# 920/922 Series

Harmonic Mixers



### Description

Mi-Wave's 920 Series Harmonic Mixers are used to downconvert millimeter wave signals using a Schottky barrier mixer diode. Measurements can be made by

- Full Waveguide Band Coverage
- Extends the Useful Frequency Range of Spectrum Analyzers

mixing the harmonic of the LO with the desired RF signal and observing the resulting IF.

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The 920 Series is designed for applications where a Diplexer is not required

922 Series include optional LO-IF frequency diplexer.



Operating Specifications	
RF Input Power	+15 dBm, Max.
LO Input Power	+15dBM, Max./ 6dBm typical
Storage Temperature	-10 C to +60 C
Operating Temperature	0 C to +50 C
Bias Requirements: (optional) Diode	-0.7 Vdc @ 5 mA

\* IF range not to exceed +20dbm



# Nominal Conversion vs. Harmonic Number and RF Band

#### **Technical Specifications** (typical) Frequency SSB Standard Band Waveguide Flange LO Band Conversion Mixer Loss (dB) (GHz) 920A 18 26.5-40.0 WR-28 UG-599 920B 33.0-50.0 WR-22 UG-383 20 920U 40.0-60.0 WR-19 UG-383M 22 8.0-12.0 GHZ 920V 50.0-75.0 WR-15 UG-385 24 920E 60.0-90.0 WR-12 UG-387 27 920W 75.0-110.0 WR-10 UG-387M 30 920F 90.0-140.0 WR-8 UG-387M 40

920 D, G available

## **Ordering Information**



Optional IF amplifiers are available. Please consult mwave.

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