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# Frequency Quadrupler, Model U-4X

### **Description:**

Spacek Labs' passive frequency quadrupler, Model U-4X, has an input frequency range of 10 to 15 GHz generating an output frequency range of 40 to 60 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

**Electrical Specifications:** 

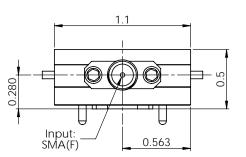
- Coaxial input, waveguide output, and filtering options available
- MIL-spec or space-qualified units available

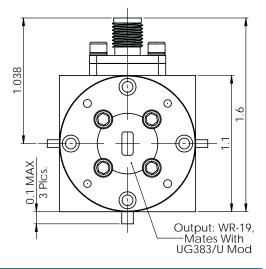
#### Description Min. Typ. Max. Input Frequency Range 10 GHz 15 GHz Input Power Level +15 dBm **Output Frequency Range** 40 GHz 60 GHz \_ Conversion Loss \_ . 21.0 dB

## **Mechanical Specifications:**

Description	Specification
Connectors I/O	SMA(F) / WR-19
Dimensions OA	See outline
Material	Brass
Finish	Gold-plate
Weight	2.0 oz







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

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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.