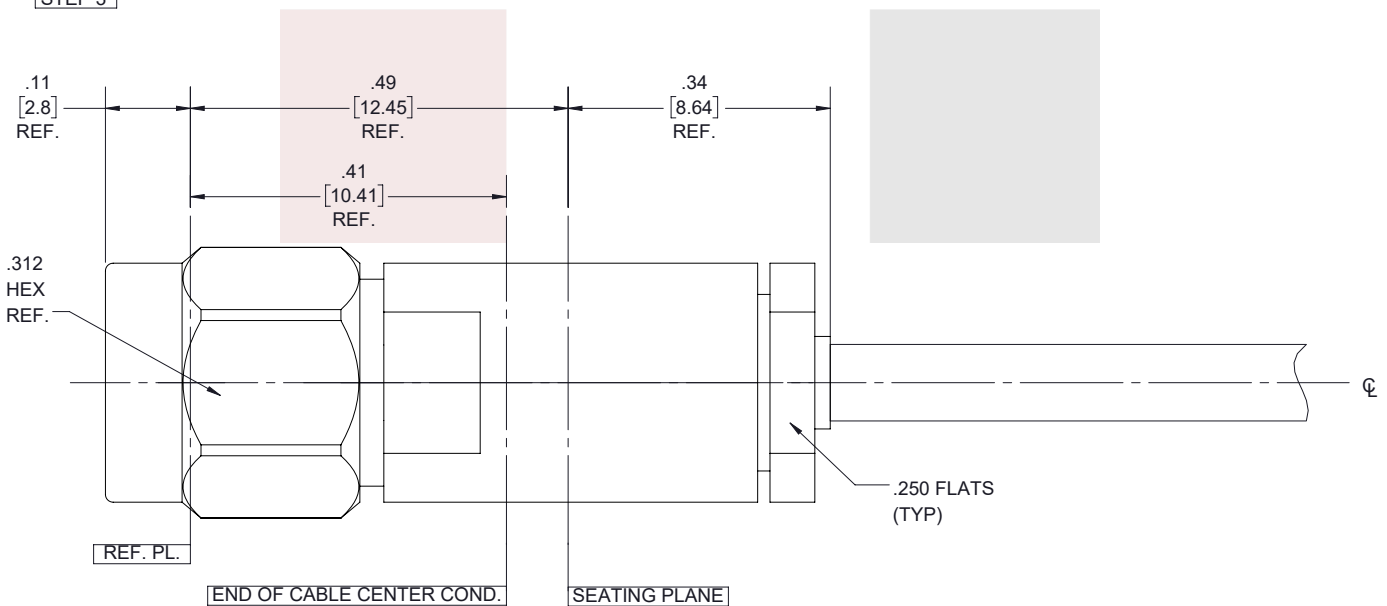
- 1A. TRIM CABLE TO EXPOSE DIELECTRIC CORE AS SHOWN.
- 1B. PRE-TIN CABLE JACKET TO APPROXIMATE DIMENSION SHOWN.

STEP 2



- 2A. SLIDE CLAMP NUT ONTO CABLE IN ORIENTATION SHOWN.
- 2B. INSERT CABLE INTO SOLDER FERRULE UNTIL FULLY SEATED. THEN SOLDER CABLE TO FERRULE WHERE SHOWN.
- 2C. TRIM CABLE DIELECTRIC FLUSH WITH FERRULE FACE (DO NOT SCORE CENTER CONDUCTOR). THEN POINT CENTER CONDUCTOR AS SHOWN.

STEP 3



3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

DISTANCE FROM END OF CABLE CENTER COND. TO REF PL. IS .410 (REF.)

- 3. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR BODY UNTIL SOLDER FERRULE IS SEATED AND TIGHTEN CLAMP NUT TO 25-35 IN. LBS.

Formable .086 Formable Coax Cable Black FEP Jacket

Formable semi-rigid coax is a hand formable version of standard semi-rigid that does not require complicated and costly preformed cable assemblies. Because the dimensions and electrical characteristics are so closely matched to semi-rigid coax, standard semi-rigid connectors can be used. The tin soaked copper braid outer shield provides excellent RF shielding. FEP Jacket reduces the chance of shorting exposed contacts or circuit conductors.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		61	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Time Delay		1.43 [4.69]		ns/ft [ns/m]
Shielding Effectiveness	100			dB
Operating Voltage (AC)			1,500	Vrms
Inner Conductor DC Resist.			65.7	Ohms/1000ft
Outer Conductor DC Resist.			10.2	Ohms/1000ft
Nominal Capacitance		29		pF/ft
		[95.14]		[pF/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	20	GHz
Attenuation, Typ	15	22.5	54.9	81.2	120	dB/100ft
	49.21	73.82	180.12	266.4	393.7	dB/100m
Power In (CW), Max	173.5	121.5	52.2	35.8	24.3	Watts

Mechanical Specifications

Diameter	0.105 in [2.67 mm]
Weight	0.026 lbs/ft [0.04 Kg/m]
Min. Bend Radius (Installation)	0.5 in [12.7 mm]
Min. Bend Radius (Repeated)	0.787 in [19.99 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 1 Strands	0.02 in [0.51 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.062 in [1.57 mm]
Outer Conductor	Tinned Copper Composite Braid	0.085 in [2.16 mm]
Jacket	FEP, Black	0.105 in [2.67 mm]



Configuration:

- Formable Cable
- 1 Shield(s)

Features:

- Dimensionally the same as standard solid outer conductor semi-rigid coax
- Standard semi-rigid connectors can be used
- Cable is hand formable and does not require special tools to bend
- Connectors are easily soldered to Tin soaked outer conductor
- Cable can be formed more than once without damage to outer conductor
- High RF Shielding > 100 dB

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www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

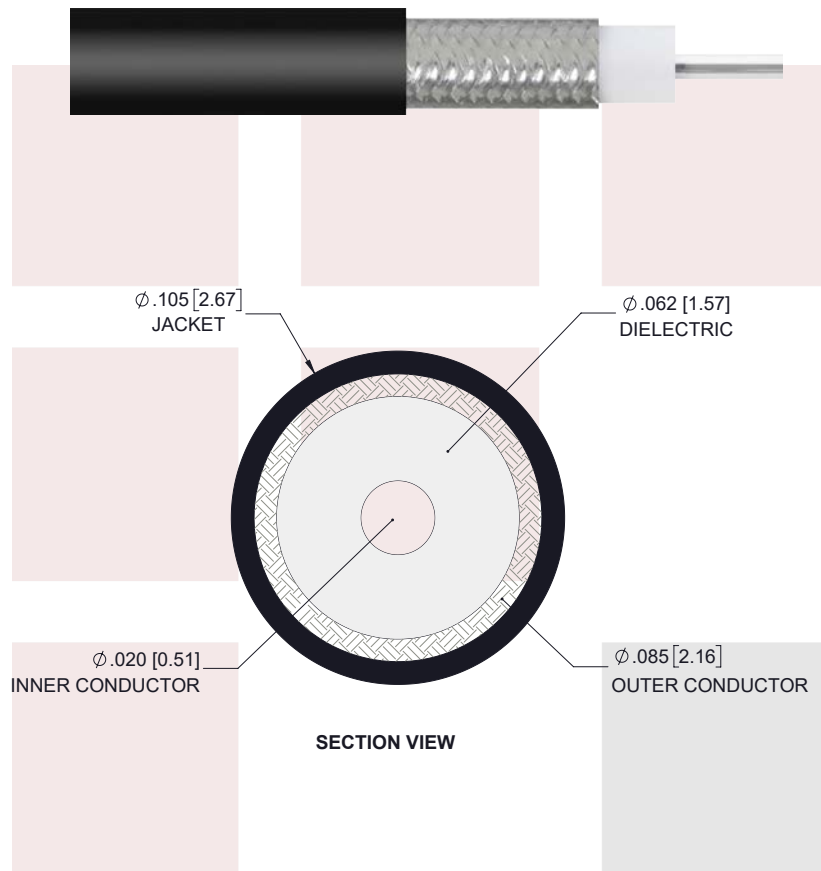
Formable .086 Formable Coax Cable Black FEP Jacket from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Formable .086 Formable Coax Cable Black FEP Jacket FM-SR086TBJ](#)

URL: <https://www.fairviewmicrowave.com/invalid-alias-formable-coax-cable-fep-jacket-fm-sr086tbj-p.aspx>

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REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/22/19	S.ELLIS



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<p>TITLE</p> <p>Formable .086 Formable Coax Cable Black FEP Jacket</p>	<p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p>SHEET 1 OF 1</p> <p>SCALE N/A</p>															
<p>SIZE A</p>	<p>CAGE CODE 3FKR5</p>	<p>DRAWN BY K.DANG</p>	<p>PART NUMBER FM-SR086TBJ</p>	<p>REV A</p>													

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