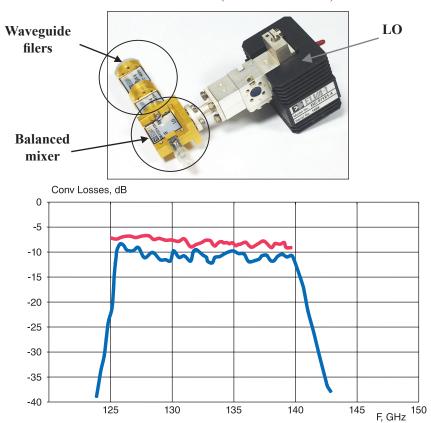
## Broadband Balanced Mixers, Receivers, Down Convertors

Typical outward view and measured data of a receiver / down converter are presented below:

F-band Downconverter LO = 121.4 GHz RF = 127.4–139.4 GHz IF = 6...18 GHz (LPF and BPF used)



Conversion Losses of the Downconverter Flo = 121.4 GHz RF = 127.4–139.4 GHz

Red line - without input BPF filter

Blue line - with input BPF filter

## **How to Order**

Specify Model Number BM-XX/LO/IF/N/A/B, where

- XX number of waveguide standard (Ex. 10 for WR-10 and 06 for WR-06)
- LO LO frequency (or operating range), F if full band
- IF intermediate frequency range
- N number of operating harmonic, nothing if N = 1
- A with built-in power amplifier at output, nothing if without output power amplifier
- B requires bias, nothing if no bias.

## **Example**

**BM-10/F/4** — W-band mixer, LO = 75-110 GHz, IF = 4 GHz

**BM-06/142/6–18** — D-band mixer, LO = 142 GHz, IF = 6–18 GHz

**BM-10/12–18/1/6** — W-band mixer, LO = 12-18 GHz, IF = 1 GHz, harmonic number 6

**BM-10/94/0.5–1.5/A** — W-band mixer, LO = 94 GHz, IF = 0.5-1.5 GHz, harmonic number 1, with built-in output power amplifier.

Delivery time 6–8 weeks for standard models. Custom designed mixers are delivered within 12 weeks ARO. All ELVA-1 balanced mixers are warranted by the manufacturer for one year after receipt.