

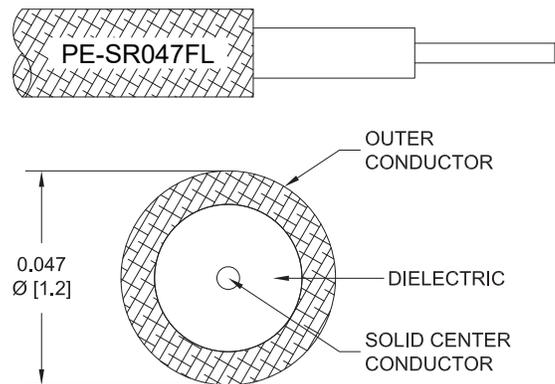
## SMPM Size 12 D38999 Contact Pin to SMA Male Cable Using PE-SR047FL Coax with HeatShrink, LF Solder



### PE3M0275

#### Configuration

- Connector 1: Push-on Mini SMP Pin PEMACTRF12P04
- Connector 2: SMA Male PE4404
- Cable Type: PE-SR047FL
- Coax Flex Type: Formable



#### Features

- Max Frequency: 18 GHz
- Can be installed in all D38999 size 12 inserts
- Lot traceability
- High speed RF cable assembly

#### Applications

- Military and Aerospace
- Avionics
- Industrial Automation

#### Description

The PE3M0275 from Pasternack is a D38999 contact cable assembly that is built with a size 12 mini SMP pin contact on one end and a SMA male connector on the other. Pasternack MIL-DTL-38999 (also known as D38999 or 38999) coaxial cable assembly products are used in applications requiring high quality such as laboratory RF test and measurement, rugged and designed for defense/military, production environments, general use, etc. This mini SMP to SMA cable assembly is a part of one of the largest selections of same-day ship coaxial cables for RF, microwave, and millimeter wave interconnect solutions. This high frequency D38999 cable assembly operates at a maximum frequency of 10 GHz.

This radio frequency cable assembly can withstand temperatures ranging from -65 to 165 degrees C. Our Mini SMP pin to SMA male cable has a maximum VSWR of 1.4:1. This formable RF cable assembly with a 0.5-inch diameter has copper clad steel as the cable's inner conducting material and PTFE dielectric type.

Mini SMP pin to SMA male cable assembly is built with PE-SR047FL, which is a formable coax type. The Pasternack PE3M0275 formable cable assembly has a 50 Ohm impedance and is single shielded. Additional dimensions, specifications, and CAD drawings for this mini SMP to SMA RF cable are available on our downloadable PDF datasheet.

Mini SMP pin to SMA male cable assembly is just one of more than one million in-stock RF products available. Pasternack is where to buy high quality custom RF cable assembly products for rugged and MIL-STD designed military/defense, aerospace, outdoor and harsh environment, microwave and millimeter wave radio transmitter receiver, component inter-connection and more for RF test & measurement labs, telecom, phase stable, phase and delay matching, and other radio frequency applications can be manufactured. Variations of mini SMP and SMA cable assemblies can also be built and will ship on the same day as well, search this website or contact us for assistance. For further information on similar products, our expert technical support and trained sales team can get you the ideal mini SMP to SMA RF cable assembly as per your requirements.

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**PE3M0275**

**Referenced Specifications**

IPC J-STD-001	Requirements for Soldered Electrical and Electronic Assemblies
IPC J-STD-006	Requirements for Electronic Grade Solder Alloys and Fluxed and Non-Fluxed Solid Solders for Electronic Soldering Applications
IPC/WHMA-A-620	Requirements and Acceptance for Cable and Wire Harness Assemblies
MIL-DTL-17	Cables, Radio Frequency, Flexible and Semirigid, General Specification for
MIL-PRF-39012	Connectors, Coaxial, Radio Frequency, General Specification for
MIL-STD-348	Radio Frequency Connector Interfaces for MIL-DTL-3643, MIL-DTL-3650, MIL-DTL-3655, MIL-DTL-25516, MIL-PRF-31031, MIL-PRF-39012, MIL-PRF-49142, MIL-PRF-55339, MIL-DTL-83517
SAE AS22520	Crimping Tools, Wire Termination, General Specification For
SAE AS23053	Insulation Sleeving, Electrical, Heat Shrinkable, General Specifications For
SAE AS5942	Marking of Electrical Insulating Materials
IPC J-STD-001	Requirements for Soldered Electrical and Electronic Assemblies

**Material Specifications**

Component	Specification
Cable	PE-SR047FL in accordance with PE-SR047FL datasheet
Connector 1	PEMACTRF12P04 in accordance with MIL-DTL-38999
Connector 2	PE4404 in accordance with MIL-STD-348
Heat Shrink 1	M23053/5-103-0 in accordance with SAE AS23053
Heat Shrink 2	M23053/5-103-0 in accordance with SAE AS23053
Solder	SAC305 in accordance with J-STD-006

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		32 [104.99]		pF/ft [pF/m]
DC Resistance Inner Conductor		207 [679.13]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		8 [26.25]		[Ω/Km]

**Specifications by Frequency**

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**PE3M0275**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		1000	2000	4500	9000	
PE3M0275	Custom Lengths Available	Insertion Loss (Typ.)	0.36	0.51	0.81	1.14	1.8	dB/ft	
			1.19	1.66	2.65	3.76	5.91	dB/m	
PE3M0275-6	6 inch	Insertion Loss (Typ.)	0.38	0.46	0.61	0.78	1.1	dB	0.0215
PE3M0275-12	12 inch	Insertion Loss (Typ.)	0.56	0.71	1.01	1.35	2	dB	0.023
PE3M0275-24	24 inch	Insertion Loss (Typ.)	0.92	1.21	1.82	2.49	3.8	dB	0.026
PE3M0275-36	36 inch	Insertion Loss (Typ.)	1.28	1.72	2.63	3.64	5.6	dB	0.029
PE3M0275-48	48 inch	Insertion Loss (Typ.)	1.64	2.22	3.43	4.78	7.4	dB	0.032
PE3M0275-60	60 inch	Insertion Loss (Typ.)	2	2.73	4.24	5.92	9.2	dB	0.035

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB  
 Loss due to Connector 2: 0.1 dB  
 Base Weight: 0.023 pounds  
 Additional Weight per Foot: 0.003 pounds

Electrical Specification Notes:  
 Values at 25°C, sea level.

**Mechanical Specifications**

**Cable Assembly**

Description	Minimum	Typical	Maximum	Units
Length*			0 [0]	in [mm]
Cable Outer Diameter			0.047	in
Weight		0.023 [10.43]		lbs [g]

**Cable Characteristics**

Description	Specification
Cable Type	PE-SR047FL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor 1 Material and Plating	Tinned Copper Braid

**Connector Characteristics**

Description	Connector 1	Connector 2
Type	Mini SMP Pin	SMA Male
Specification	MIL-DTL-38999	MIL-STD-348

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**PE3M0275**

**Connector Characteristics**

Description	Connector 1	Connector 2
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method	Push-on	
Contact Size	12	
Mating Cycles	1,000	
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Specification		50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Body Material and Plating	Beryllium Copper, Gold	Brass, Gold over Nickel
Body Plating Specification		50 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		50 µin minimum
Hex Size		5/16 inch
Torque		10 in-lbs [1.13 Nm]

Mechanical Specification Notes:

**Environmental Specifications**

Description	Specification
Temperature Operating Range	-65 to +100 deg C

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

**Plotted and Other Data**

Notes:  
Values at 25°C, sea level.

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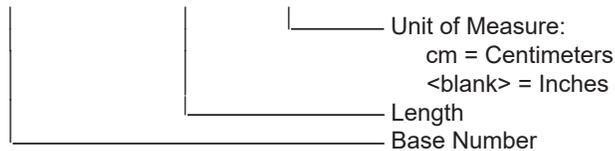


**PE3M0275**

**How to Order**

Part Number Configuration:

**PE3M0275 - xx uu**



Example: PE3M0275-12 = 12 inches long cable  
PE3M0275-100cm = 100 cm long cable

Cable Assembly Length Tolerances:

Imperial English		Metric	
"L" ≤ 1 ft	+0.5 in / -0 in	"L" ≤ 0.3 m	+12.5 mm / -0 mm
1 ft < "L" ≤ 5 ft	+1 in / -0 in	0.3 m < "L" ≤ 1.5 m	+25 mm / -0 mm
5 ft < "L" ≤ 10 ft	+2 in / -0 in	1.5 m < "L" ≤ 3 m	+50 mm / -0 mm
10 ft < "L" ≤ 25 ft	+3 in / -0 in	3 m < "L" ≤ 7.5 m	+75 mm / -0 mm
25 ft < "L"	+2%"L" / -0%"L"	7.5 m < "L"	+2%"L" / -0%"L"

\* Cable Length = "L"

SMPM Size 12 D38999 Contact Pin to SMA Male Cable Using PE-SR047FL Coax with HeatShrink, LF Solder 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.

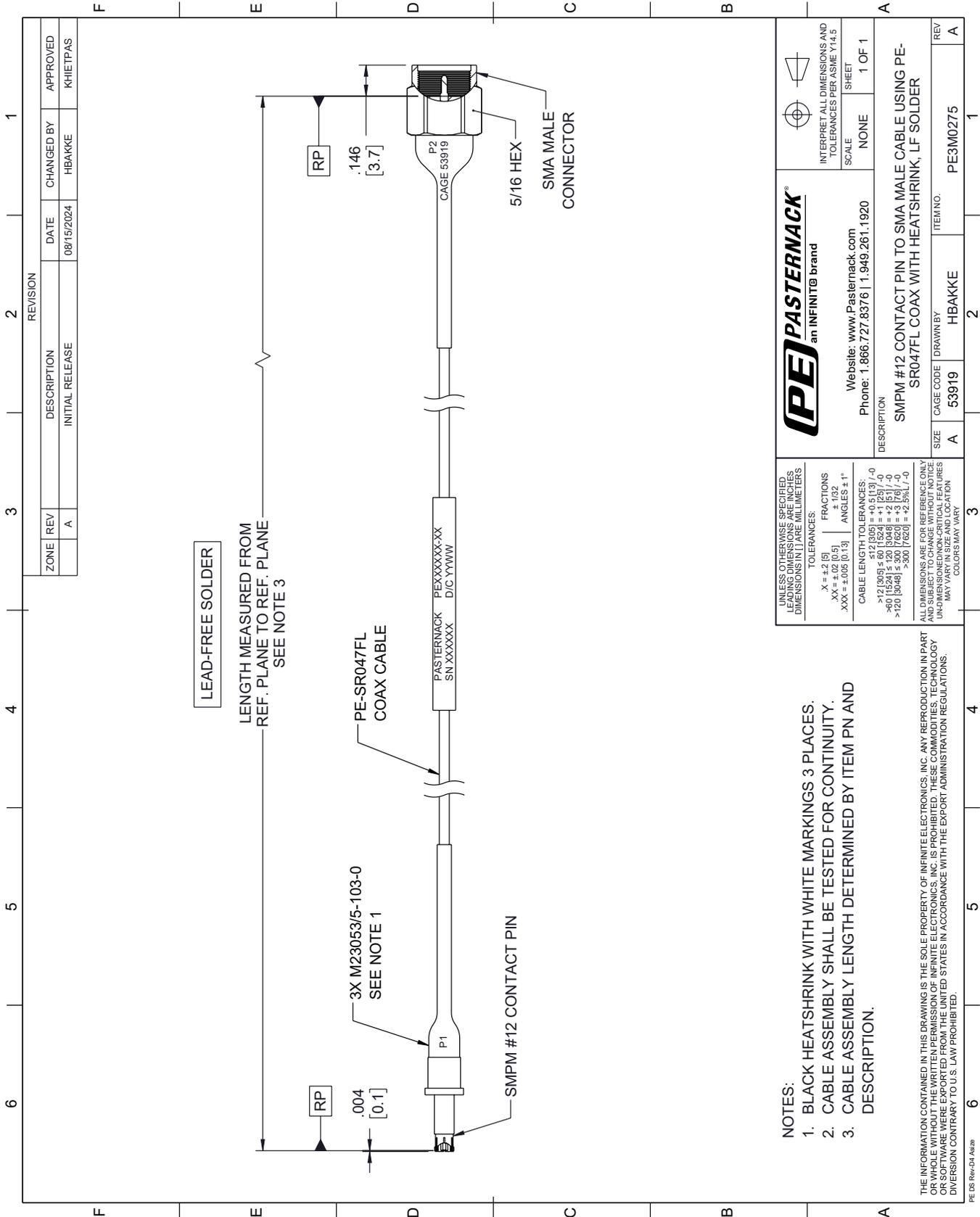
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMPM Size 12 D38999 Contact Pin to SMA Male Cable Using PE-SR047FL Coax with HeatShrink, LF Solder PE3M0275](#)

URL: <https://www.pasternack.com/smpm-12-d38999-contact-pin-to-sma-male-cable-using-pe-sr047fl-coax-with-heatshrink-lf-solder-pe3m0275-p.aspx>

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# PE3M0275 CAD Drawing

SMPM Size 12 D38999 Contact Pin to SMA Male Cable Using PE-SR047FL Coax with HeatShrink, LF Solder



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

**TOLERANCES:**  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

**FRACTIONS**  
± 1/32

**ANGLES** ± 1°

**CABLE LENGTH TOLERANCES:**  
 <12 [305] ≤ 60 [1524] = ±.05 [1.3] / -0  
 >60 [1524] ≤ 120 [3048] = ±.05 [1.3] / -0  
 >120 [3048] ≤ 300 [7620] = ±.05 [1.3] / -0  
 >300 [7620] = ±.05 [1.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY  
UNLESS OTHERWISE SPECIFIED  
UNDIMENSIONED NON-CRITICAL FEATURES  
MAY VARY IN SIZE AND LOCATION  
COLORS MAY VARY

an INFINITE brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION		SIZE	CAGE CODE	DRAWN BY	ITEM NO.
SMPM #12 CONTACT PIN TO SMA MALE CABLE USING PE-SR047FL COAX WITH HEATSHRINK, LF SOLDER		A	53919	HBAKKE	PE3M0275
REV					A

**NOTES:**

- BLACK HEATSHRINK WITH WHITE MARKINGS 3 PLACES.
- CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-D4 Add2