

## W Band Subharmonically Pumped Mixer



Model **SFS-75311416-10VFSF-S1** is a W-Band, subharmonically pumped mixer. The mixer employs high performance GaAs Schottky beamlead diodes, balanced configuration to produce superior RF performance. The subharmonically pumped mixer is capable for full RF waveguide band operation for RF frequencies from 75 to 110 GHz with half of the LO frequency: 37.5 to 55.0 GHz. The conversion loss measured was 12 to 16 dB at +13 dBm LO pumping level typically. The primary advantages of implementing subharmonically pumped mixer are 1) the LO oscillator frequency is at half of the RF frequency, which is very desirable at upper millimeterwave frequency operation and 2) the isolation of the LO to RF ports is high. The subharmonically pumped mixer family also includes the mixers in the frequency bands such as Q, U, E, V and F under different model numbers.

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