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
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 requirement are needed, like in tactical applications (UAV systems).

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

- **Low Filter Bandwidth**: 14.4 ÷ 14.83 GHz
- **High Filter Bandwidth**: 15.15 ÷ 15.35 GHz
- **Return Loss**: ≥ 18 dB
- **Insertion Loss**: ≤ 1.2 dB
- **Low Filter Rejection**: ≥ 80 dB @ 14.15 GHz
  - ≥ 105 dB from 15.15 GHz to 15.35 GHz
  - ≥ 80 dB from 15.35 GHz to 18 GHz
- **High Filter Rejection**: ≥ 60 dB @ 14.15 GHz
  - ≥ 105 dB from 14.4 GHz to 14.83 GHz
  - ≥ 60 dB from 15.65 GHz to 18 GHz
- **2nd Harmonic Rejection**: ≥ 55 dB (both low & high filter)
- **Dimensions**: mm 80 x 80 x 13
- **Connectors**: SMA-Female (Antenna)  
  SMA-Female or SMA-Male (Low & High Filters)
Typical Bandpass Frequency Responses

Typical Wideband Frequency Response 1÷33 GHz