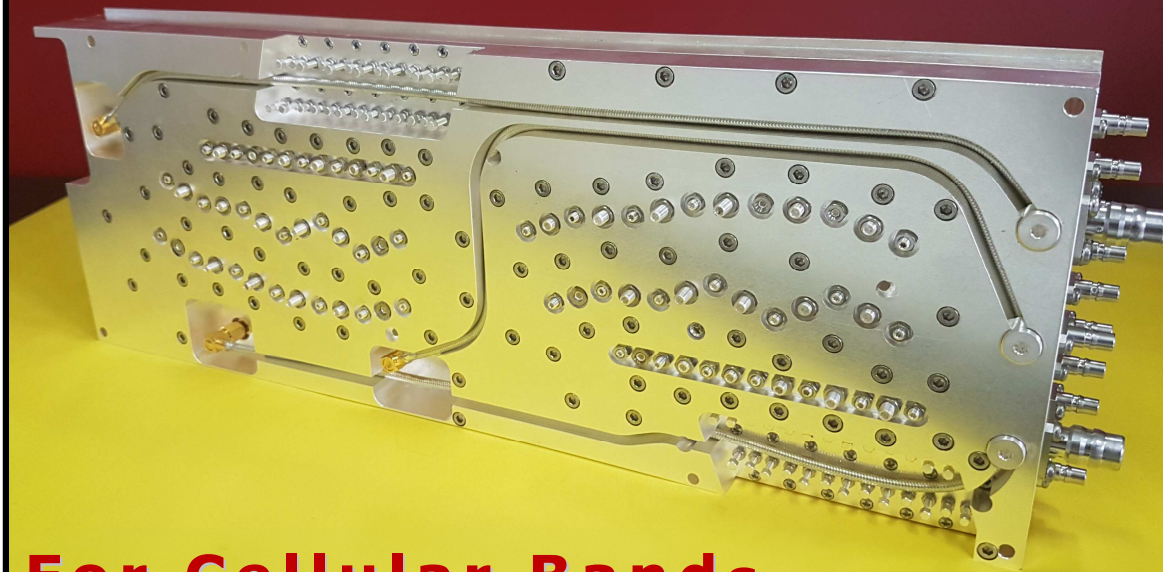


# Double Pentaplexer



**For Cellular Bands**

**Compact, with Low IL &  
Very Low PIM**

**Microwavefilters & TVC srl**

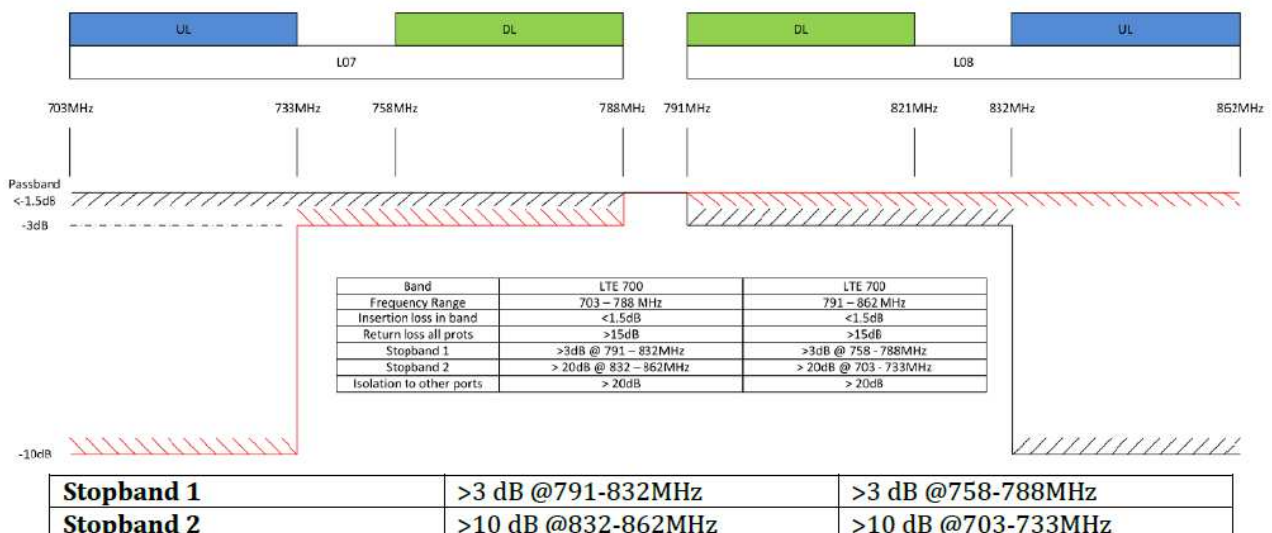
Via G. Cavalcanti, 10 - 20063 Cernusco s/N (MI) - ITALY  
Tel. +39-02-92162703 Fax. +39-02-92162705

[info@mw-tvc.com](mailto:info@mw-tvc.com) [www.mw-tvc.com](http://www.mw-tvc.com)

## Double Pentaplexer MW-F01436-LLBT Main Characteristics

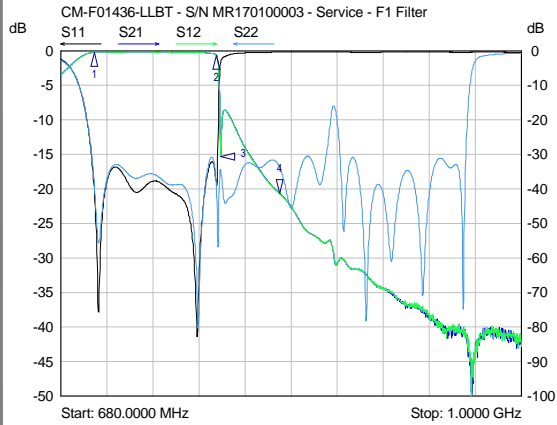
<b>Frequency range LTE 700</b> E-UTRS (LTE) ETSI Norms	703 – 788 MHz
<b>Frequency range LTE 800</b> Only E-UTRA (LTE) ETSI Norms	791 – 862 MHz
<b>Frequency range GSM 900</b> GSM and UTRA (UMTS) ETSI Norms	880 - 960 MHz
<b>Frequency range GSM 1800</b> GSM and E-UTRA (LTE) Norms	1710 - 1880 MHz
<b>Frequency range UMTS</b> UTRA (UMTS) ETSI Norms	1920–2170 MHz
<b>Insertion Loss Donor Path</b>	Max. 2.5 dB
<b>Insertion Loss Service Path</b>	Max. 2 dB
<b>Return Loss all ports</b>	Min. 15 dB
<b>Isolation between RMD ports</b>	Min. 20 dB
<b>Isolation between Quintplexers (all Ports)</b>	Min 95 dB
<b>Coupling Modem Port</b>	Typ. 15 (± 1.5 dB) dB
<b>Input Power per Port</b>	Max 1 W
<b>RMD connectors, all bands</b>	QMA(f)
<b>Donor and Service Port</b>	QN(f)
<b>Modem Port</b>	QMA(f)
<b>PIM @ 2 x 30dBm</b>	min. 140 dBc
<b>Temperature Class according to EN50155</b>	According to T3  -25°C to +70°C
<b>Separation L07-L08</b>	See table below

### Separation L07-L08



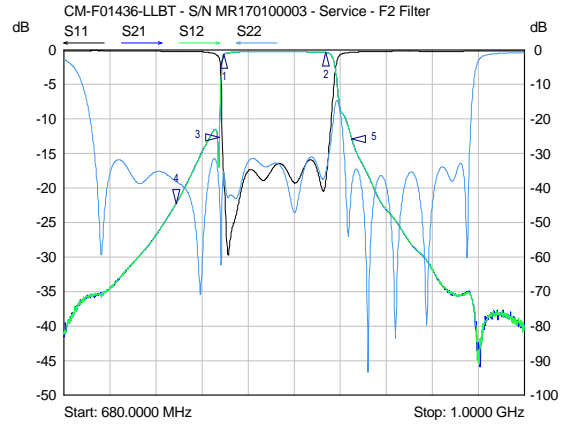
## Typical frequency responses of Service Pentaplexer

### Filter # 1: 703 – 788 MHz



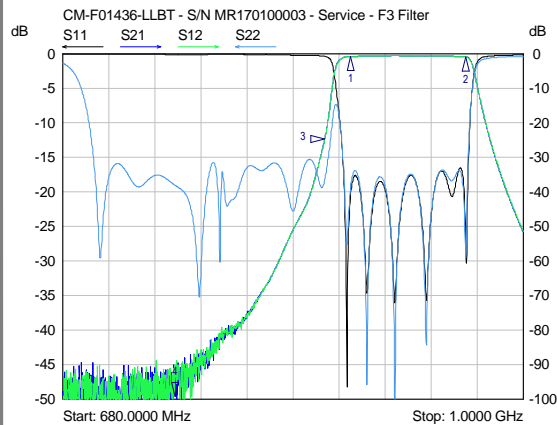
Mkr	Trace	X-Axis	Value	Notes
1	S21	703.0000 MHz	-0.42 dB	
2	S21	788.0000 MHz	-1.25 dB	
3	S21	791.0000 MHz	-30.62 dB	
4	S21	832.0000 MHz	-41.26 dB	

### Filter # 2: 791 – 862 MHz



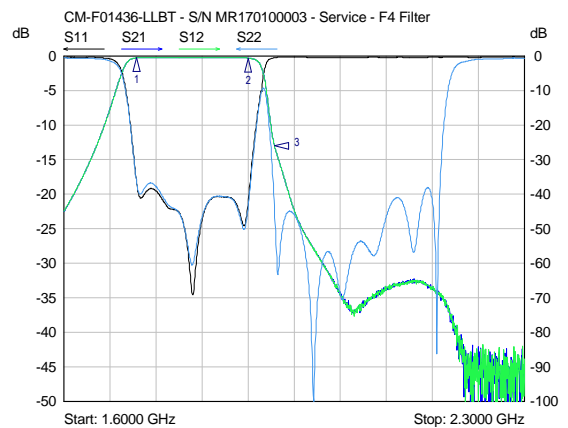
Mkr	Trace	X-Axis	Value	Notes
1	S21	791.0000 MHz	-1.40 dB	
2	S21	862.0000 MHz	-0.75 dB	
3	S21	788.0000 MHz	-25.40 dB	
4	S21	758.0000 MHz	-44.42 dB	
5	S21	880.0000 MHz	-25.79 dB	

### Filter # 3: 880 – 960 MHz

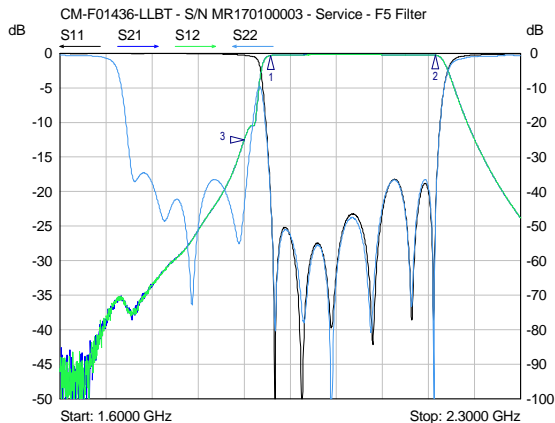


Mkr	Trace	X-Axis	Value	Notes
1	S21	880.0000 MHz	-0.82 dB	
2	S21	960.0000 MHz	-0.92 dB	
3	S21	862.0000 MHz	-24.72 dB	
4	S21	758.0000 MHz	-99.15 dB	

### Filter # 4: 1710 – 1880 MHz



Mkr	Trace	X-Axis	Value	Notes
1	S21	1.7100 GHz	-0.57 dB	
2	S21	1.8800 GHz	-0.60 dB	
3	S21	1.9200 GHz	-25.99 dB	



Mkr	Trace	X-Axis	Value	Notes
1	S21	1.9200 GHz	-0.64 dB	
2	S21	2.1700 GHz	-0.52 dB	
3	S21	1.8800 GHz	-25.01 dB	

### Filter # 5: 1920 – 2170 MHz