

## *15 GHz (Ku-Band) Diplexer*



*Compact, with low loss  
and high isolation*

Low Filter 14.4 - 14.83 GHz    High Filter 15.15 - 15.35 GHz

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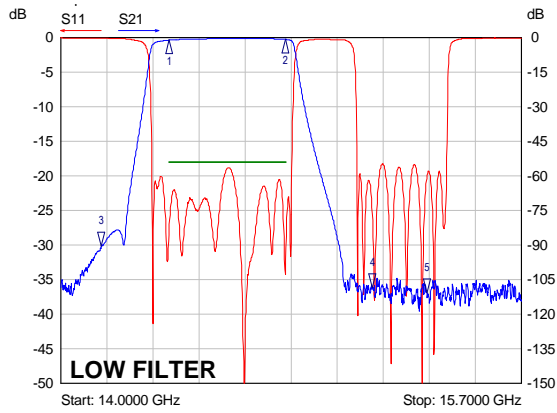
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This diplexer is the latest in a family designed and optimized to offer a very sharp response (105 dB of rejection of TX over RX and vice versa) with a shift of 635 MHz. Compared with its predecessors, it is even more compact. It can be used wherever stringent requirements are needed, like in tactical applications (UAV systems).

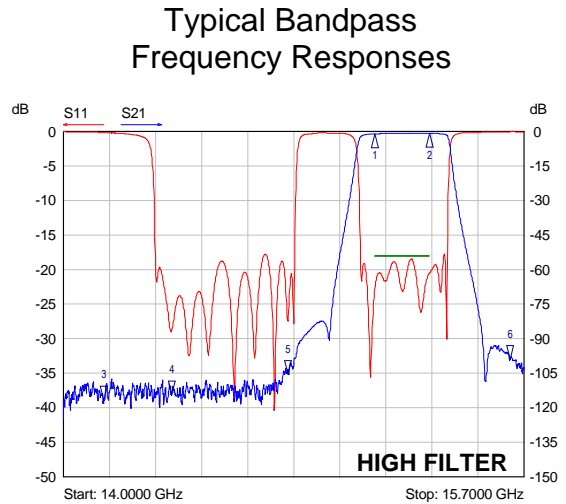
## Diplexer Characteristics – P/N MW-15G-0886/01

Low Filter Bandwidth	<b>14.4 ÷ 14.83 GHz</b>
High Filter Bandwidth	<b>15.15 ÷ 15.35 GHz</b>
Return Loss	<b>≥ 18 dB</b>
Insertion Loss	<b>≤ 1.2 dB</b>
Low Filter Rejection	<b>≥ 80 dB @ 14.15 GHz</b> <b>≥ 105 dB from 15.15 GHz to 15.35 GHz</b> <b>≥ 80 dB from 15.35 GHz to 18 GHz</b>
High Filter Rejection	<b>≥ 60 dB @ 14.15 GHz</b> <b>≥ 105 dB from 14.4 GHz to 14.83 GHz</b> <b>≥ 60 dB from 15.65 GHz to 18 GHz</b>
2 <sup>nd</sup> Harmonic Rejection	<b>≥ 55 dB (both low &amp; high filter)</b>
Dimensions	<b>mm 80 x 80 x 13</b>
Connectors	<b>SMA-Female (Antenna)</b> <b>SMA-Female or SMA-Male (Low &amp; High Filters)</b>

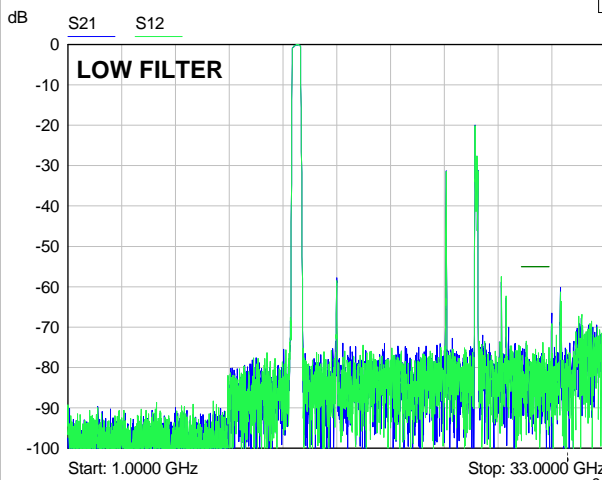




Mkr	Trace	X-Axis	Value	Notes
1	S21	14.4000 GHz	-1.12 dB	
2	S21	14.8300 GHz	-0.84 dB	
3	S21	14.1500 GHz	-90.60 dB	
4	S21	15.1500 GHz	-108.54 dB	
5	S21	15.3500 GHz	-110.77 dB	



Mkr	Trace	X-Axis	Value	Notes
1	S21	15.1500 GHz	-0.97 dB	
2	S21	15.3500 GHz	-0.72 dB	
3	S21	14.1500 GHz	-116.80 dB	
4	S21	14.4000 GHz	-114.52 dB	
5	S21	14.8300 GHz	-105.45 dB	
6	S21	15.6500 GHz	-98.92 dB	



Typical Wideband Frequency Response  
1 ÷ 33 GHz

