

50Ω DC to 1575 MHz

VLFG-1575+

- Excellent power handling, 5.5W
- Temperature stable

The Big Deal

- Rugged unibody construction
- Good rejection, 45 dB typical



Product Overview

VLFG-1575+ is a 50 Ω low pass filter built in rugged unibody construction. Covering DC-1575 MHz bandwidth, these units offer good matching within the passband and good rejection in stopband. VLFG-1575+ offer 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.

Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application.
5.5W Power handling	Supports a range of system power requirements.
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

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Coaxial Low Pass Filter

50Ω DC to 1575 MHz

Features

- Low loss, 1.1 dB typical
- Good rejection 45 dB typical
- Excellent power handling, 5.5W
- Temperature stable
- Connectorized package
- Rugged unibody construction

Applications

- Military radar applications
- Test and measurement
- Telecommunication and broadband wireless applications

Functional Schematic



Typical Frequency Response







Generic photo used for illustration purposes only CASE STYLE: FF704

+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

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Pa	rameter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Insertion Loss	DC-F1	DC - 1575	_	1.1	1.8	dB
Pass Band	Freq. Cut-Off	F2*	1850	_	3.0	_	dB
	Return Loss	DC-F1	DC - 1575	_	15	_	dB
		F3-F4	2175 - 2400	20	38	_	dB
Stop Band	Rejection Loss	F4-F5	2400 - 7000	36	45	—	dB
		E5-E6	7000 - 12000	l _	35		dB

In Application where DC voltage is present at either input or output port, DC blocks are required. * Typically, a \pm 5% frequency deviation from the stated value may occur on a unit-to-unit basis.

Maximum Ratings

	- J-	
Operating Temperature	-55°C to 125°C	
Storage Temperature	-55°C to 125°C	
RF Power Input*	5.5W max.@25°C	
Deschand rating denote linearly to 1W at 105% ambient		

*Passband rating, derate linearly to 1W at 125°C ambient Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
10	0.06	41.92	
100	0.13	29.52	
1000	0.59	15.80	
1100	0.64	15.95	
1400	0.82	20.07	
1500	0.94	24.62	
1575	1.08	33.09	
1850	3.53	11.28	
1960	11.49	3.78	
2035	21.64	2.19	
2100	33.33	1.61	
2175	47.80	1.25	
2400	61.50	0.76	
3000	61.27	0.45	
7000	47.10	0.44	
8000	39.12	0.43	
9000	41.67	0.41	
10000	38.68	0.47	
11000	33.55	0.65	
12000	33.35	0.97	



Notes
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Coaxial Connections

PORT - 1	SMA-Male
PORT - 2	SMA-Female

Outline Drawing



Outline Dimensions (inch)

в	D	Е	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

Note: Please refer to case style drawing for details

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