Bandpass Filter

VBF-1525+

1480 to 1570 MHz 50Ω

The Big Deal

- Low Insertion Loss (2.0 dB typical)
- Good close-in rejection
- Versatile small size, coaxial, 1.43" length



Product Overview

The VBF-1525+ Band Pass Filter is constructed using internal LTCC Band Pass Filter structure to achieve repeatable performance. Covering 1525 MHz ± 45 MHz, these units offer 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-1525+ takes very little space and meets rugged test lab system environment.

Key Features

Feature	Advantages	
Good Rejection close to pass band	Provides good rejection of signals close to the pass band, for improved system performance.	
Compact Versatile Case (1.43"x0.41")	Enables use in a variety of applications including space constrained connectorized systems. Connectors: SMA Female (1), SMA Male (1)	
Rugged Unibody Construction	Mini-Circuits Unibody construction allows survivability in critical applications including militarized or industrial systems.	

For detailed performance specs

Bandpass Filter

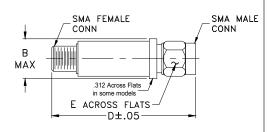
50Ω 1480 to 1570 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
RF Power Input*	1.5W max, at 25°C		

^{*}Passband rating, derate linearly to 0.25W at 100°C ambient Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



Outline Dimensions (inch mm)

D Ε .410 1.43 .312 grams 10.41 36.32 7.92 10.0

Features

- · Small size
- Temperature stable
- · Rugged unibody construction

Applications

- Harmonic Rejection
- Transmitters / Receivers

VBF-1525+



CASE STYLE: FF704

Connectors	Model	Price	Qty.
SMA	VBF-1525+	\$34.95 ea.	(1-9)

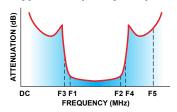
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

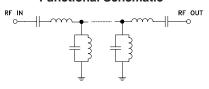
Electrical Specifications at 25°C

Parar	neter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	_	_	_	1525	_	MHz
Pass Band	Insertion Loss	F1-F2	1480-1570	_	_	3.0	dB
	VSWR	F1-F2	1480-1570	_	_	2.5	:1
Cton Bond Lawer	Insertion Loss	DC-F3	DC-1150	_	20	_	dB
Stop Band, Lower	VSWR	DC-F3	DC-1150	_	25	_	:1
Stop Bond Upper	Insertion Loss	F4-F5	2900-5100	_	25	_	dB
Stop Band, Upper	VSWR	F4-F5	2900-5100	_	20	_	:1

Typical Frequency Response

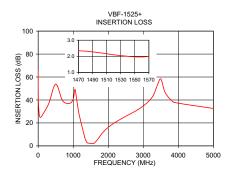


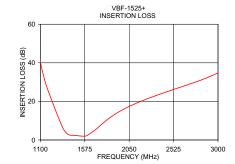
Functional Schematic

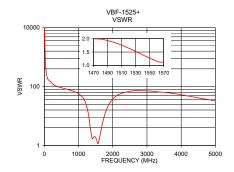


Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)		
0.30	65.45	2271.75		
300.00	36.71	110.05		
900.00	37.14	65.76		
1050.00	49.26	51.32		
1100.00	40.11	45.74		
1250.00	17.00	18.94		
1400.00	2.80	1.73		
1480.00	2.32	1.98		
1570.00	2.00	1.13		
2100.00	18.50	47.88		
2400.00	24.10	65.44		
2600.00	27.40	71.84		
3000.00	34.81	71.10		
3500.00	58.38	63.85		
5100.00	32.14	30.99		







Mini-Circuits

For detailed performance specs

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