

Part No:

HWCA-121F-EL



WR-12 to 1.0mm Female End Launch Waveguide to Coax Adapter, 60 -90 GHz

The HASCO HWCA-121F-EL waveguide to coaxial adapter is manufactured for end-launch (straight) requirements. This adapter is designed for WR-12 waveguide and has a UG387/U compatible flange with a 1.0mm Female connector. A 1.0mm Male version is also available upon request.

This precision full-band coax-to-waveguide end launch adapter converts between TEM mode in coax and the 1.0mm connector to TE₁₀ mode in WR-12 waveguide. This adapter offers exceptionally low loss for an end-launch configuration. The measurements show the loss and VSWR of two adapters measured back-to-back in a calibrated waveguide measurement system, which infers a loss for each adapter at half the measured value, and a VSWR of the square root of the measured back-to-back value. An outer rim based on the widely adopted ALMA recommendation form an anti-cocking flange that is backward compatible to the Mil-F-3922/67B standard. For test-and-measurement applications, our gold-plated solid brass body and stainless steel alignment pins ensure reliable gall-free mating over multiple mate and de-mate cycles.

The HASCO HWCA-121F-EL is RoHS Compliant.



HASCO stocks an extensive selection of RF and Microwave between-series, waveguide, in-series, right angle and low PIM adapters.

Installation torque of 0.45 ± 0.02 NM [4.0 ± 0.15 in lbs] recommended.

HASCO torque wrench #HTW-1564-04 is available in stock.



Electrical

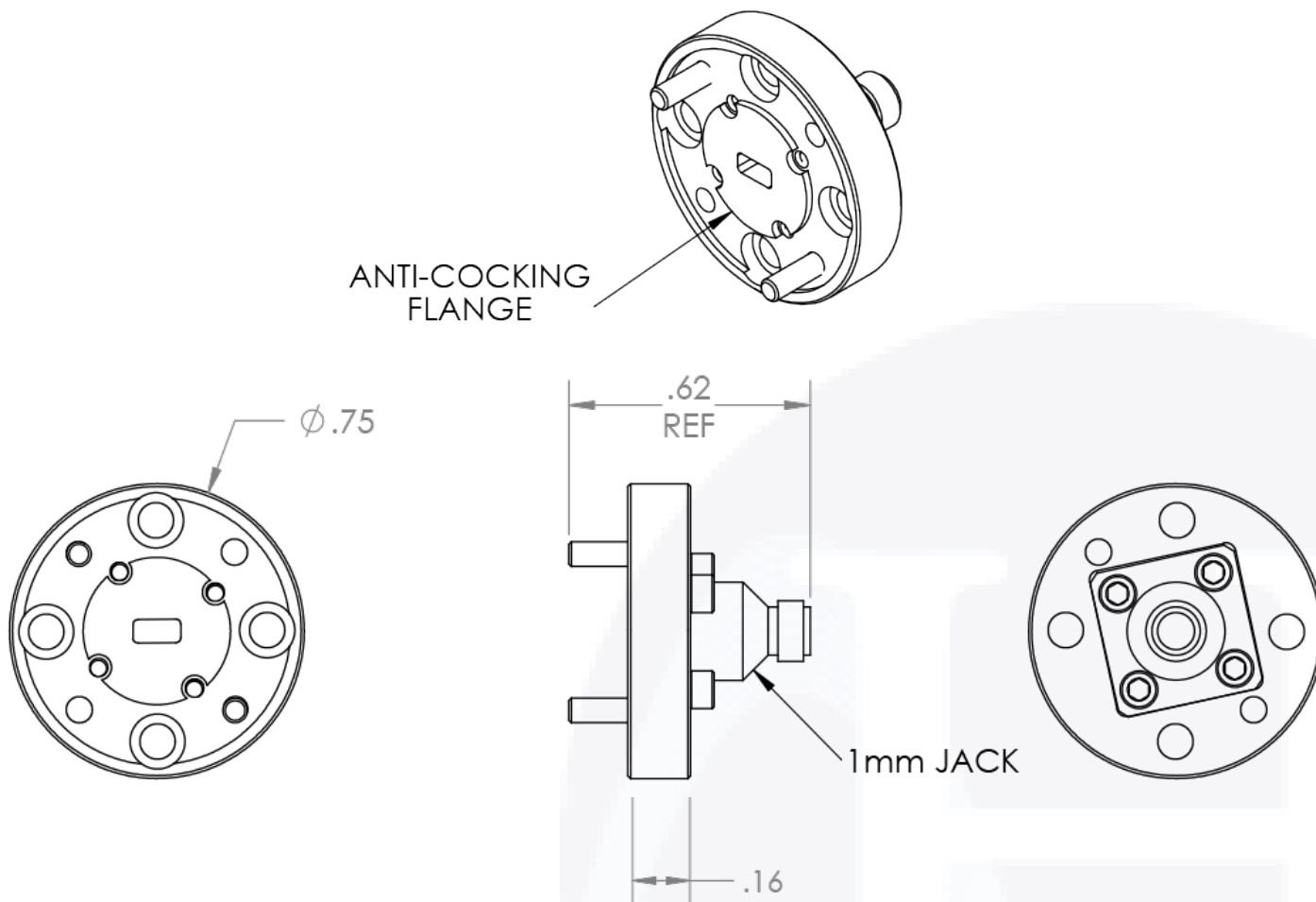
- Connector Impedence 50 Ohms
- Frequency Range 60 - 90 GHz
- VSWR $\sqrt{1.7:1}$ (17dB RL) Typ.
- Insertion Loss 0.75 dB Typ.
- Temperature Range -20°C to +50°C

Material

- Waveguide Type WR-12, UG387/U Compatible Flange
- Waveguide Material Gold Plated Brass
- 1.0mm Connector Body Passivated Stainless Steel
- 1.0mm Center Contact Gold Plated BeCu



WR-12 to 1.0mm Female Waveguide to Coax_End Launch Adapter | 60 ~ 90 GHz | Outline Drawing



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| LTR | DESCRIPTION | DATE | APPR. | DRAWN BY: <i>JMS</i> | CHECKED BY: <i>JMS</i> |
| - | RELEASE | 09/20 | TAC | APPROVED BY: <i>TAC</i> | |
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| MATERIALS: SEE DATA SHEET | CAGE CODE: 0T8L4 | SCALE: N/A | SIZE: A |
| FINISHES: SEE DATA SHEET | PART NO./DRAWING NO. HWCA-121F-EL | | REV: - |