

**Microwavefilters® & ®**

**Microwave components for telecommunication systems**

# E-Band Diplexer



**In Metal Insert  
Technology (No Tuning)**

**BW 5 GHz Shifter 10 GHz  
Isolation > 60dB**

**RL > 14 dB, IL < 1.0 dB**

**Microwavefilters & TVC srl**

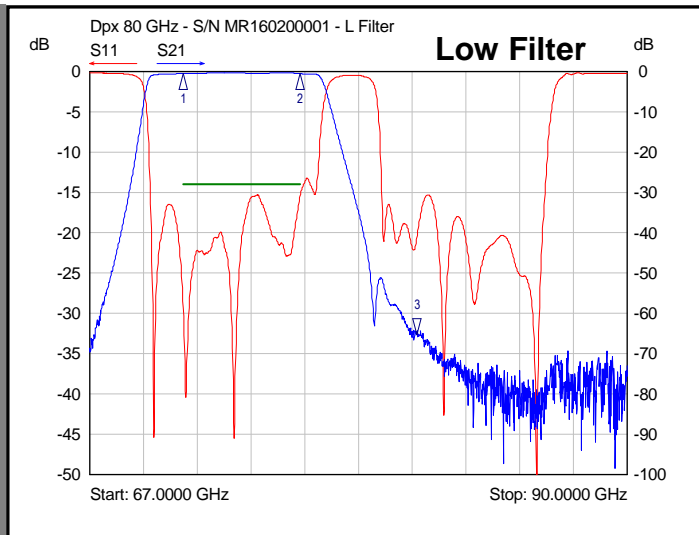
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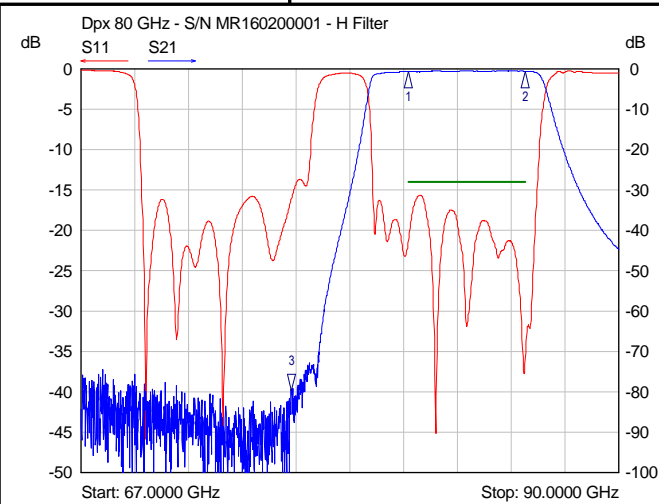
This diplexer works in the emerging frequency range of **E-band** (60 – 90 GHz). It was designed for **radio links applications** and optimized to offer a **very low insertion loss** (< 0.6 dB typical) in both the high and low band. It has a **high isolation TX-RX** (>60 dB). It's fabricated in metal-insert technology, with no tuning required.

### E-Band Diplexer Characteristics P/N MWD78500-FFFT

Low Filter Bandwidth	<b>71-76 GHz</b>
High Filter Bandwidth	<b>81-86 GHz</b>
Return Loss	<b>&gt; 14 dB</b>
Insertion Loss	<b>&lt; 1.0 dB (0.6 dB typ.)</b>
TX/RX Isolation	<b>&gt; 60 dB</b>
Temperature Range	<b>-40 ÷ +85 °C</b>
Dimensions	<b>80 x 24 x 9 mm</b>
Connectors (on all Ports)	<b>Flanges WG26 R740 WR12</b>



Mkr	Trace	X-Axis	Value
1	S21	71.0000 GHz	-0.47 dB
2	S21	76.0000 GHz	-0.55 dB
3	S21	81.0000 GHz	-65.39 dB



Mkr	Trace	X-Axis	Value	Notes
1	S21	81.0000 GHz	-0.69 dB	
2	S21	86.0000 GHz	-0.61 dB	
3	S21	76.0000 GHz	-79.53 dB	