40GHz/50GHz Millimeter-wave Switch Filter Mixing Module

40GHz/50GHz Millimeter-wave YIG switch filter mixing module includes high and low band switches, ferrite filter, mixer and IF amplifier. DC ~ 40GHz/50GHz input signals pass an electronic switch which outputs signals below 26.5GHz directly, and signals above that go through the filter. After mixing through harmonic mixer and external LO signals, the module finally amplifies and outputs generated IF signals.

·Specifications :

◆ Input frequency range: DC~40/50GHz
◆ Low-band thru insertion loss: ≤4.5dB (DC-26.5GHz)
◆ High-band conversion loss: ≤29dB (26.5~40GHz), ≤32dB (40~50GHz)
◆ LO frequency range: 10~15GHz (IF frequency: 5.0GHz)
◆ 3dB bandwidth: ≥85MHz (26.5~40GHz), ≥100MHz (40~50GHz)
◆ Out band rejection: ≥55dBc
◆ P_{1dB}: ≥0dBm
◆ Second harmonic distortion: ≤-85dBc (input signal power: -10dBm)
◆ Third-order intermodulation: ≤-85dBc (input signal power: -30dBm)
· Principle diagram:

![Principle Diagram]

· Dimensions:

![Dimensions Diagram]

Note: All dimensions are in millimeter.