

SMB Plug to SMA Male Low Loss Cable Using LMR-195-UF Coax



PE3W14148

Configuration

- Connector 1: SMB Plug
- Connector 2: SMA Male
- Cable Type: LMR-195-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 4 MHz
- Shielding Effectivity > 90 dB
- 74% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14148 SMB plug to SMA male cable using LMR-195-UF 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 SMB to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-195-UF coax. The PE3W14148 SMB plug to SMA male cable assembly operates to 4 MHz. 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		4	GHz
VSWR			1.3:1	
Velocity of Propagation		74		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (DC)			1,000	Vdc

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms
Input Power (Peak)			2.5	KWatts

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W14148	Custom Lengths Available	Insertion Loss (Typ.)	0.042	0.068	0.097	0.132	0.285	dB/ft	
			0.14	0.23	0.32	0.44	0.94	dB/m	
PE3W14148-12	12 Inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.34	0.49	dB	0.052
PE3W14148-24	24 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.47	0.77	dB	0.073
PE3W14148-36	36 Inch	Insertion Loss (Typ.)	0.33	0.41	0.5	0.6	1.06	dB	0.094
PE3W14148-60	60 Inch	Insertion Loss (Typ.)	0.41	0.54	0.69	0.86	1.63	dB	0.136
PE3W14148-300	300 Inch	Insertion Loss (Typ.)	1.25	1.9	2.63	3.5	7.33	dB	0.556

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: 0.052 pounds
 Additional Weight per Inch: 0.00175 pounds

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

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.031 lbs [14.06 g]

Cable

Cable Type LMR-195-UF
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper
 Dielectric Type Foam PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper
 Jacket Material TPE, Black
 Jacket Diameter 0.195 in [4.95 mm]
 One Time Minimum Bend Radius 0.5 in [12.7 mm]
 Repeated Minimum Bend Radius 2 in [50.8 mm]
 Bending Moment 0.1 lbs-ft [0.14 N-m]
 Flat Plate Crush 10 lbs/in [0.18 Kg/mm]
 Tensile Strength 40 lbs [18.14 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMB Plug	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		5 in-lbs 0.57 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

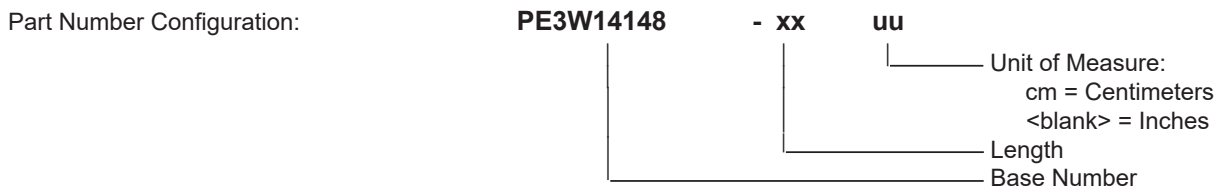
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Typical Performance Data

How to Order



Example: PE3W14148-12 = 12 inches long cable
 PE3W14148-100cm = 100 cm long cable

SMB Plug to SMA Male Low Loss Cable Using LMR-195-UF 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: [SMB Plug to SMA Male Low Loss Cable Using LMR-195-UF Coax PE3W14148](#)

URL: <https://www.pasternack.com/smb-plug-to-sma-male-low-loss-cable-using-lmr-195-uf-pe3w14148-p.aspx>

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PE3W14148 CAD Drawing

SMB Plug to SMA Male Low Loss Cable Using LMR-195-UF Coax

