

2.2-5 Male to 2.2-5 Female Low PIM Cable Using 1/4 inch Superflexible Coax, LF Solder



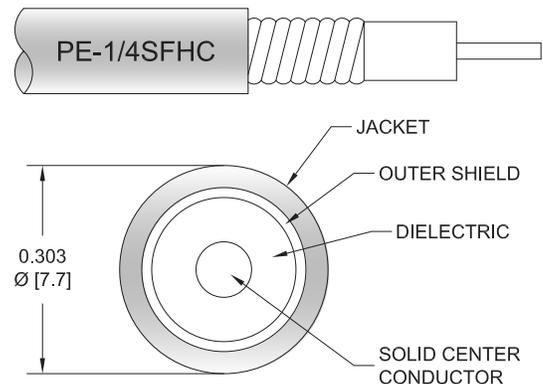
PE3C7858LF

Configuration

- Connector 1: 2.2-5 Male
- Connector 2: 2.2-5 Female
- 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 PE3C7858LF 2.2-5 male to 2.2-5 female 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 2.2-5 to 2.2-5 cable assembly has a male to female gender configuration with 50 ohm corrugated 1/4" superflexible coax. The PE3C7858LF 2.2-5 male to 2.2-5 female 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

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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	
PE3C7858LF	Custom Lengths Available	Insertion Loss (Typ.)	0.016	0.027	0.039	0.058	0.107	dB/ft	
			0.06	0.09	0.13	0.2	0.36	dB/m	
PE3C7858LF-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.26	0.31	dB	0.122
PE3C7858LF-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.32	0.42	dB	0.164
PE3C7858LF-36	36 inch	Insertion Loss (Typ.)	0.25	0.29	0.32	0.38	0.53	dB	0.206
PE3C7858LF-48	48 inch	Insertion Loss (Typ.)	0.27	0.31	0.36	0.44	0.63	dB	0.248
PE3C7858LF-60	60 inch	Insertion Loss (Typ.)	0.28	0.34	0.4	0.49	0.74	dB	0.29

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:	0.122 pounds
Additional Weight per Inch:	0.0035 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.122 lbs [55.34 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 Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Typical Flex Cycles	20
Tensile Strength	79 lbs [35.83 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	2.2-5 Male	2.2-5 Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Bronze, Silver
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Bronze, Silver
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	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:

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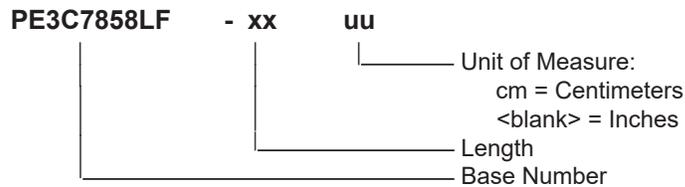


PE3C7858LF

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C7858LF-12 = 12 inches long cable
PE3C7858LF-100cm = 100 cm long cable

2.2-5 Male to 2.2-5 Female Low PIM Cable Using 1/4 inch Superflexible Coax, 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.

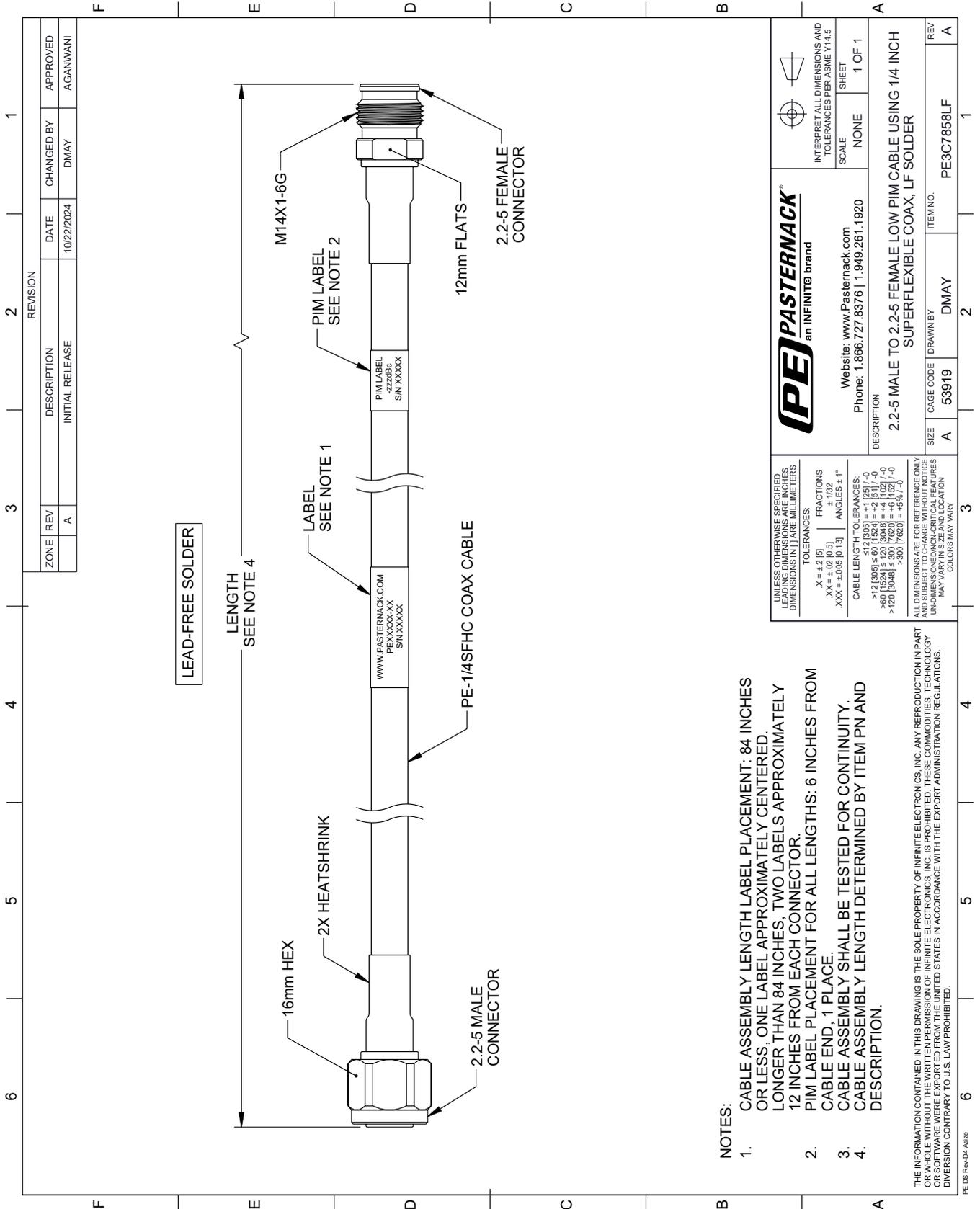
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.2-5 Male to 2.2-5 Female Low PIM Cable Using 1/4 inch Superflexible Coax, LF Solder PE3C7858LF](#)

URL: <https://www.pasternack.com/2.2-5-male-to-2.2-5-female-low-pim-cable-using-1-4-inch-superflexible-lf-solder-pe3c7858lf-p.aspx>

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PE3C7858LF CAD Drawing

2.2-5 Male to 2.2-5 Female Low PIM Cable Using 1/4 inch Superflexible Coax, LF Solder



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS		PE PASTERNAK an INFINITI [®] brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1	
TOLERANCES: .X = +.2 [-.5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS ± 1/32 ANGLES ± 1°		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = +.1 [25] / -0 >60 [1524] ≤ 120 [3048] = +.4 [102] / -0 >120 [3048] ≤ 300 [7620] = +.6 [152] / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED DIMENSIONS/DRAWING FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY		DESCRIPTION 2.2-5 MALE TO 2.2-5 FEMALE LOW PIM CABLE USING 1/4 INCH SUPERFLEXIBLE COAX, LF SOLDER	
SIZE	A	CAGE CODE	53919	DRAWN BY	DMAY
ITEM NO.	PE3C7858LF		REV A		

- NOTES:**
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
 - PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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