LTCC COAXIAL

Bandpass Filter

VBF-1560+

50Ω 1500 to 1620 MHz SMA Male/Female

KEY FEATURES

- Good Return Loss, 11.7 dB Typ.
- Small Size
- Temperature Stable
- Rugged Unibody Construction

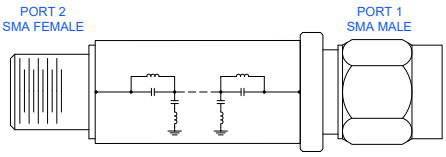


Generic photo used for illustration purposes only

APPLICATIONS

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use
- Test Instrumentation

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

Mini-Circuits' The VBF-1560+ Band Pass Filter is constructed using internal LTCC Band Pass Filter structure to achieve repeatable performance. This offers low insertion loss and good rejection at the band reject edges. Built using Mini Circuits proven unibody construction which integrates the RF connectors with the case body, the VBF-1560+ takes very little space and meets rugged test lab system environment.

ELECTRICAL SPECIFICATIONS AT +25°C

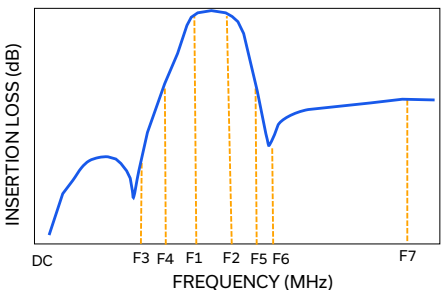
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	Fc	—	—	1560	—	MHz
	Insertion Loss	F1-F2	1500 - 1620	—	—	5	dB
	Return Loss	F1-F2	1500 - 1620	10.2	11.7	—	dB
Stopband, Lower	Rejection	DC-F3	1040	—	30	—	dB
		DC-F4	1100	20	—	—	
Stopband, Upper	Rejection	F5	2100	20	—	—	dB
		F6-F7	2105 - 4200	—	30	—	

ABSOLUTE MAXIMUM RATINGS[1]

Parameter	Ratings
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
Input Power[2]	1.5 W @ +25°C

1. Permanent damage may occur if any of these limits are exceeded.
2. Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 0.25 W at +100°C.

TYPICAL FREQUENCY RESPONSE



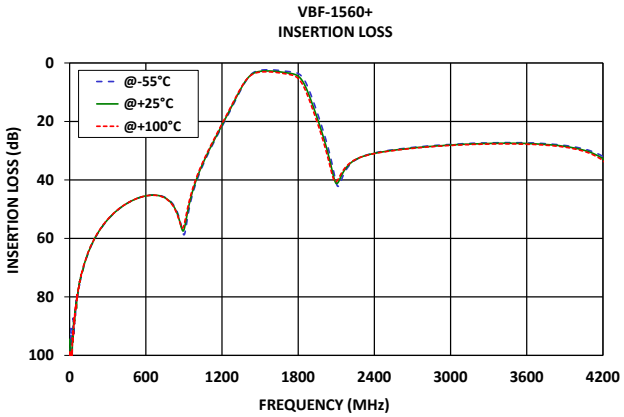
REV. C
ECO-031106
VBF-1560+
MCINU
260907

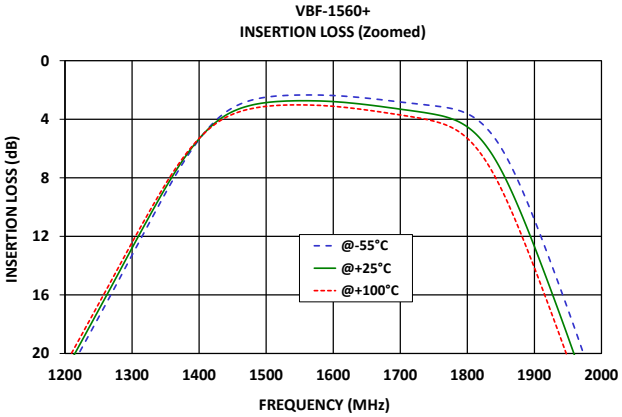
Bandpass Filter

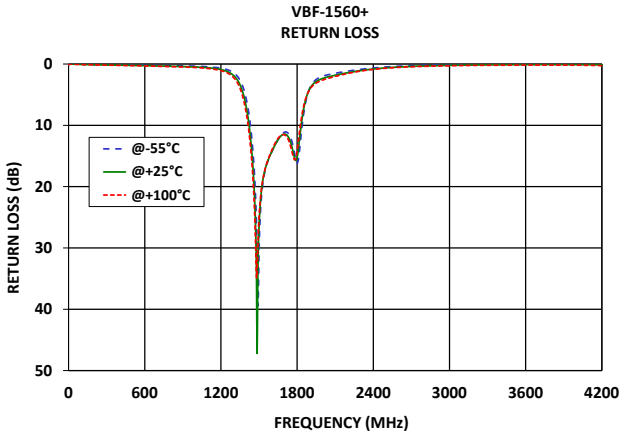
VBF-1560+

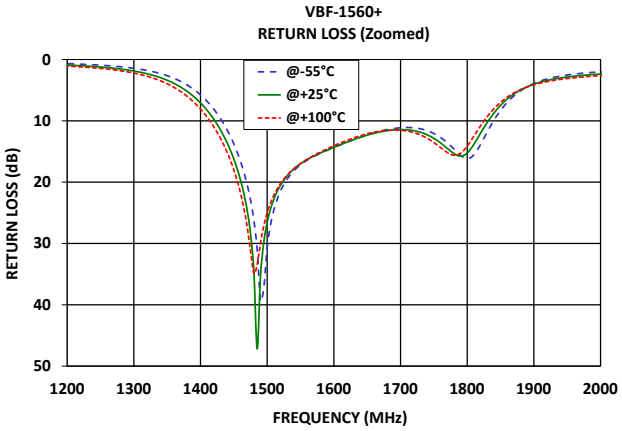
50Ω 1500 to 1620 MHz SMA Male/Female

TYPICAL PERFORMANCE GRAPHS









Bandpass Filter

VBF-1560+

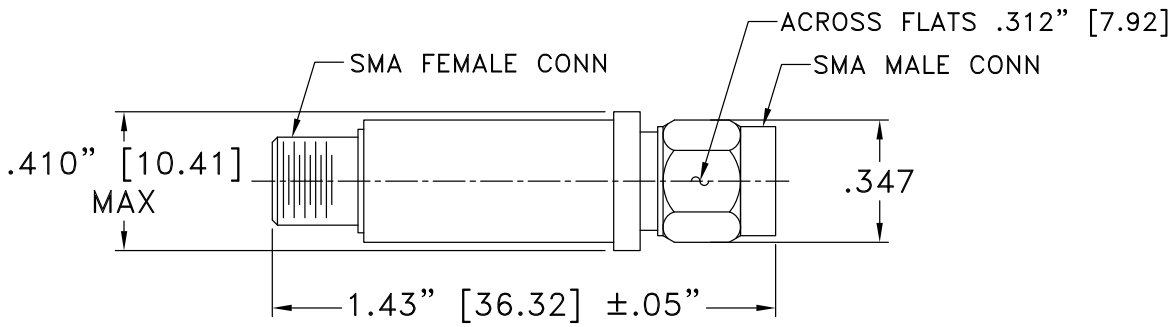
50Ω 1500 to 1620 MHz SMA Male/Female

CONNECTOR DESCRIPTION

Function	Connector
RF1[3]	SMA Male
RF2[3]	SMA Female

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

CASE STYLE DRAWING



Unit weight: 10.0grams
Dimensions are in inches (mm). Tolerances: 2 Pl. ±.04"; 3 Pl. ±.30"

PRODUCT MARKING*: VBF-1560+

*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	ENV28

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