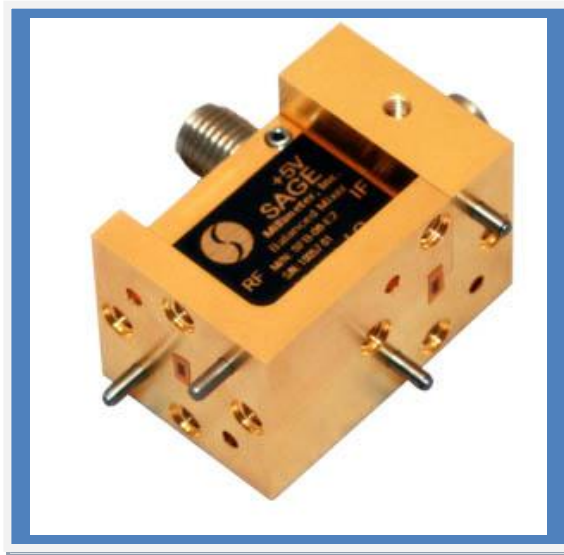


## D Band, Externally Biased Balanced Mixer



Model SFB-06-E2 is a D-Band, externally biased balanced mixer. The mixer employs high performance GaAs Schottky beamlead diodes, balanced configuration and proprietary bias circuitry to produce superior RF performance with very low LO pumping level. The low LO pumping level is desirable feature at higher millimeterwave bands.

The D- Band externally biased mixer is capable for full waveguide band operation for both LO and RF frequencies from 110 to 170 GHz with extreme broad band IF output from DC to 40 GHz. The conversion loss measured was 14 dB at +3 dBm LO pumping level and +3.0 Vdc/ 1.0 mA external bias from RF/LO frequency of 135 to 145 GHz. The proprietary feature of the mixer is its superior DC path noise suppression guaranteed by SMA (F) connector and low pass filtering circuits for DC bias port. The externally biased mixer family also includes the mixers in the frequency bands such as Q, U, E, W and F.

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