

SMA Male to SMA Female Low Loss Cable Using LMR-LW240 Coax with HeatShrink



PE3W14277/HS

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: LMR-LW240
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14277/HS SMA male to SMA female cable using LMR-LW240 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 female gender configuration with 50 ohm flexible LMR-LW240 coax. The PE3W14277/HS SMA male to SMA female cable assembly operates to 8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	90			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		14.4 [47.24]		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	500	1000	2000	4000	8000	MHz	
PE3W14277/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.056 0.19	0.082 0.27	0.115 0.38	0.163 0.54	0.243 0.8	dB/ft dB/m	
PE3W14277/HS-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.37	0.45	dB	0.05
PE3W14277/HS-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.43	0.53	0.69	dB	0.076
PE3W14277/HS-36	36 inch	Insertion Loss (Typ.)	0.37	0.45	0.55	0.69	0.93	dB	0.101
PE3W14277/HS-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.66	0.86	1.18	dB	0.126
PE3W14277/HS-60	60 inch	Insertion Loss (Typ.)	0.48	0.61	0.78	1.02	1.42	dB	0.151

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: 0.05 pounds
Additional Weight per Inch: 0.00209 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
Weight 0.025 lbs [11.34 g]

Cable

Cable Type	LMR-LW240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Aluminum
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	SMA Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 Nm	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

Compliance Certifications

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

Plotted and Other Data

Notes:

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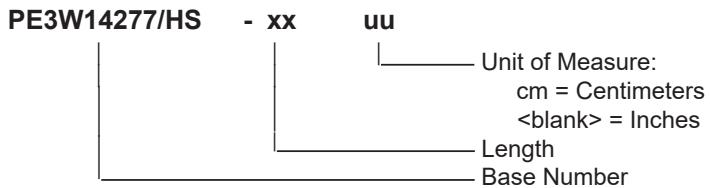


PE3W14277/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3W14277/HS-12 = 12 inches long cable
PE3W14277/HS-100cm = 100 cm long cable

SMA Male to SMA Female Low Loss Cable Using LMR-LW240 Coax with HeatShrink 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 to SMA Female Low Loss Cable Using LMR-LW240 Coax with HeatShrink PE3W14277/HS](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-lw240-with-heatshrink-pe3w14277-hs-p.aspx>

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PE3W14277/HS CAD Drawing

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