

Waveguide Taper and Mode Transitions

Description:

SWT series waveguide transitions are offered in seven waveguide bands to cover the frequency range from 18 to 110 GHz. There are two type transitions, namely, rectangular waveguide taper transitions and rectangular to circular waveguide mode transitions. While catalog models only listed the rectangular taper transitions between adjacent waveguide sizes, the transition models between all waveguide sizes are available upon request. Similarly, the catalog models for the rectangular to circular waveguide mode transitions only listed the standard rectangular waveguide to the correspondence mid-band circular waveguide transitions. The taper implemented in the standard models is “linear” type. All transitions are manufactured by using either EDM machining or electro-forming techniques to ensure high accuracy and quality surface finishing. Typically, these transitions induce fraction of dB insertion loss and their VSWR in the range of 1.05:1 or better.



Features:

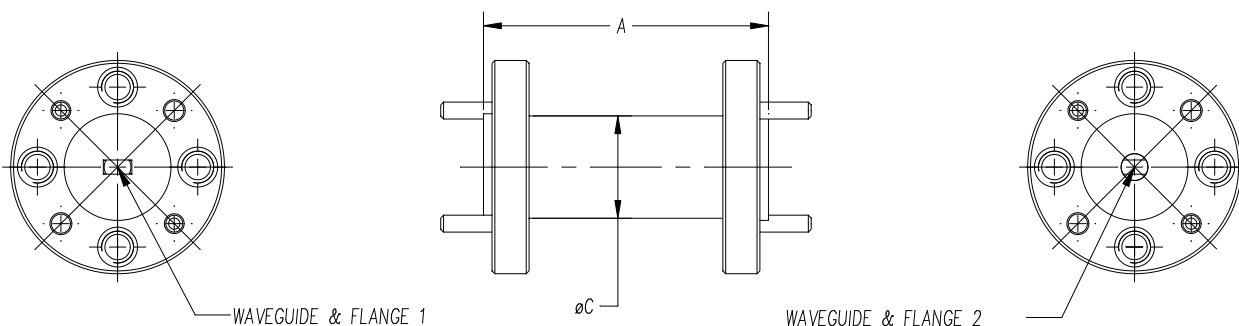
- Rugged waveguide configuration
- Low insertion loss
- Instrumentation grade

Applications:

- Test labs
- Test instrumentations
- Sub-assemblies

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

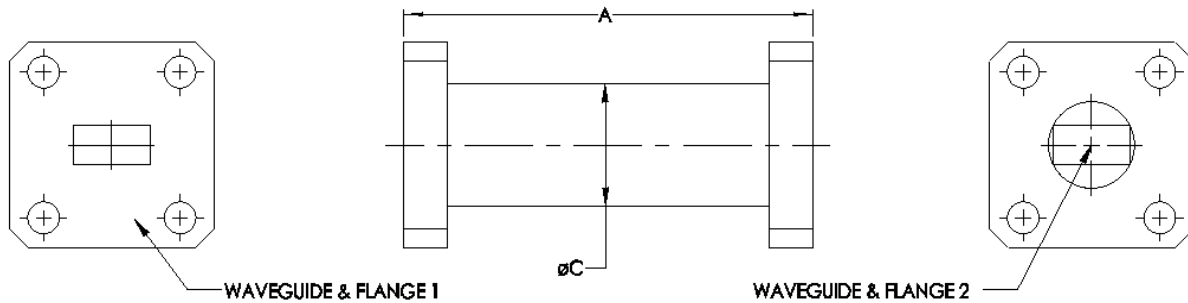
Waveguide Mode Transition: (Round Flange)



Model Number	Waveguide 1	Flange 1	Waveguide 2	Flange 2	A	C
SWT-06067-SB	WR-06	UG-387/U-M	Ø 0.067	UG-387/U-M	1	0.36
SWT-08080-SB	WR-08	UG-387/U-M	Ø 0.080	UG-387/U-M	1	0.36
SWT-10094-SB	WR-10	UG-387/U-M	Ø 0.094	UG-387/U-M	1	0.36

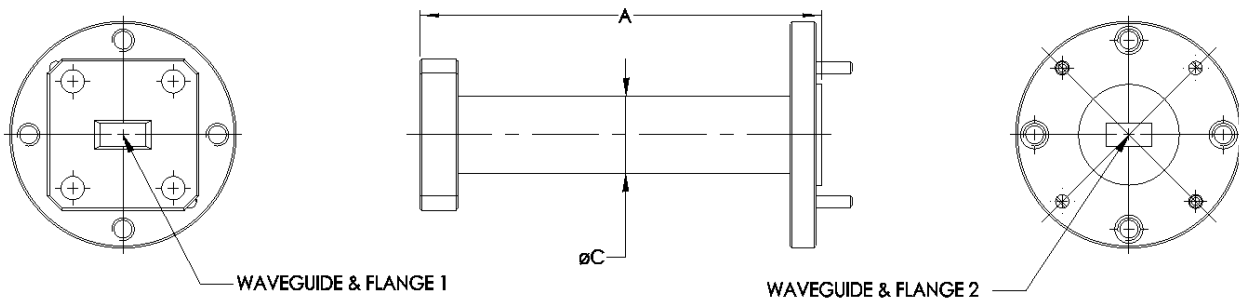
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Waveguide Mode Transition: (Square Flange)



Model Number	Waveguide 1	Flange 1	Waveguide 2	Flange 2	A	C
SWT-28315-SB	WR-28	UG-599/U	Ø 0.315	UG-599/U	1.5	0.4

Waveguide Taper Transition:



*The above drawing is for representation only, actual part may look different.

Model Number	Waveguide 1	Flange 1	Waveguide 2	Flange 2	A	C
SWT-1210-SB	WR-12	UG-387/U	WR-10	UG-387/U-M	1	0.36
SWT-1915-SB	WR-19	UG-383/U	WR-15	UG-385/U	1.5	0.36

Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.