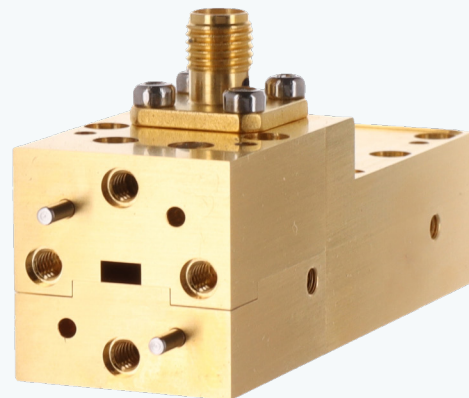




WR-15 Harmonic Mixer 50-75 GHz: WHMB-15-0002

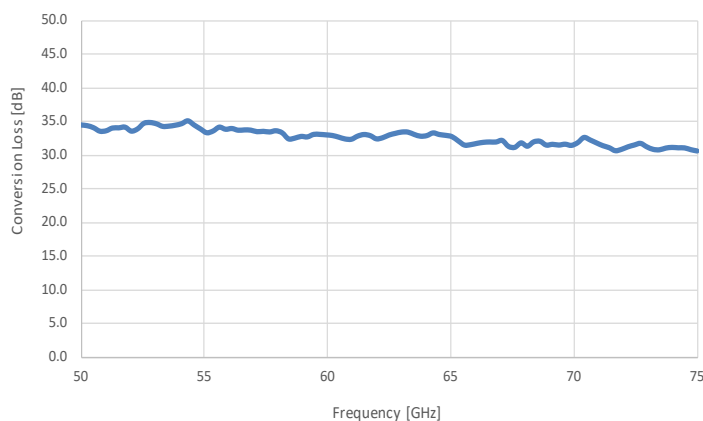
Farran's WHMB-15-0002 is a high performance harmonic mixer series offering low conversion loss with no bias required. Suitable for use with Keysight and Rohde & Schwarz spectrum analysers for frequency extension applications.



Key Facts:

- Low conversion loss
- Flat frequency response
- Product Family frequency coverage up to 500 GHz
- Unbiased anti-parallel diode pair

Typical Conversion Loss vs Frequency



“We have made many Farran purchases, including amplifiers, mixers and multipliers. They are all high-performance devices and always meet our expectations. Farran supplied each component with comprehensive set of test results and a manual, which is not necessarily a given in this industry.”

Microwave Circuit Designer & Engineer, Multinational Electronic Test Equipment Manufacturer.



APPLICATIONS

- Spectrum analysis
- mm-Wave instrumentation
- Signal processing
- Phased locked loops



ACCESSORIES

- User Manual
- Diplexer (optional)
- LO/IF cable (optional)



Product Specification

| Specification | Unit | Min | Typ | Max |
|---|-------|------------------|-------|------|
| Frequency Range | GHz | 50 | - | 75 |
| IF Frequency Range | MHz | DC | 322.5 | 2000 |
| LO Harmonic Number | - | - | 14 | - |
| LO Frequency Range | GHz | 3.57 | - | 5.38 |
| Mixer Conversion Loss SSB (n. trc. meas.) | dB | - | 40 | - |
| LO Input Power | dBm | +13 | +15 | +17 |
| Test Port VSWR (typ.) | - | - | 3.6:1 | - |
| Test Port Flange (nom.) | - | WR-15, UG-385/UM | | |
| LO/IF Connector (nom.) | - | SMA-F | | |
| CW RF Input Level (typ.) | dBm | - | - | -10 |
| CW RF Damage Level (nom.) | dBm | 10 | - | - |
| Weight (typ.) | g | - | 150 | - |
| Dimensions (approx.) | mm | 55 x 20 x 30 | | |
| Operating Temperatures (nom.) | deg C | 0 | - | 30 |
| Integrated LO/IF Diplexer | - | No | | |
| Bias | - | Not required | | |



SERVICES AVAILABLE

- Technical Support
- Installation and Setup
- Maintenance
- Application Support
- Hardware Support

For more information on any of our products or services please visit our website: www.farran.com



TECHNICAL SUPPORT

- Technical support provided directly by our knowledgeable and friendly engineers.
- Support for pre- and post-purchase: system configuration, installation and troubleshooting.



PRODUCT INSIGHTS

- For more product insights register at www.farran.com/customer
- Additional information: test data, CAD drawings and 3D models available.



WARRANTY

- Standard 1 year warranty.

Specification Definitions

Nominal value (nom.) – ensured by design, not tested. **Measured value (min, max)** – expected and warranted product performance obtained from the actual measurements of product sample. **Non-traceable measured value (n. trc. meas.)** – expected product performance obtained from the actual measurements of a product sample by means of using Farran's own equipment and methods. Traceable only to Farran laboratory equipment. **Typical data (typ.)** – value that represents the product specification met over 90% of bandwidth or a mean value. **Specifications without limits** – represent the warranted product performance; with values of no or a negligible deviation from the given value and as such have a secondary impact on the product performance.

