PASTERNACK®
THE ENGINEER'S RF SOURCE



Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet PE44493

Configuration

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 65 GHz
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44493 Mini SMP female right angle connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our Mini SMP female connector operates up to a maximum frequency of 65 GHz. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated. Its right angle body geometry allows for easier connections in tight spaces.

Our Mini SMP female right angle connector PE44493 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		65	GHz
Operating Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 6	6 to 12	12 to 18			GHz
VSWR, Max	1.11:1	1.23:1	1.68:1			

Electrical Specification Notes:
Insertion loss = 0.05 x sqrt(fGHz) dB max up to 12 GHz.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493

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Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

Mechanical Specifications

Size

Length	0.24 in [6.1 mm]
Width/Dia.	0.136 in [3.45 mm]
Height	0.2 in [5.08 mm]
Weight	0.00073 lbs [0.33 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold
Body	Brass	Gold

Mechanical Specification Notes:
Mating cycles: 500 (smooth bore), 100 (full detent) minimum.

Environmental Specifications

Temperature

Operating Range	-55 to +155 deg C
Humidity	MIL-STD-202, Method 106
Shock	MIL-STD-202, Method 213, Condition A
Vibration	MIL-STD-202, Method 204, Condition A
Thermal Shock	MIL-STD-202, Method 107, Condition B

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493

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Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: Mini SMP Female Right Angle Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44493

URL: https://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44493-p.aspx

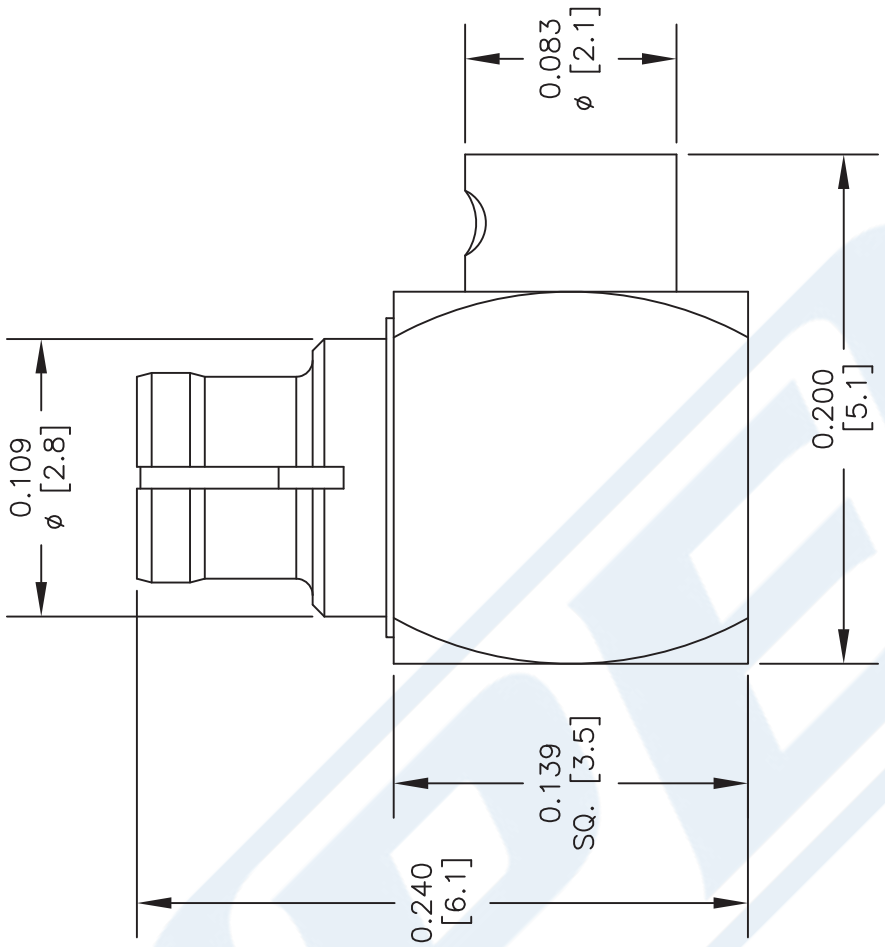
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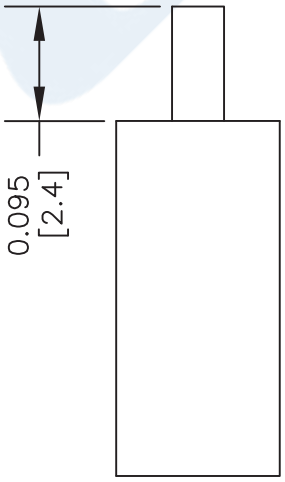
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PE44493 CAD Drawing

Mini SMP Female Right Angle Connector Solder Attachment
for PE-047SR, PE-SR047AL, PE-SR047FL





STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN TIN CENTER CONDUCTOR.
2. INSERT CABLE INTO BODY UNTIL IT STOPS.
3. SOFT SOLDER CONTACT AND OUTER CONDUCTOR, PRESS CAP DOWN.

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE **PE44493**

REV. A	FSCM NO. 53919	CAD FILE 081412	SCALE N/A	SIZE A	2233

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SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

RF Connectors Technical Data Sheet PE45277

Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 8 GHz
- Excellent VSWR of 1.1:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-DTL-45204
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45277 SMP female connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our SMP female connector operates up to a maximum frequency of 8 GHz and offers excellent VSWR of 1.1:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our SMP female connector PE45277 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. Pasternack 8 GHz SMP connectors are designed to offer a low cost alternative where the SMP form factor is desired but the standard SMP frequency range is not needed. The line of 8 GHz SMP connectors is fully compatible with industry standard SMP and GPO® connectors. These SMP connectors offer a low cost high performance blind-mate solution for lower frequency applications. The Male versions of the 8 GHz SMP is available in Full Detent, Limited Detent, and Smooth Bore versions.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
VSWR			1.1:1	

Mechanical Specifications

Size

Length	0.262 in [6.65 mm]
Weight	0.00244 lbs [1.11 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz PE45277

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SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-DTL-45204
Insulation	PTFE	
Body	Beryllium Copper	Gold MIL-DTL-45204

Environmental Specifications

Temperature

Operating Range	-55 to +155 deg C
Humidity	MIL-STD-202, Method 106 (except 7b omitted)
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition D
Salt Spray	MIL-STD-202, Method 101, Condition B

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL, Up To 8 GHz PE45277

URL: https://www.pasternack.com/smp-female-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45277-p.aspx

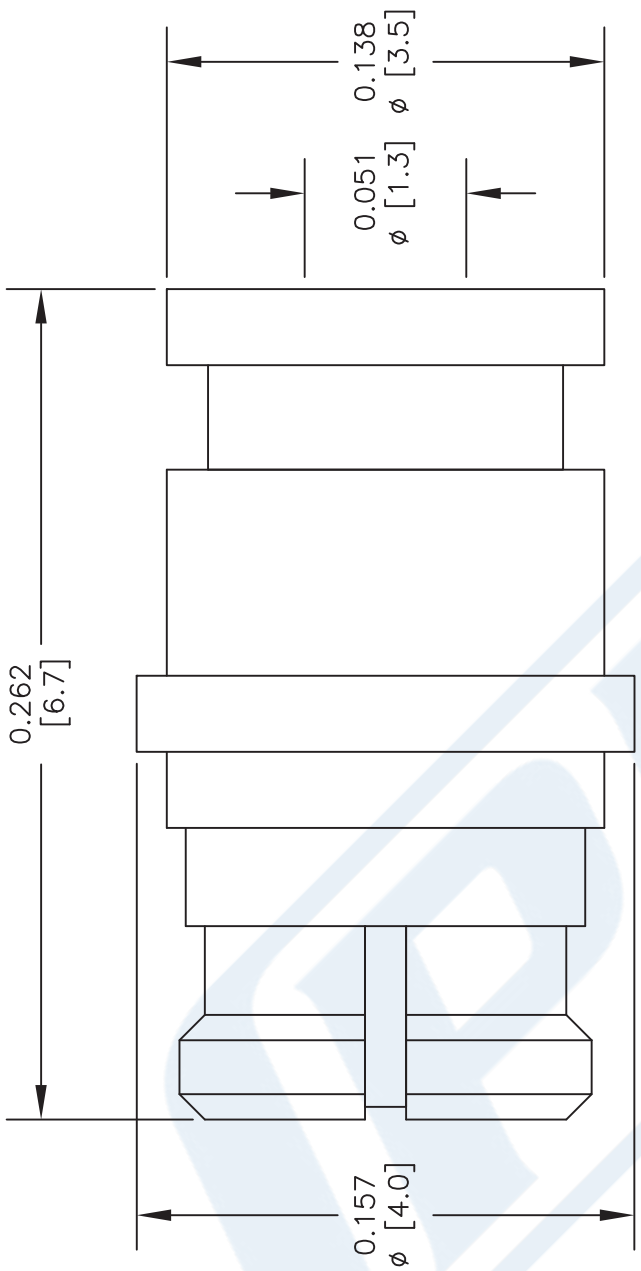
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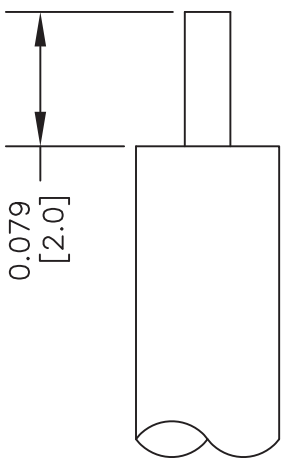
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PE45277 CAD Drawing

SMP Female Connector Solder Attachment for PE-047SR,
PE-SR047AL, PE-SR047FL, Up To 8 GHz





STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.
2. SOLDER CONTACT TO CENTER CONDUCTOR.
3. INSERT CABLE INTO BODY UNTIL IT BOTTOMS OUT. SOLDER OUTER CONDUCTOR TO BODY.

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE **PE45277**

CAD FILE	071416	SCALE N/A	SIZE A	2233

FSCM NO. 53919

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Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables
Technical Data Sheet

PE-SR047FL

Configuration

- Formable Cable
- 1 Shield(s)

Features

- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- May be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- Tinned Copper Braid Outer Conductor
- Max Frequency 20 GHz

Applications

- Test and Measurement
- Communication Systems
- Wireless Systems
- Medical Equipment
- RADAR
- Low Loss Applications

Description

Formable semi-rigid coaxial cable 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. Pasternack's PE-SR047FL is a formable .047 semi-rigid coax cable with tinned copper braid outer conductor, providing low loss and excellent RF shielding effectiveness. This semi-flexible cable has an FEP jacket to reduce the chance of shorting exposed contacts or circuit conductors. Pasternack's formable cable can be used as an alternative to semi-rigid coaxial cable in applications where flexibility is required without giving up high electrical performance level. PE-SR047FL datasheet specifications and outline drawing for this .047 semi-flexible hand formable cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Inner Conductor DC Resistance			207	Ohms/1000ft
Outer Conductor DC Resistance			8	Ohms/1000ft
Nominal Capacitance		32 [104.99]		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: Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL

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Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables
Technical Data Sheet

PE-SR047FL

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	3	5	10	GHz
Attenuation, Typ	25	36	65	86	128	dB/100ft
	82.02	118.11	213.25	282.15	419.95	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	15	20				GHz
Attenuation, Typ	162	192				dB/100ft
	531.5	629.92				dB/100m

Mechanical Specifications

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver1	0.011 in 0.28 mm
Conductor Type	Solid	
Dielectric	PTFE	0.034 in 0.86 mm
Outer Conductor	Tinned Copper Braid	0.047 in 1.19 mm

Environmental Specifications

Temperature

Operating Range	-40 to +100 deg C

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL

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Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables
Technical Data Sheet

PE-SR047FL

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor 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: Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL

URL: https://www.pasternack.com/formable-0.047-semirigid-replacement-50-ohm-coax-cable-tinned-braid-pe-sr047fl-p.aspx

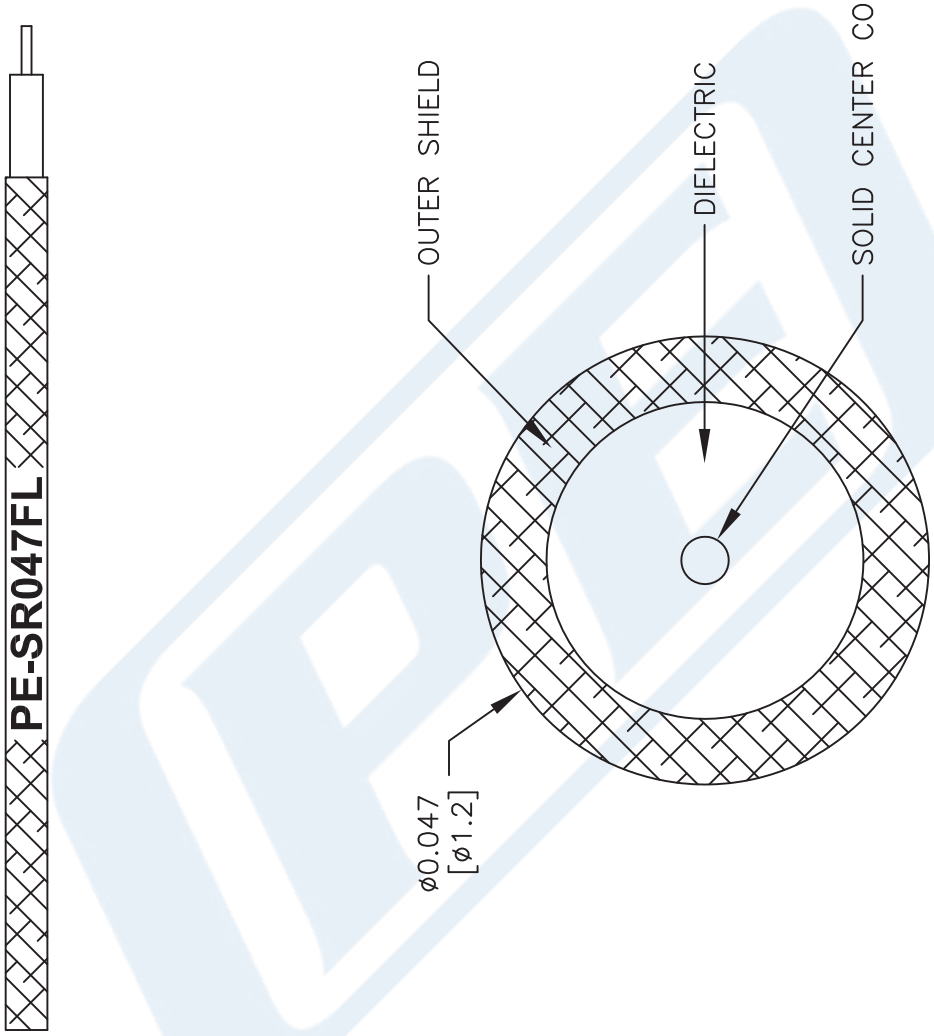
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PE-SR047FL CAD Drawing

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor



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

DWG TITLE: PE-SR047FL

CAD FILE 111716 | SCALE N/A | SIZE A | 41742

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