

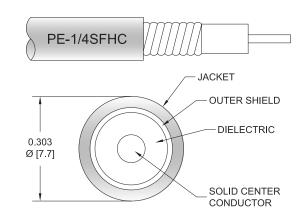
# PE3W15029

# Configuration

Connector 1: NEX10 Male
Connector 2: QMA Male
Cable Type: 1/4" Superflexible
Coax Flex Type: Corrugated

### **Features**

- Max Frequency 6 GHz
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- · PE Jacket



# **Applications**

· General Purpose

· Laboratory Use

· Low PIM Applications

# **Description**

Pasternack's PE3W15029 NEX10 male to QMA male cable using 1/4 inch superflexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack NEX10 to QMA cable assembly has a male to male gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3W15029 NEX10 male to QMA male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance.

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		82		%
RF Shielding	120			dB
Capacitance		24.4 [80.05]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.53 [8.3]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (AC)			750	Vrms





# PE3W15029

# **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

**Specifications by Frequency** 

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W15029	Custom Lengths	Insertion Loss (Typ.)	0.016	0.027	0.039	0.058	0.107	dB/ft	
1 23 7 13 02 3	Available	ilisertion Loss (Typ.)	0.06	0.09	0.13	0.2	0.36	dB/m	
PE3W15029-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.26	0.31	dB	0.082
PE3W15029-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.32	0.42	dB	0.124
PE3W15029-36	36 inch	Insertion Loss (Typ.)	0.25	0.29	0.32	0.38	0.53	dB	0.166
PE3W15029-48	48 inch	Insertion Loss (Typ.)	0.27	0.31	0.36	0.44	0.63	dB	0.208
PE3W15029-60	60 inch	Insertion Loss (Typ.)	0.28	0.34	0.4	0.49	0.74	dB	0.25

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: 0.082 pounds
Additional Weight per Inch: 0.0035 pounds

# **Mechanical Specifications**

Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.082 lbs [37.19 g]

Cable

Cable Type 1/4" Superflexible Impedance 50 Ohms

Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Aluminum

Dielectric Type PE (F)
Number of Shields 1

Shield Layer 1 Helically Corrugated Copper Tube
Jacket Material PE, Black

Jacket Material

Jacket Diameter

O.303 in [7.7 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

1 in [25.4 mm]

Typical Flex Cycles 20

Tensile Strength 79 lbs [35.83 Kg]



# 

# PE3W15029

## **Connectors**

Connector 1	Connector 2	
NEX10 Male	QMA Male	
50 Ohms	50 Ohms	
Straight	Straight	
Brass, Silver	Brass, Silver	
PTFE	PTFE	
Brass, Tri-Metal	Brass, Tri-Metal	
Brass, Tri-Metal	Brass, Tri-Metal	
	50 Ohms Straight Brass, Silver PTFE Brass, Tri-Metal	

# **Environmental Specifications**

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

## **Plotted and Other Data**

Notes:





# PE3W15029

# **Typical Performance Data**

## **How to Order**

Part Number Configuration:

PE3W15029 - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
Length
Base Number

Example: PE3W15029-12 = 12 inches long cable

PE3W15029-100cm = 100 cm long cable

NEX10 Male to QMA Male Low PIM Cable Using 1/4 inch Superflexible Coax 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: NEX10 Male to QMA Male Low PIM Cable Using 1/4 inch Superflexible Coax PE3W15029

URL: https://www.pasternack.com/nex10-male-to-gma-male-low-pim-cable-using-1-4-inch-superflexible-pe3w15029-p.aspx

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

