

WR-05 X2, Passive Frequency Multiplier, 186 to 190 GHz**Description:**

Model SFP-184194218-0510-UEB is a WR-05 X2 passive multiplier that generates second order harmonics with good harmonic and fundamental suppression. This multiplier requires an input frequency range of 93 to 95 GHz at +26 dBm RF power to yield typical +18 dBm output power at 186 to 190 GHz. The multiplier is equipped with a WR-10 waveguide and UG-387/U-M flange as its input port and a WR-05 waveguide and UG-387/U-M flange as its output port.

**Features:**

- High Conversion Efficiency
- Compact Package

Applications:

- THz
- Source Modules
- Frequency Extenders

Electrical Specifications:

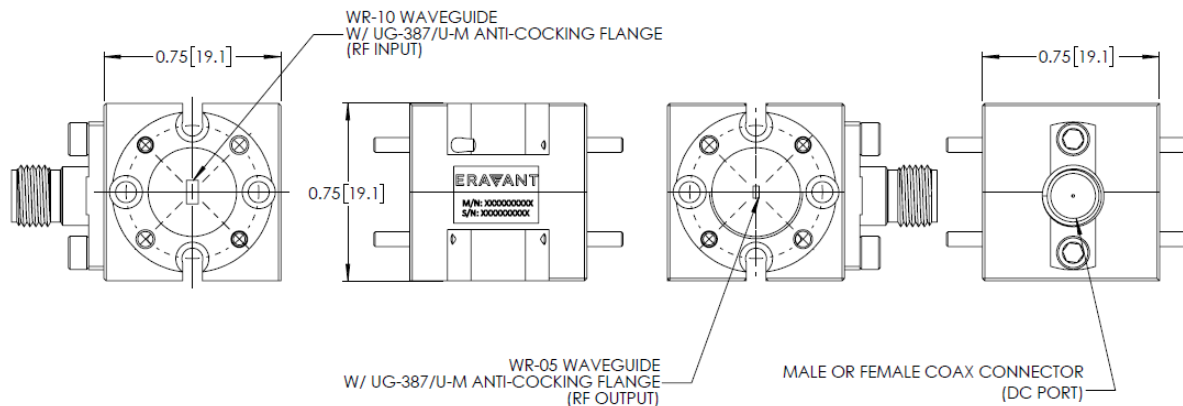
| Parameter | Minimum | Typical | Maximum |
|----------------------------|---------|---------|---------|
| Input Frequency | 93 GHz | 94 GHz | 95 GHz |
| Output Frequency | 186 GHz | 188 GHz | 190 GHz |
| Input Power | | +26 dBm | |
| Damage Input Power | | | +28 dBm |
| Output Power (@ -10V Bias) | +16 dBm | +18 dBm | |
| Conversion Efficiency | | 18% | |
| Harmonic Suppression | | 20 dB | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | 0 °C | | +50 °C |

Mechanical Specifications:

| Item | Specification |
|----------------|--|
| RF Input Port | WR-10 Waveguide with UG-387/U-M Flange |
| RF Output Port | WR-05 Waveguide with UG-387/U-M Flange |
| Bias Port | SMA (F) |
| Material | Aluminum |
| Finish | Gold Plated |
| Weight | 0.4 Oz |
| Size | 0.75" (L) X 0.75" (W) X 0.75" (H) |
| Outline | FP-GW2-A |

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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [Millimeters])



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings of the multiplier will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- The multiplier is a static sensitive device. Always follow ESD rules when working with the multiplier.

