

## SMA Male Right Angle to SMA Male Low Loss Cable Using TCOM-240 Coax with Times Microwave Components



### PE3W17009

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male
- Cable Type: TCOM-240
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W17009 SMA male right angle to SMA male cable using TCOM-240 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240 coax. The PE3W17009 SMA male to SMA male cable assembly operates to 6 GHz. The right angle SMA interface on the TCOM-240 cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	100			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.06 [6.76]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	Vrms

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	250	500	1000	2500	6000	
PE3W17009	Custom Lengths Available	Insertion Loss (Typ.)	0.036	0.052	0.075	0.123	0.197	dB/ft	
			0.12	0.18	0.25	0.41	0.65	dB/m	
PE3W17009-12	12 Inch	Insertion Loss (Typ.)	0.39	0.41	0.43	0.48	0.55	dB	0.069
PE3W17009-24	24 Inch	Insertion Loss (Typ.)	0.43	0.46	0.5	0.6	0.75	dB	0.099
PE3W17009-36	36 Inch	Insertion Loss (Typ.)	0.46	0.51	0.58	0.72	0.95	dB	0.129
PE3W17009-48	48 Inch	Insertion Loss (Typ.)	0.5	0.56	0.65	0.85	1.14	dB	0.159
PE3W17009-60	60 Inch	Insertion Loss (Typ.)	0.53	0.61	0.73	0.97	1.34	dB	0.189

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:	0.25 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.069 pounds
Additional Weight per Inch:	0.4125 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.069 lbs [31.3 g]

#### Cable

Cable Type	TCOM-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 μin	ASTM B488
Dielectric Type	PTFE	Teflon
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification		SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification		SAE-AMS-2700
Torque	7 in-lbs 0.79 Nm	

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

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### PE3W17009

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W17009**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W17009-12 = 12 inches long cable  
PE3W17009-100cm = 100 cm long cable

SMA Male Right Angle to SMA Male Low Loss Cable Using TCOM-240 Coax with Times Microwave Components 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: [SMA Male Right Angle to SMA Male Low Loss Cable Using TCOM-240 Coax with Times Microwave Components PE3W17009](#)

URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-male-low-loss-cable-using-tcom-240-pe3w17009-p.aspx>

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# PE3W17009 CAD Drawing

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