

## Frequency Quadrupler, Model W-4X

### Description:

Spacek Labs' passive frequency quadrupler, Model W-4X, has an input frequency range of 23 to 24 GHz generating an output frequency range of 92 to 96 GHz. This is a cost-effective frequency multiplier with similar models available from 18 to 110 GHz in complete waveguide output bandwidths from K-band to W-band. All designs are a balanced configuration to suppress undesired harmonics and are unconditionally stable for any input/output VSWR. To meet your needs, features can be added such as coaxial output adapters and additional filtering. MIL-spec or space-qualified units available.

### Features:

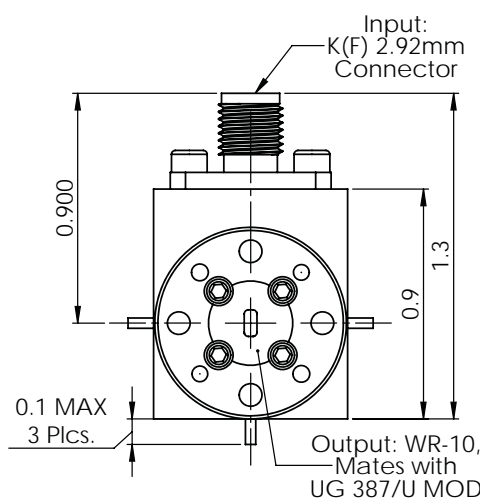
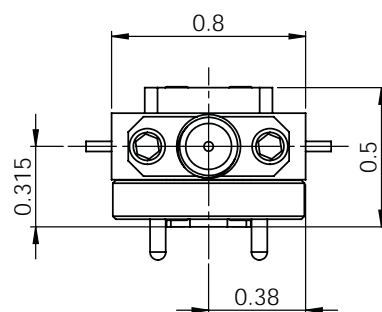
- Balanced Circuitry
- Unconditionally Stable
- Coaxial input, waveguide output, and filtering options available
- MIL-spec or space-qualified units available

### Electrical Specifications:

Description	Min.	Typ.	Max.
Input Frequency Range	23 GHz	-	24 GHz
Input Power Level	-	+15 dBm	-
Output Frequency Range	92 GHz	-	96 GHz
Conversion Loss	-	-	20.0 dB

### Mechanical Specifications:

Description	Specification
Connectors I/O	K 2.92mm(F) / WR-10
Dimensions OA	See outline
Material	Brass
Finish	Gold-plate
Weight	2.0 oz



**OUTLINE:** Dimensions in inches (Not to scale)

PASSIVE FREQUENCY MULTIPLIER