

Waveguide Fundamental Balanced Mixers

General Features

- Frequency coverage: 50 – 140 GHz
- Waveguide full bandwidth RF/LO as standard
- Zero bias, with LO +10 to +13 dBm
- Low conversion loss
- IF to > 20 GHz

Specifications

Model	RF /LO Frequency (GHz)	Conversion Loss (dB) ⁻¹	IF Frequency (GHz) max ⁻³	Input RF _{MAX} (dBm)	Waveguides, Flange
THZBM-15	50 – 75	7 typical, 10 max	18	13	WR 15, UG385/U
THZBM-12	60 – 90	7 typical, 10 max	18	13	WR 12, UG387/U-M
THZBM-10	75 – 110	7 typical, 10 max	18	13	WR 10, UG387/U-M
THZBM-08	90 – 140	8 typical, 12 max	18	13	WR 08, UG387/U-M

Notes

1. Conversion loss, LO @ +13 dBm, IF DC - 18 GHz (IF can extend to 35 GHz with increased loss)
2. Option: combined mixer / LO amplifier units with low LO (0 to + 3 dBm typical); send request
3. IF bandwidths typically > 35 GHz with fixed LO. (See also Note 1)
4. IF connector SMA-F/K-F.
5. **How to make a request:** specify Model or waveguide sizes, RF / IF/LO frequency range, LO power, conversion loss, and email to: sales@vivatechthz.com

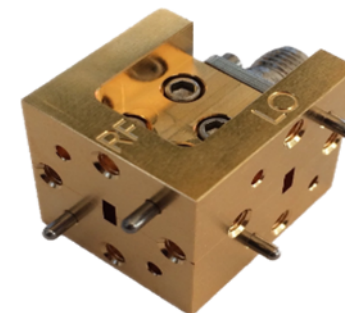


Figure 1 Full Band Fundamental Balanced Mixers

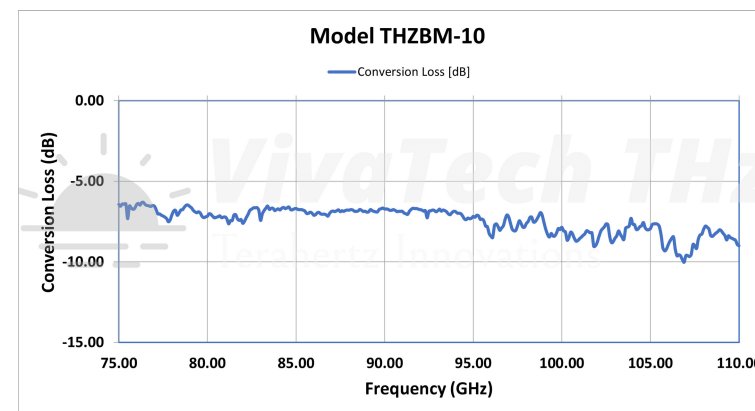


Figure 2 Typical Conversion Loss THZBM-10