



Mini-Circuits

LTCC COAXIAL

## Low Pass Filter

VLFG-360+

50 $\Omega$ 

DC to 360 MHz SMA Male/Female

## KEY FEATURES

- Low Insertion Loss, 0.9 dB Typ.
- Return Loss, 19 dB Typ.
- Stopband Rejection, 46 dB Typ.
- Rugged Unibody Construction.
- Power Handling: 3 Watts

## APPLICATIONS

- VHF Transmitters / Receivers
- Aircraft Communications

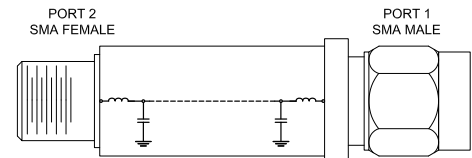


Generic photo used for illustration purposes only

## PRODUCT OVERVIEW

VLFG-360+ is a Low Pass filter with DC to 360 MHz passband supporting a variety of applications. This model provides 0.9 dB typical insertion loss over a wide band due to its rugged unibody construction. VLFG-360+ offers low insertion loss, and excellent power handling capability. It handles up to 3 W RF input power and provides a wide operating temperature range from -55°C to 125°C.

## FUNCTIONAL DIAGRAM

ELECTRICAL SPECIFICATIONS<sup>1,2</sup> AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	DC-F1	DC- 360	—	0.9	1.6	dB
	Freq. Cut-Off <sup>3</sup>	F <sub>c</sub> <sup>3</sup>	500	—	3	—	dB
	Return Loss	DC-F1	DC - 360	—	19	—	dB
Stopband	Rejection	F2-F3	630 - 830	20	39	—	dB
		F3-F4	830 - 1500	37	46	—	
		F4-F5	1500 - 3000	35	43	—	
		F5-F6	3000 - 8500	—	23	—	

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  $\pm 5\%$

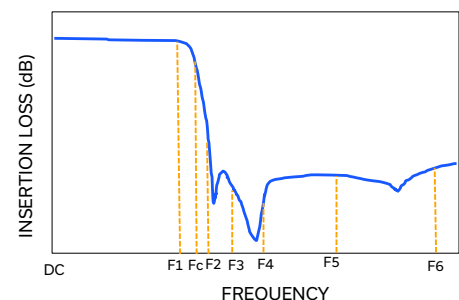
ABSOLUTE MAXIMUM RATINGS<sup>4</sup>

Parameter	Ratings
Operating Temperature	-55 °C to +125 °C
Storage Temperature	-55 °C to +125 °C
Input Power <sup>5</sup>	3 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 0.7 W at +125°C.

## TYPICAL FREQUENCY RESPONSE AT +25°C



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REV. OR  
ECO-026662  
VLFG-360+  
EDU5162  
URJ  
250821

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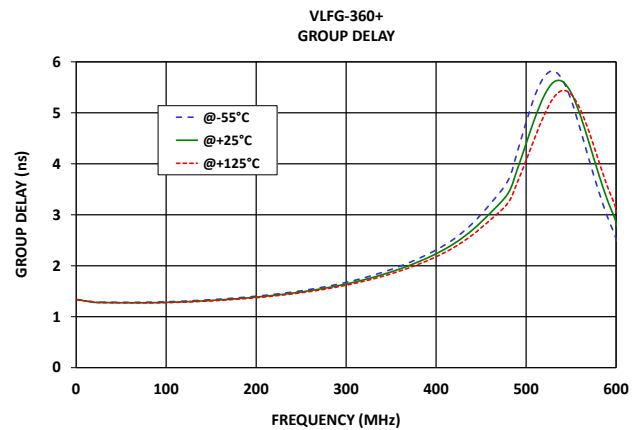
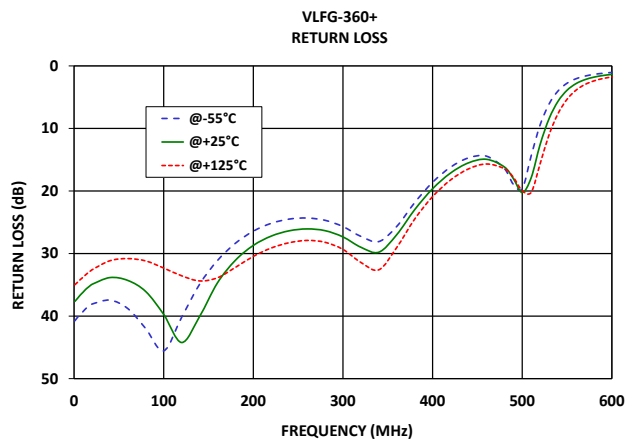
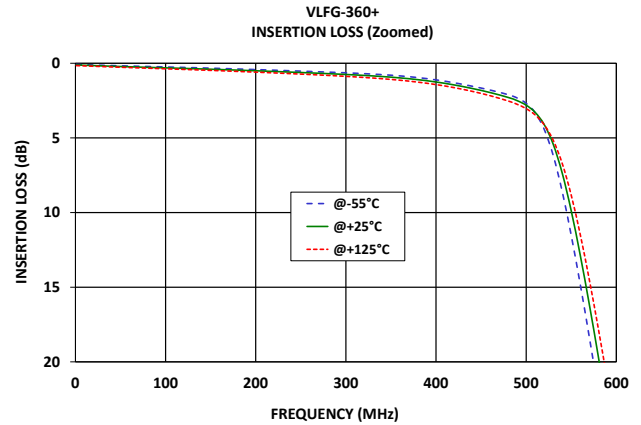
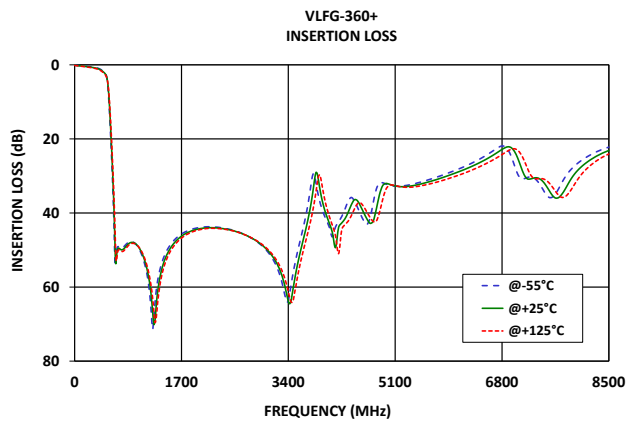
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## TYPICAL PERFORMANCE GRAPHS AT +25°C

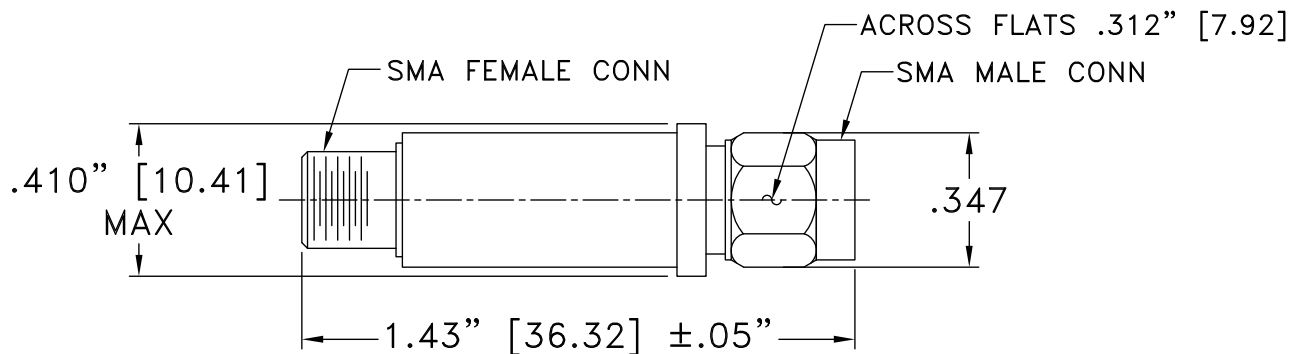




## CONNECTOR DESCRIPTION

Function	Functionality	Connector
RF1 <sup>1</sup>	Port-1	SMA MALE
RF2 <sup>1</sup>	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-360+

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



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50Ω

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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.
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