

WAVEGUIDE TO COAX ADAPTERS



FEATURES:

- Waveguide to 2.92, 2.4, 1.85, 1.0 mm coax connectors
- Right-angle

APPLICATIONS:

- Transition waveguide to coax components
- Test equipment
- External coax connectors for waveguide based assemblies or vice versa

DESCRIPTION

Millitech's waveguide to coax adapters, cover up to 110 GHz. Waveguide to coax include 2.92, 2.4, 1.85, and 1.0 mm connectors.

ELECTRICAL SPECIFICATIONS

MODEL NAME	FREQUENCY RANGE (GHz)	BAND	WAVEGUIDE	COAX CONNECTOR	INSERTION LOSS (DB)	RETURN LOSS (DB)	OUTLINE DRAWING
WCA-42-K	18.0 – 26.5	K	WR-42	2.92 mm	0.20	19	Figure 1 ¹
WCA-34-K	22.3 – 33.0	-	WR-34	2.92 mm	0.30	21	Figure 1 ¹
WCA-28-K	26.5 – 40.0	Ka	WR-28	2.92 mm	0.25	19	Figure 1 ¹
WCA-28-Q	26.5 – 40.0	Ka	WR-28	2.40 mm	0.25	20	Figure 1 ¹
WCA-22-Q	33.0 – 50.0	Q	WR-22	2.40 mm	0.30	18	Figure 2
WCA-19-V	40.0 – 60.0	U	WR-19	1.85 mm	0.35	18	Figure 2
WCA-15-V	50.0 - 72.0	V	WR-15	1.85 mm	0.40	16	Figure 2
WCA-12-1	60.0 - 90.0	E	WR-12	1.00 mm	0.60	15	Figure 2
WCA-10-1	75.0 -110.0	W	WR-10	1.00 mm	0.80	14	Figure 2

¹ - WR-42, WR-34, and WR-28 have square waveguide flanges. All else are round.

OUTLINE DRAWINGS

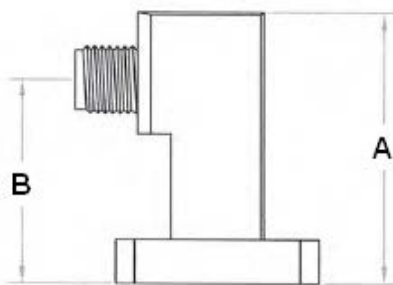


Figure 1 (Square Flange)

MODEL NAME	DIMENSION A	DIMENSION B	WAVEGUIDE FLANGE
WCA-42-K	1.250 in.	0.963 in.	WR-42 UG595/U
WCA-34-K	0.85 in.	0.60 in.	WR-34 UG595/U
WCA-28-K	1.250 in.	0.998 in.	WR-28 UG599/U
WCA-28-Q	1.00 in.	0.75 in.	WR-28 UG599/U

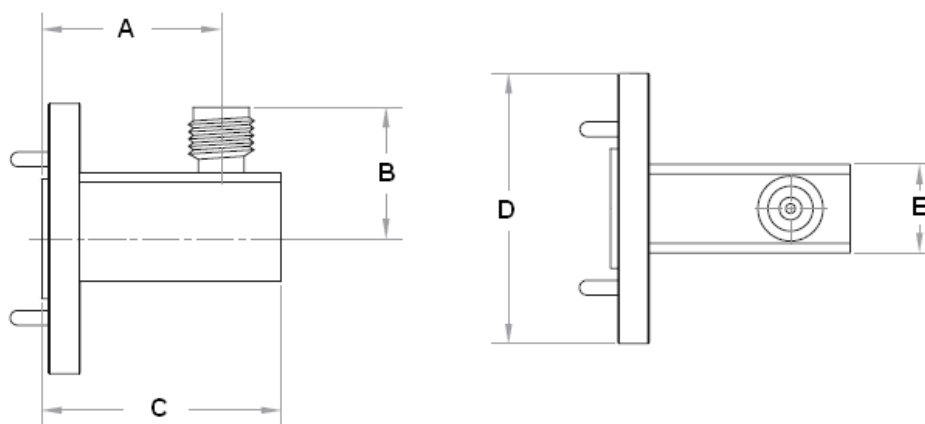


Figure 2 (Round Flange)

MODEL NAME	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	DIMENSION E	WAVEGUIDE FLANGE
WCA-22-Q	0.75 in.	0.55 in.	1.00 in.	1.13 in.	0.37 in.	WR-22 UG383/U
WCA-19-V	0.75 in..	0.55 in..	1.00 in.	1.13 in.	0.37 in.	WR-19 UG383/U
WCA-15-V	0.80 in.	0.53 in.	1.05 in.	0.75 in.	0.34 in.	WR-15 UG385/U
WCA-12-1	0.76 in.	n/a	1.00 in.	n/a	0.34 in.	WR-12 UG387/U
WCA-10-1	0.76 in.	n/a	1.00 in.	n/a	0.34 in.	WR-10 UG387/U

How To ORDER

Specify Model Number WCA-XX-ABCØØ
XX = Waveguide band WR - Number
A = Coax connector K – 2.92 mm connector Q – 2.4 mm connector V – 1.85 mm connector 1 – 1.00 mm connector
B – Flange type S – Square flange (WR-42, WR-34, and WR-28 only) R – Round
C – Coax connector type F – Female (standard) M – Male