

## Waveguide Frequency Converter/Mixer, Model M95-1

### Description:

Spacek Labs model M95-1 is a W-band mixer optimized for the RF frequency range of 90 to 100 GHz. Our cross-bar mixer design uses two custom-made hermetic point-contact Schottky barrier diodes. This mixer can be designed in a variety of frequency combinations from single point to full waveguide bands.

Spacek Labs offers a full line of mixers covering the frequency range of 18-110 GHz which can also function as upconverters. These mixers are available with optional DC bias to allow LO input levels as low as 0 dBm.

Additionally, to complement your mixer's capabilities, Spacek Labs offers waveguide to coax transitions, filters, detectors, frequency sources, passive and active multipliers and amplifiers.

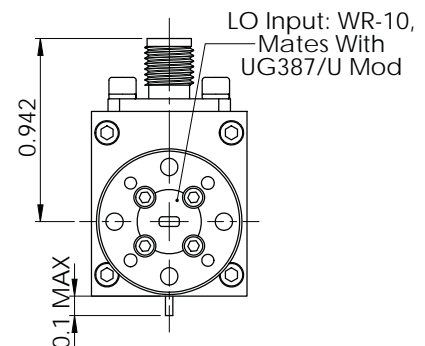
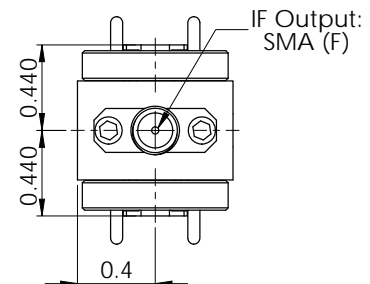
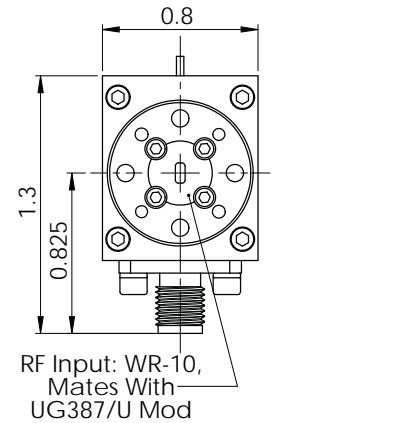


### Electrical Specifications:

Description	Specification
RF Input Frequency	90-100 GHz
LO Input Frequency	90-100 GHz
LO Input Power	+10 to +15 dBm
IF Output Frequency	DC to 3 GHz in SMA (F)
Conversion Loss	6.0 dB typ., 7.5 dB max
DC Bias	NA

### Mechanical Specifications:

Description	Specification
RF Input Flange	WR-10, UG387/U Mod
LO Input Flange	WR-10, UG387/U Mod
IF Output Connector	SMA (F) Coaxial
Dimensions OA	(See drawing)
Material	Brass
Finish	Gold
Weight	5 ounces / 0.14 kg



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Notes: Product data is periodically updated to reflect product / raw material / process / testing changes. This data should not be used as guaranteed specifications. Please contact Spacek Labs to make sure you have the most current data.