



Mini-Circuits

LTCC COAXIAL

Low Pass Filter

VLFG-1900+

50Ω

DC to 1900 MHz SMA Male/Female

KEY FEATURES

- Low Insertion Loss, 1 dB Typ.
- Return Loss, 15 dB Typ.
- Stop Band Rejection, 43 dB Typ.
- Rugged unibody construction.
- Power Handling: 5.5 Watts

APPLICATIONS

- GPS
- Wireless Networks

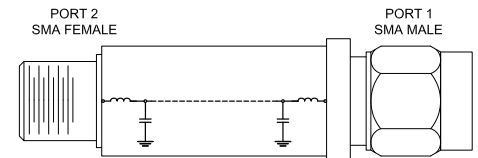
PRODUCT OVERVIEW

VLFG-1900+ is a Low Pass filter with DC to 1900 MHz passband supporting a variety of applications. This model provides 1 dB typical insertion loss over a wide band due to its rugged unibody construction. VLFG-1900+ offers low insertion loss, and excellent power handling capability. It handles up to 5.5W RF input power and provides a wide operating temperature range from -55°C to 125°C.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM

ELECTRICAL SPECIFICATIONS^{1,2} AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Pass Band	Insertion Loss	DC-F1	DC - 1900	—	1	1.8	dB
	Freq. Cut-Off ³	F _c ³	2300	—	3	—	dB
	Return Loss	DC-F1	DC - 1900	—	15	—	dB
Stop Band	Rejection	F2-F3	2750 - 3200	20	37	—	dB
		F3-F4	3200 - 7500	40	43	—	
		F4-F5	7500 - 13500	—	29	—	

1. This filter is bi-directional, RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

2. This component should not be used as a DC-block. In applications where DC voltage and/or current is present at either the input or output ports, external DC blocking capacitors are required.

3. Typical variation ± 5%

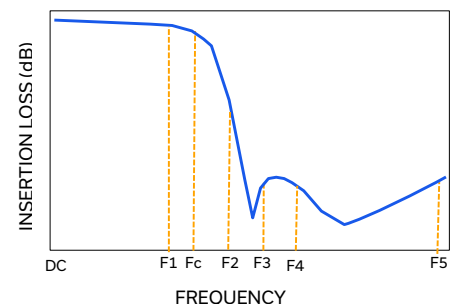
ABSOLUTE MAXIMUM RATINGS⁴

Parameter	Ratings
Operating Temperature	-55 °C to +125 °C
Storage Temperature	-55 °C to +125 °C
Input Power ⁵	5.5 W @25°C

4. Permanent damage may occur if any of these limits are exceeded.

5. Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 1 W at +125°C.

TYPICAL FREQUENCY RESPONSE AT +25°C



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REV. OR
ECO-026012
VLFG-1900+
EDU5143
URJ
250626

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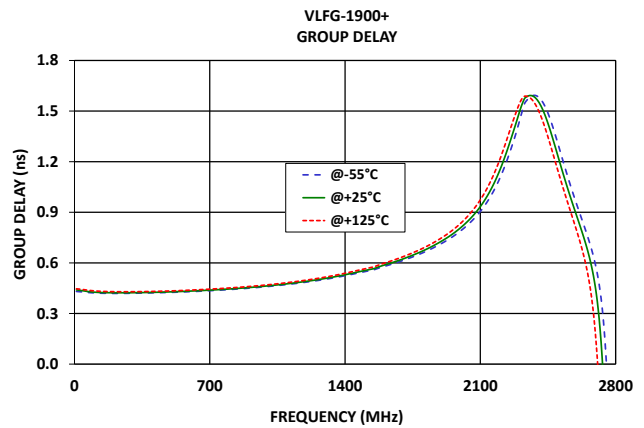
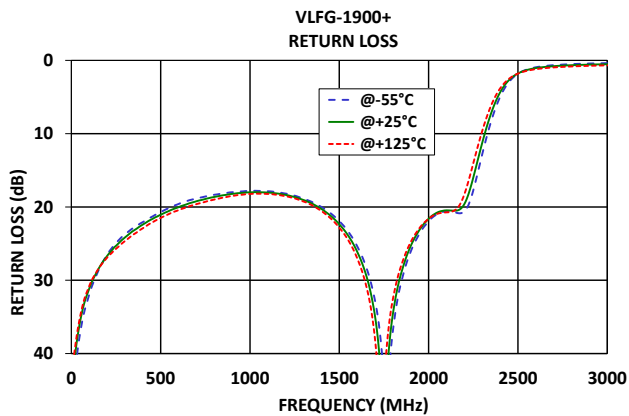
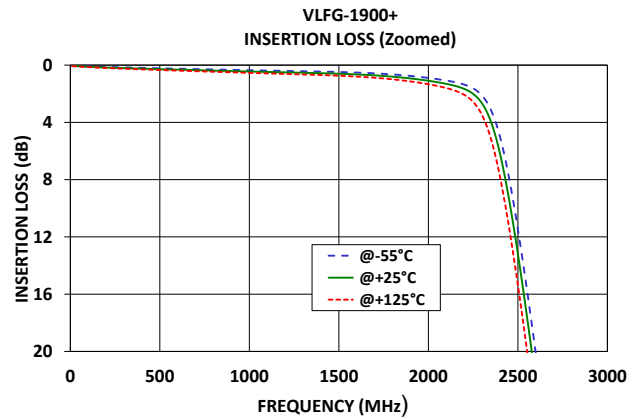
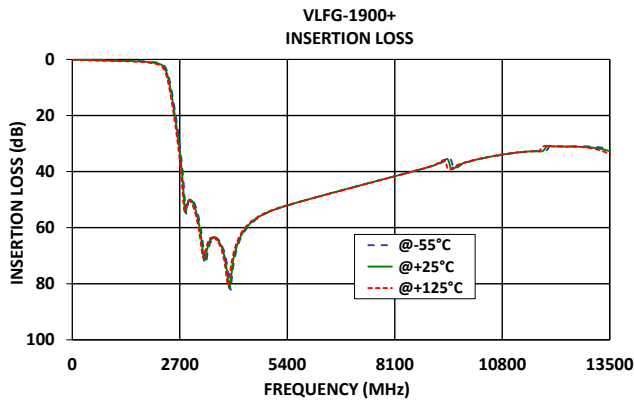
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TYPICAL PERFORMANCE GRAPHS AT +25°C

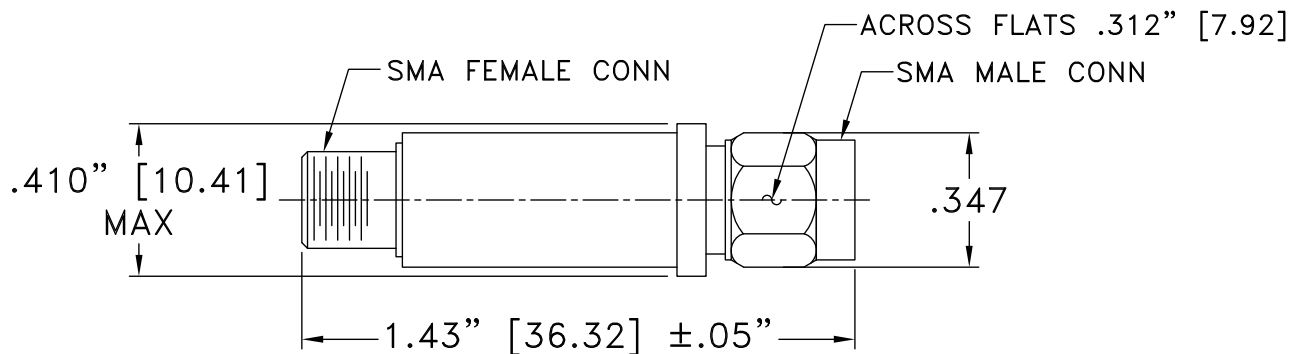




CONNECTOR DESCRIPTION

Function	Functionality	Connector
RF1 ¹	Port-1	SMA MALE
RF2 ¹	Port-2	SMA FEMALE

CASE STYLE DRAWING



Unit weight: 10.0grams

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .04$ "; 3 Pl. $\pm .30$ "

PRODUCT MARKING*: VLFG-1900+

*Marking may contain other features or characters for internal lot control.



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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	FF704
RoHS Status	Compliant
Environmental Ratings	ENV113

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

