

# VSF-K Series Filters

Lab Brick® 5G Mitigation Filters

C-Band Satcom Waveguide Filters (4000 – 4200 MHz) | 1.1 dB Typical Insertion Loss

## Features/Benefits

- Industry Leading Insertion Loss
- Drop in Replacement for Existing C-Band Satcom Receivers
- Flat or Grooved Flange Options Available
- Easily identifiable Blue Color



As cellular network operators introduce 5G, LTE and Wi-Max solutions in the C-band, Satellite Communications (Satcom) equipment manufacturers require improved filter performance to avoid receiver saturation by unwanted signals.

Vaunix has introduced high performance 5G mitigation waveguide filters to reject the interference and optimize Satcom receiver performance.

The VSF-K series waveguide filters offer industry leading performance and availability.

# Specifications

<i>Band</i>	<i>Parameter</i>	<i>Performance</i>
<b>Electrical Properties</b>		
<b>Group K - Blue</b>		
	<b>Passband (MHz)</b>	4000 - 4200
	<b>Group Delay Variation</b>	1.45 nSec Max within $\pm 0.5$ MHz
	<b>Insertion Loss -Typical (dB)</b>	1.1
	<b>Insertion Loss - Max (dB)</b>	1.3
	<b>Rejection</b>	70 dB Min below 3900 MHz
	<b>Rejection</b>	60 dB Min at 3980 MHz
	<b>Rejection</b>	50 dB Min at 3983 MHz
	<b>Rejection</b>	25 dB Min above 4230 MHz
	<b>Return Loss</b>	20 dB Min
<b>Mechanical Properties</b>		
<b>Interface Flange</b>	UDR40 CPR-229 PDR40 CPR-229	
<b>Material</b>	Aluminum 6061	
<b>Finish</b>	Flanges: Chemical Conversion Waveguide: Silver Plate Exterior: Blue Paint	
<b>Weight</b>	2.2 lbs. 998 g.	
<b>Environmental Conditions</b>		
<b>Operating Temperature</b>	-40°C to +50°C	

## Configuration Guide

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VSF-K-XX-XX

Series – Group – Flange1 – Flange2

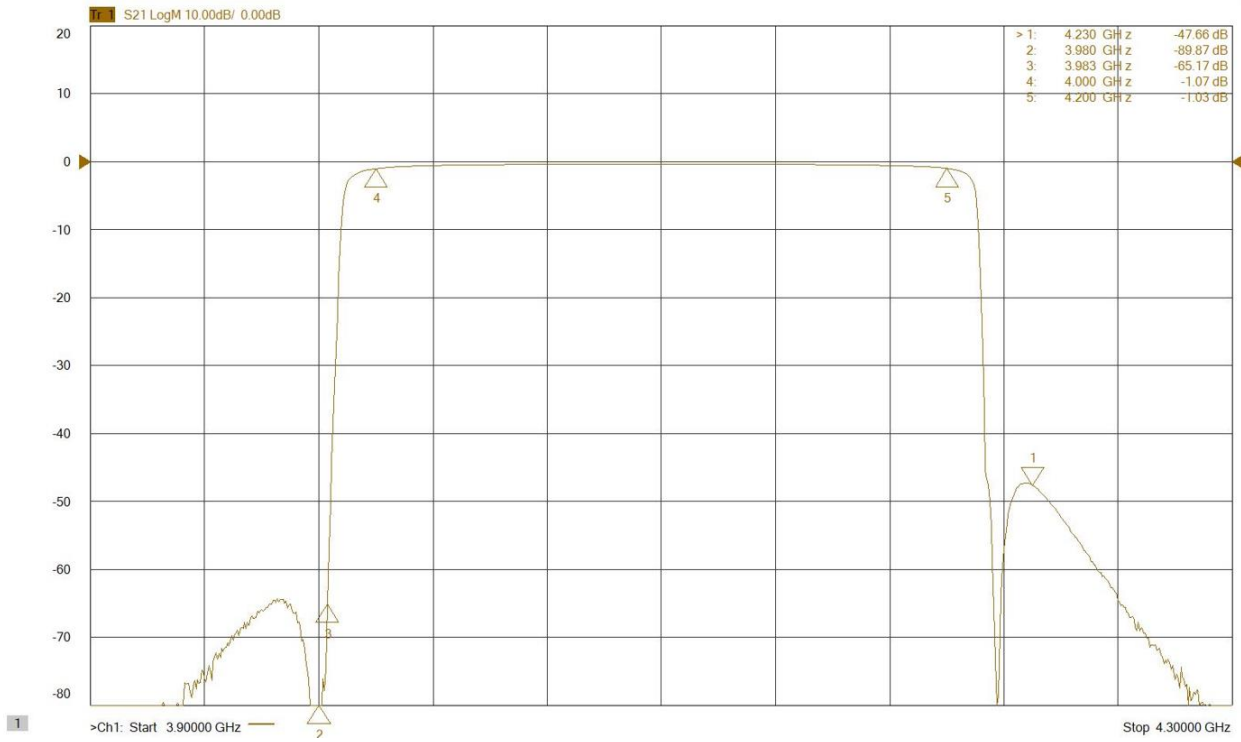
Group	
K	4000 – 4200 MHz

Flange1	
01	Flat and Thru Hole
02	Flat and Threaded Hole
03	Grooved and Thru Hole
04	Grooved and Threaded Hole

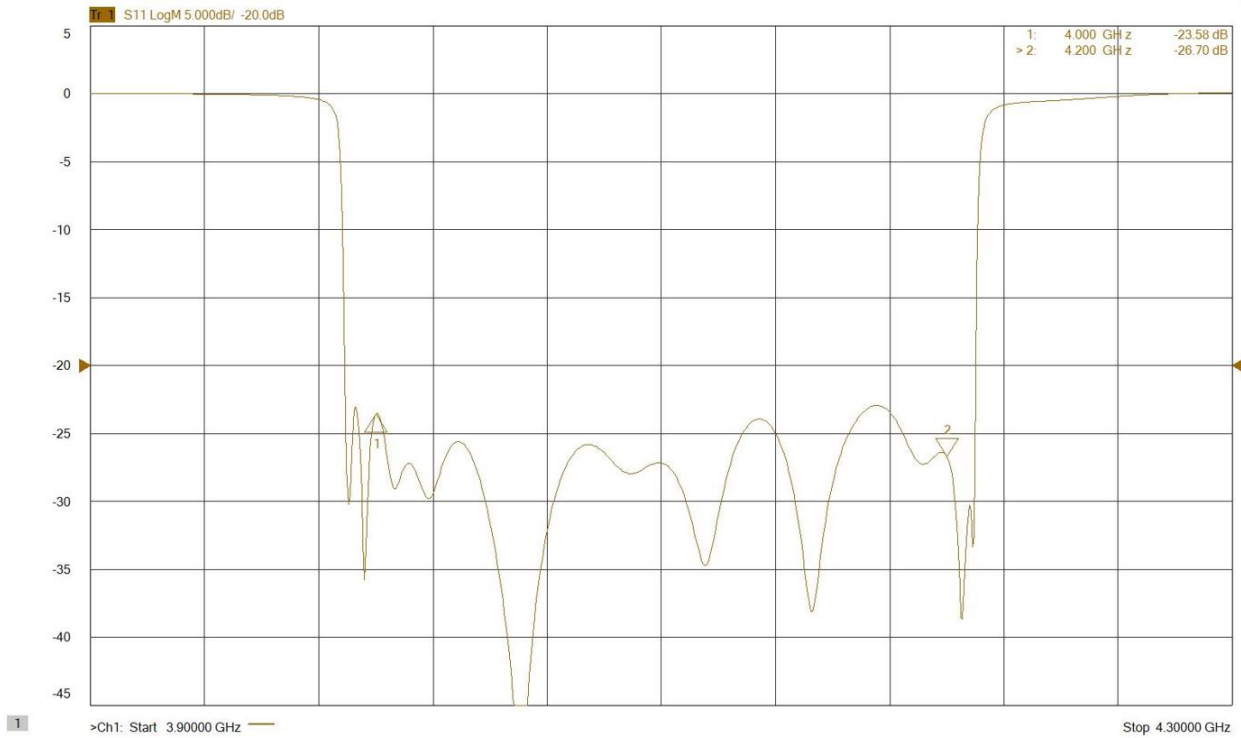
Flange2	
01	Flat and Thru Hole
02	Flat and Threaded Hole
03	Grooved and Thru Hole
04	Grooved and Threaded Hole

# Performance

## Group K – Insertion Loss and Rejection



## Group K – Return Loss



# Mechanical Outline

