



Mini-Circuits

LTCC COAXIAL

Low Pass Filter

VLFG-3700+

50Ω

DC to 3700 MHz SMA Male/Female

KEY FEATURES

- Low Insertion Loss, 1.3 dB Typ.
- Return Loss, 15 dB Typ.
- Stopband Rejection, 44 dB Typ.
- Rugged Unibody Construction
- Power Handling: 4.5 Watts



Generic photo used for illustration purposes only

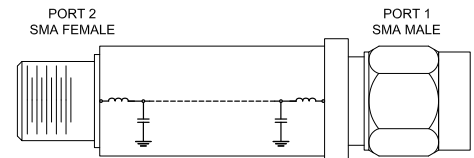
APPLICATIONS

- 5G Sub 6 GHz
- Satcom Modems

PRODUCT OVERVIEW

VLFG-3700+ is a Low Pass filter with DC to 3700 MHz passband supporting a variety of applications. This model provides 1.3 dB typical insertion loss over a wide band due to its rugged unibody construction. VLFG-3700+ offers low insertion loss, and excellent power handling capability. It handles up to 4.5 W RF input power and provides a wide operating temperature range from -55°C to 125°C.

FUNCTIONAL DIAGRAM

ELECTRICAL SPECIFICATIONS¹ AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	DC-F1	DC - 3700	—	1.3	2.1	dB
	Freq. Cut-Off ²	Fc	4360	—	3	—	dB
	Return Loss	DC-F1	DC - 3700	—	15	—	dB
Stopband	Rejection	F2-F3	5500 - 6100	20	43	—	dB
		F3-F4	6100 - 8200	35	44	—	
		F4-F5	8200 - 10000	25	36	—	
		F5-F6	10000 - 18000	—	20	—	

1. 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.

2. Typical variation $\pm 5\%$

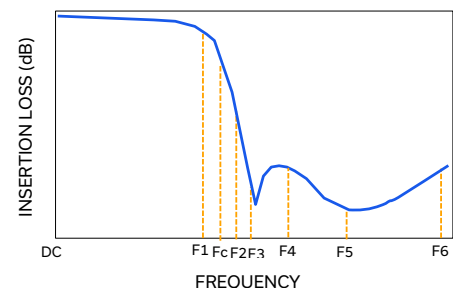
ABSOLUTE MAXIMUM RATINGS³

Parameter	Ratings
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
Input Power ⁴	4.5 W @+25°C

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

4. 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-026903
VLFG-3700+
EDU5165
URJ
250910

PAGE 1 OF 4



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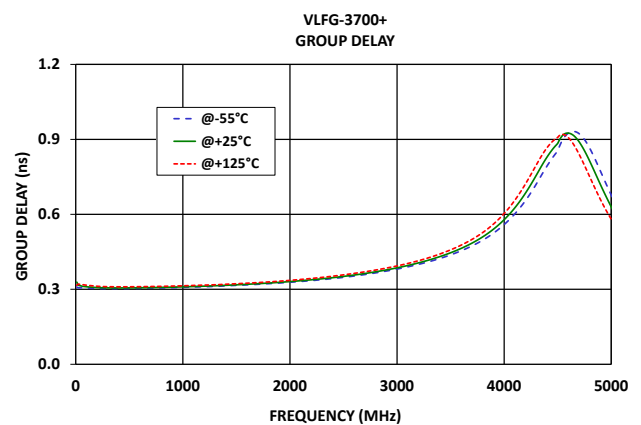
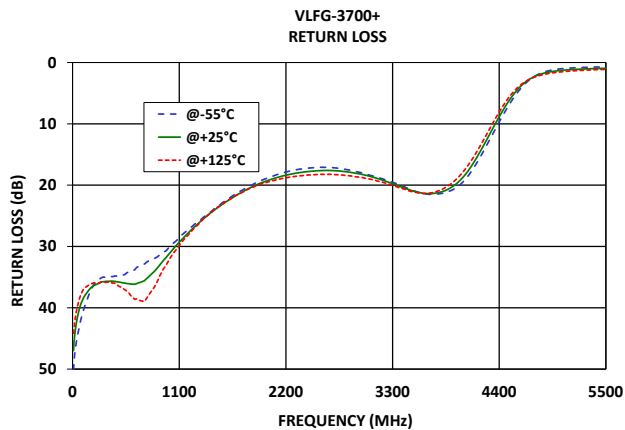
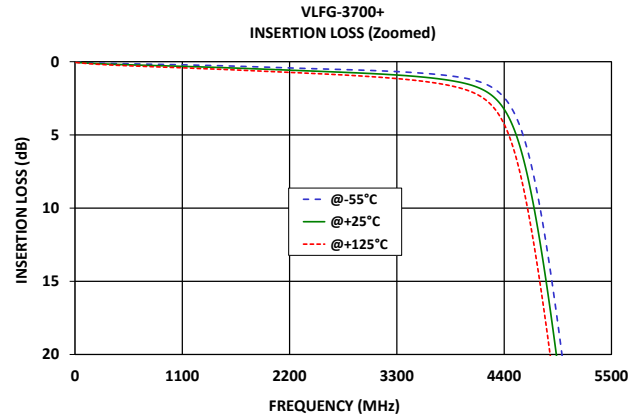
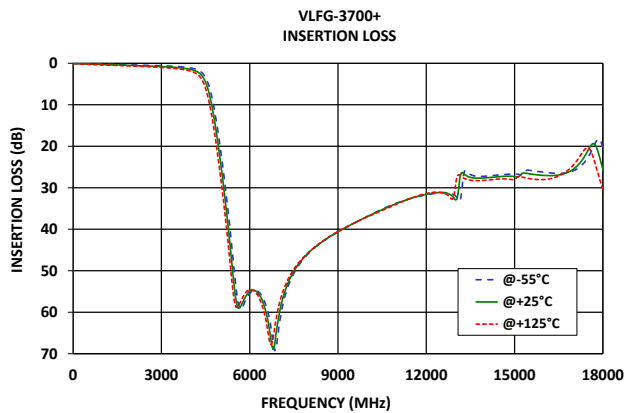
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TYPICAL PERFORMANCE GRAPHS AT +25°C

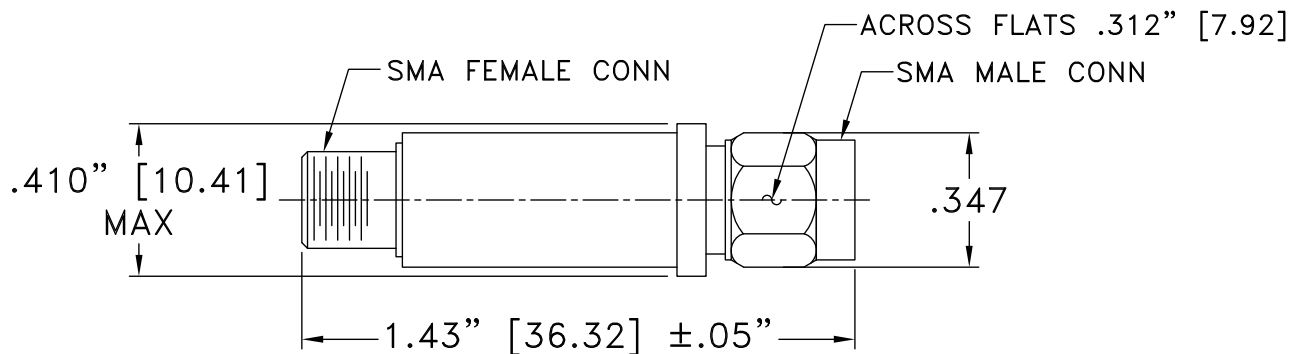




CONNECTOR DESCRIPTION

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

CASE STYLE DRAWING



Unit weight: 10.0grams

Dimensions are in inches (mm). Tolerances: 2 Pl. ± 0.04 "; 3 Pl. ± 0.30 "

PRODUCT MARKING*: VLFG-3700+

*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

