

**GPS Extended Filter**  
**Pass Band 1624 - 1760 MHz**

***PN: MW-F01692-AAT***

**Microwavefilters & TVC srl**

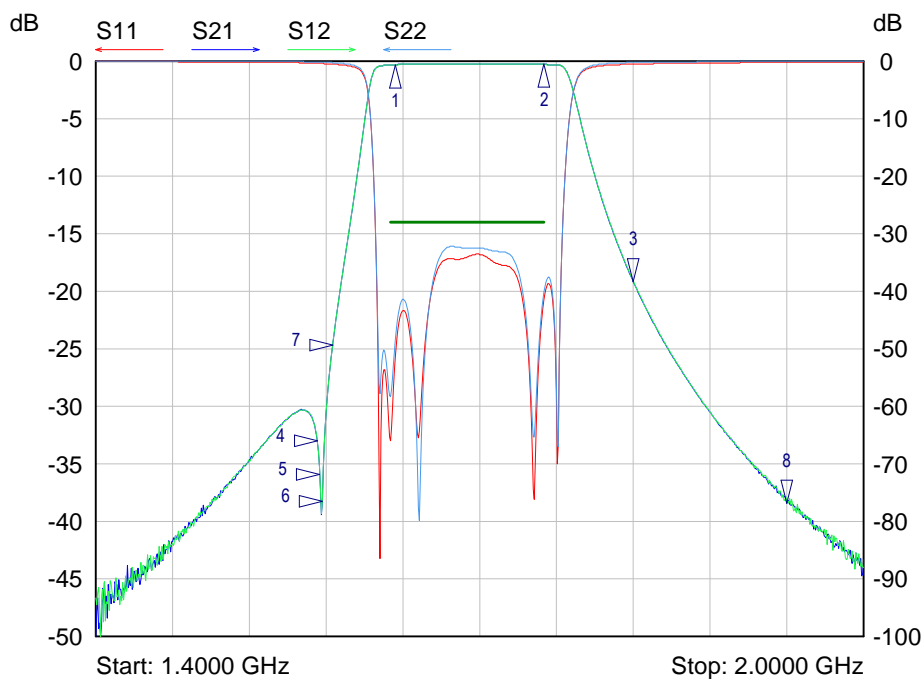
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GPS Extended Filter Specifications	
Parameter	Requirement
Temperature Range	-40°C ÷ +85 °C
Pass Band	1624-1760 MHz
Insertion Loss @1634-1750 MHz @ 1624 MHz -40 °C @ 1760 MHz +85 °C	-0.75 dB max. -1.2 dB max. -1.7 dB max.
Upper stop band rejection 1820-1940 MHz	-12 dB min.
Lower band stop rejection DC-1300 MHz	-60 dB min.
GPS band rejection 1575+/-2MHz @1585 MHz	-50 dB min. -20 dB min.
Ultimate Rejection 2010-6000MHz	-60 dB min.
Ripple within any 5MHz, 1634-1750MHz	0.1 dB max.
GDV @ 1624-1626 MHz	3.5 ns max.
GDV for any 5 MHz @ 1626-1636 MHz GDV for any 5 MHz @ 1636-1748 MHz GDV for any 5 MHz @ 1748-1758 MHz GDV for any 5 MHz @ 1758-1760 MHz	4 ns max. 2 ns max. 3.3 ns max. 3 ns max.
GDV @ 1748-1750 MHz GDV @ 1748-1750 MHz @ 85 °C	2.5 ns max. 5 ns max.
GDV over full band	20 ns max.
Average Power	10 W
Impedance	50 Ω input/output
VSWR	1.5:1
Connectors	Female SSMA

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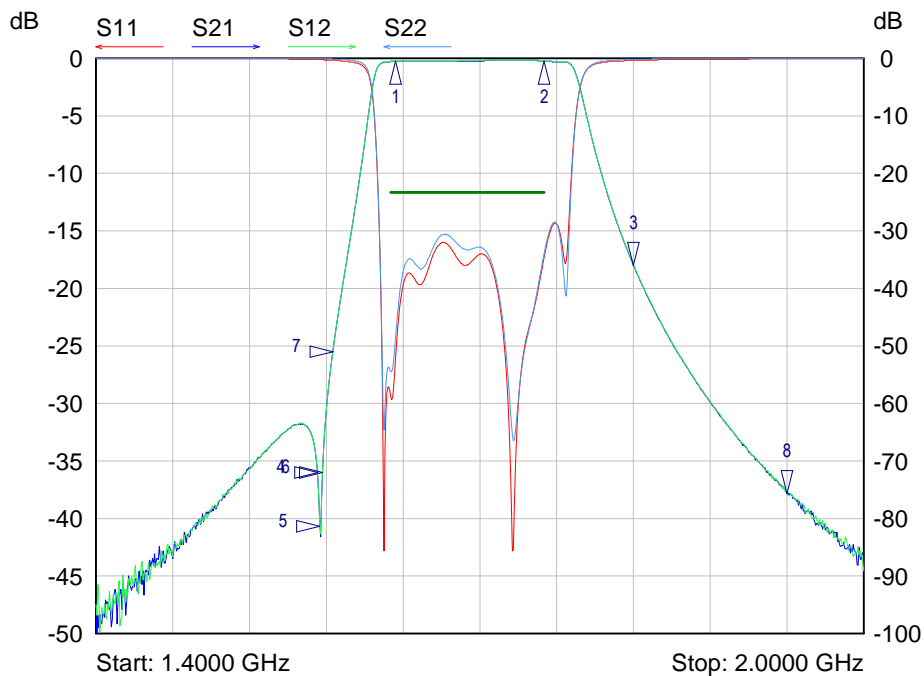
FREQUENCY RESPONSE



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S21	1.6340 GHz	-0.60 dB	
2 ▾	S21	1.7500 GHz	-0.55 dB	
3 ▾	S21	1.8200 GHz	-38.28 dB	
4 ▾	S21	1.5730 GHz	-65.99 dB	
5 ▾	S21	1.5750 GHz	-71.86 dB	
6 ▾	S21	1.5770 GHz	-76.44 dB	
7 ▾	S21	1.5850 GHz	-49.34 dB	
8 ▾	S21	1.9400 GHz	-76.88 dB	

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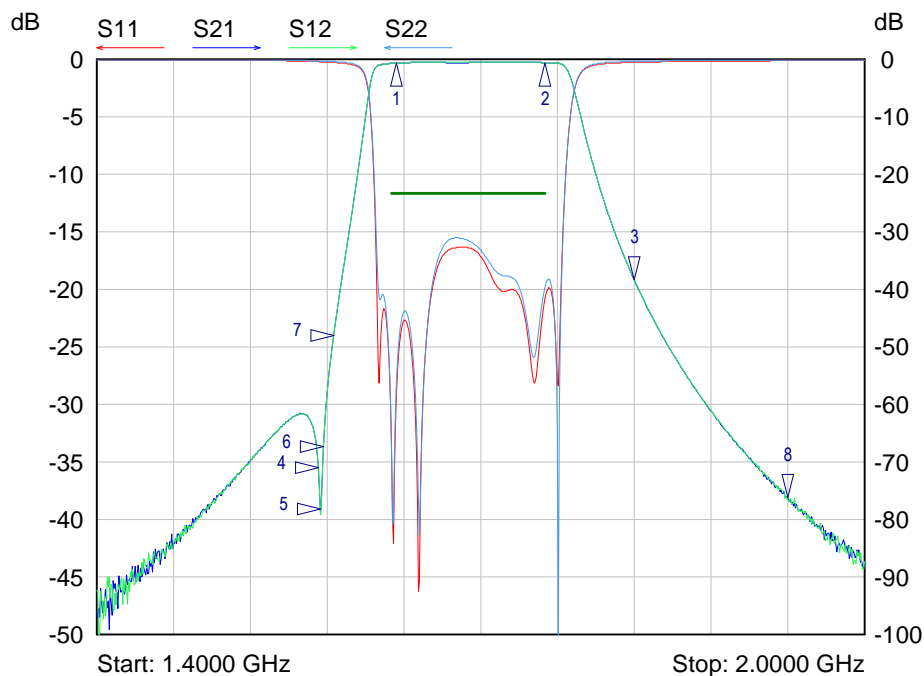
FREQUENCY RESPONSE @ -40 °C



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S21	1.6340 GHz	-0.53 dB	
2 ▾	S21	1.7500 GHz	-0.47 dB	
3 ▾	S21	1.8200 GHz	-35.93 dB	
4 ▾	S21	1.5730 GHz	-72.07 dB	
5 ▾	S21	1.5750 GHz	-81.41 dB	
6 ▾	S21	1.5770 GHz	-72.08 dB	
7 ▾	S21	1.5850 GHz	-50.99 dB	
8 ▾	S21	1.9400 GHz	-75.60 dB	

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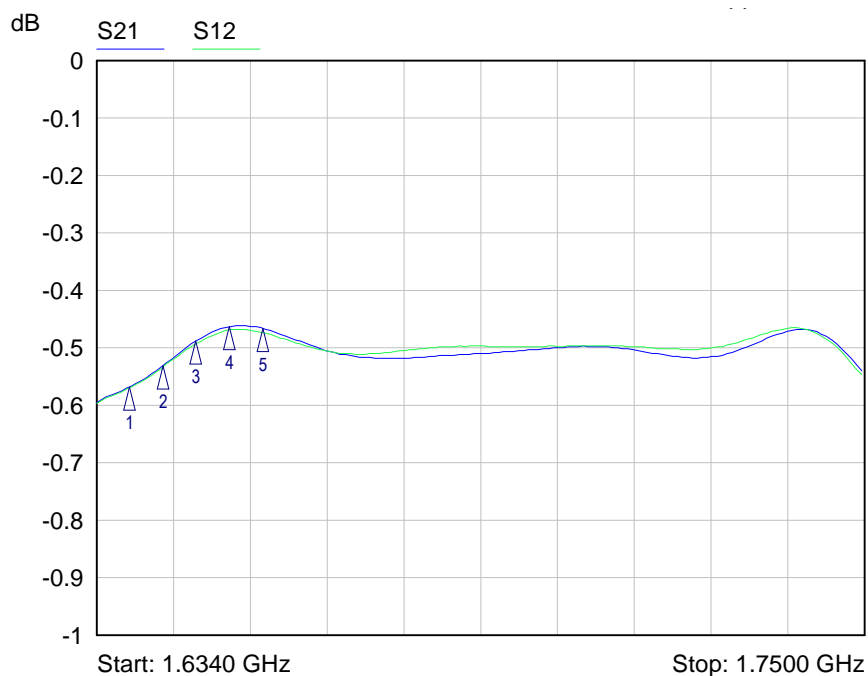
FREQUENCY RESPONSE @ +85 °C



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S21	1.6340 GHz	-0.66 dB	
2 ▾	S21	1.7500 GHz	-0.61 dB	
3 ▾	S21	1.8200 GHz	-38.36 dB	
4 ▾	S21	1.5730 GHz	-71.05 dB	
5 ▾	S21	1.5750 GHz	-78.15 dB	
6 ▾	S21	1.5770 GHz	-67.25 dB	
7 ▾	S21	1.5850 GHz	-47.94 dB	
8 ▾	S21	1.9400 GHz	-76.23 dB	

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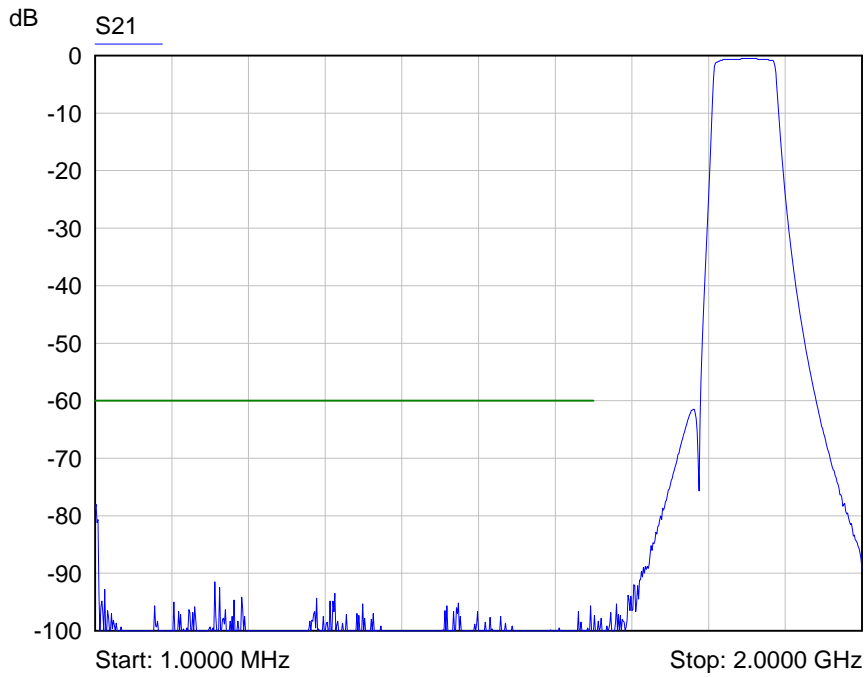
FREQUENCY RESPONSE – RIPPLE



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S21	1.6390 GHz	-0.57 dB	
2 ▾	S21	1.6440 GHz	-0.53 dB	
3 ▾	S21	1.6490 GHz	-0.49 dB	
4 ▾	S21	1.6540 GHz	-0.46 dB	
5 ▾	S21	1.6590 GHz	-0.47 dB	

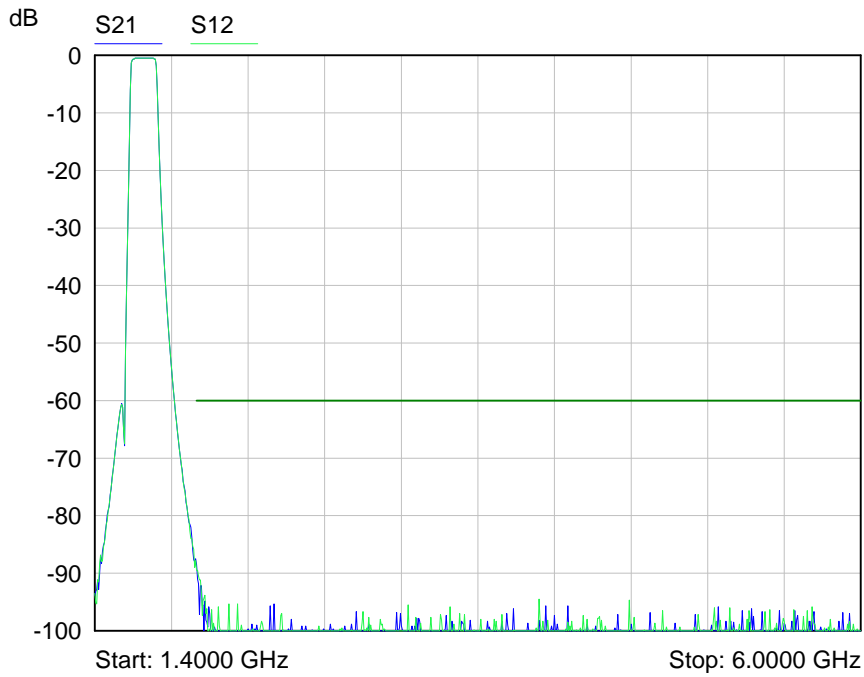
## MW-F01692-AAT - GPS Extended Filter

WIDE BAND FREQUENCY RESPONSE – LOW EDGE



## MW-F01692-AAT - GPS Extended Filter

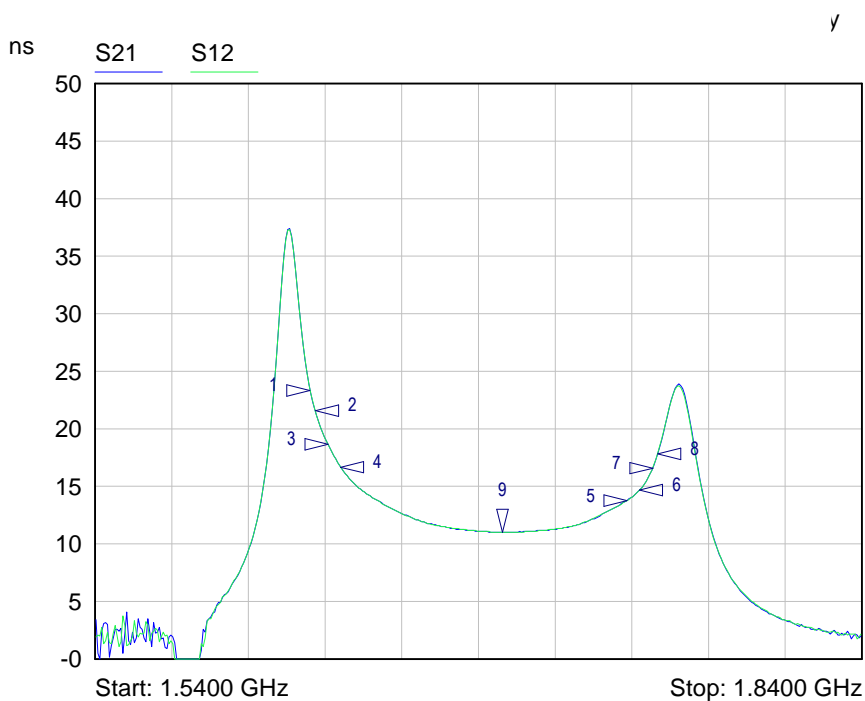
WIDE BAND FREQUENCY RESPONSE – HIGH EDGE





## MW-F01692-AAT - GPS Extended Filter

GROUP DELAY



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S21	1.6240 GHz	23.38 ns	
2 ▽	S21	1.6260 GHz	21.54 ns	
3 ▽	S21	1.6310 GHz	18.65 ns	
4 ▽	S21	1.6360 GHz	16.67 ns	
5 ▽	S21	1.7480 GHz	13.78 ns	
6 ▽	S21	1.7530 GHz	14.68 ns	
7 ▽	S21	1.7580 GHz	16.56 ns	
8 ▽	S21	1.7600 GHz	17.83 ns	
9 ▽	S21	1.6993 GHz	10.99 ns	

## MW-F01692-AAT - GPS Extended Filter MECHANICAL DRAWING

