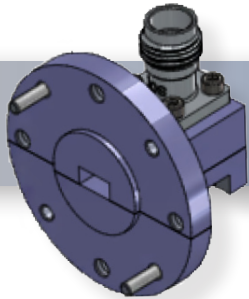


Part No:

# HWCA-1918F-RA



## *WR-19 to 1.85mm Female Precision Waveguide to Coax Adapter Right Angle Design, U-Band - 40 GHz to 60 GHz*

The **HWCA-1918F-RA** is a precision WR-19 waveguide to 1.85mm coaxial adapter operating in U-Band with a 40 GHz to 60 GHz frequency range. This adapter offers a robust design with Low VSWR and Low Insertion Loss with a UG-383/U flange.

HASCO waveguide to 1.85mm coaxial transitions are designed to provide enhanced RF performance, resulting in characteristics like low insertion loss and low VSWR. When selecting a waveguide to coaxial adapter, choosing the correct connector type, flange materials, flange types and flange profiles is essential to achieving your desired RF performance.

A waveguide to coaxial adapter is a coaxial cable component designed as a transition between a waveguide and a coax connector. Waveguides, true to their name, guide electromagnetic waves of a specific frequency range with the least loss of energy possible. Coaxial connectors are cables composed of at least three layers, including a tubular shield, a layer of insulation and a conductive material. A waveguide to coaxial adapter allows for electromagnetic waves with different modes to be coupled, and thus transforms waveguide transmission lines into coaxial lines or vice versa.

HASCO Components offers Waveguide to Coax Adapters in right angle and end-launch configurations. Go to <https://www.hascoinc.com/categories/adapters/adapters-waveguide.html> to view the entire line.

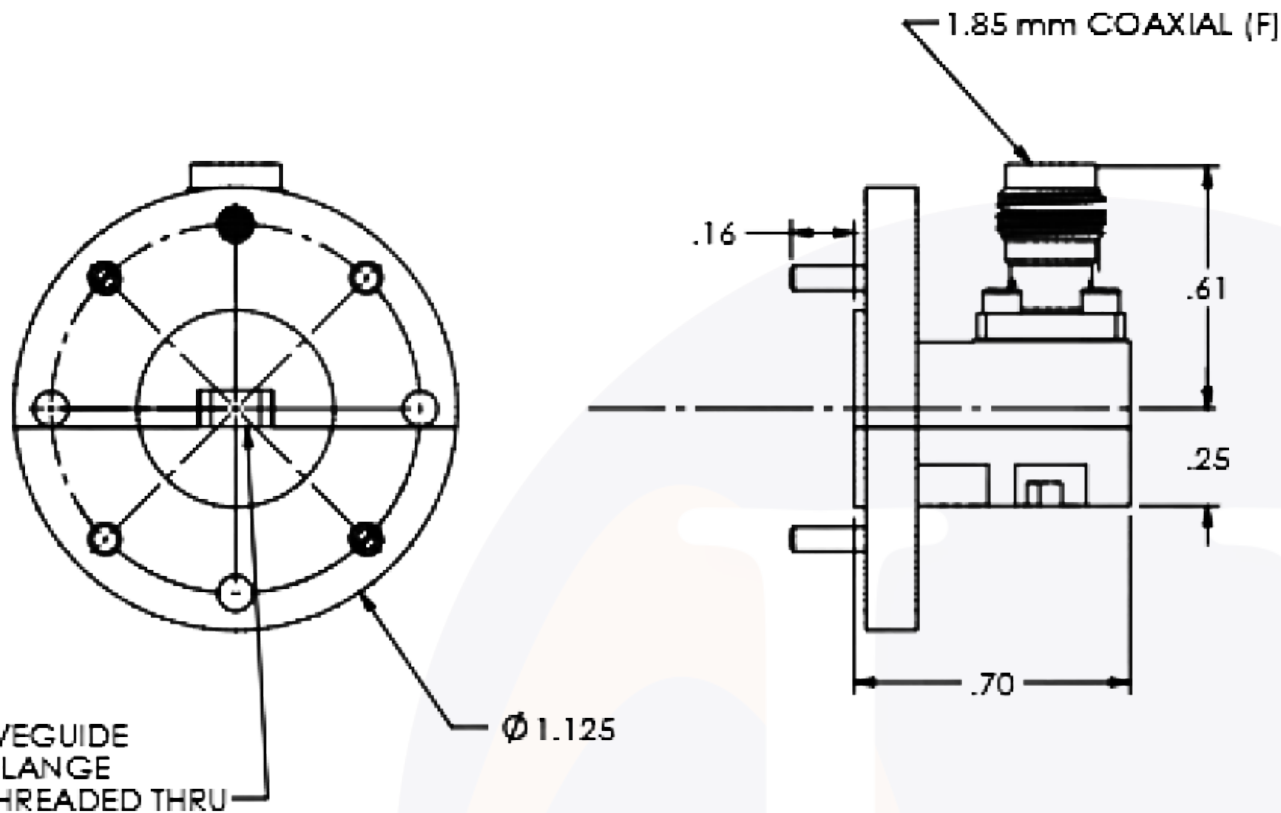
### Electrical

• Impedance	50 Ohms
• Frequency Range	40 to 60 GHz
• Waveguide	WR-19
• Insertion Loss	0.3 dB
• Return Loss	15 dB Min

### Material

• Waveguide	Gold plated Aluminum Alloy
• Flange	UG-383/U
• 1.85mm Connector	Passivated Stainless Steel
• Connector Center Contact	Gold plated BeCu

U-Band, WR-19 to 1.85mm Female Right Angle Waveguide to Coax Adapter | 40 - 60 GHz | Outline Drawing



WR-19 WAVEGUIDE  
GU-383/U FLANGE  
W/ #4-40 THREADED THRU

LTR	DESCRIPTION	DATE	APPR.	DRAWN BY: NS	REVIEWED BY: JS
-	RELEASE	12/23	TC		APPROVED BY: TC
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5214 Bonsai Street • Moorpark, CA 93021  
(888) 498-3242 • sales@hasco-inc.com  
[www.hasco-inc.com](http://www.hasco-inc.com)

MATERIALS: SEE DATA SHEET	CAGE CODE: 0T8L4	SCALE: N/A	SIZE: A
FINISHES: SEE DATA SHEET	PART NO./DRAWING NO. <b>HWCA-1918F-RA</b>		REV: -