

# Waveguide Parts

[Product Portfolio]



- Bends (E-Plane and H-Plane), straight parts, double bends (S-shaped and U-shaped parts), available from 4 to 13 GHz (from WR187 to WR75);
- Ports: UER and/or PDR-compatible flanges, depending on code;
- Insertion loss  $\leq 0.2$  dB,  $\leq 0.15$  dB or  $\leq 0.1$  dB, depending on code;
- Return loss  $\geq 25$  dB,  $\geq 26$  dB,  $\geq 27$  dB or  $\geq 32$  dB, depending on code;
- Very light components because aluminium is the material of choice.



# Waveguide Parts – R48 Wg – 4 GHz

[Product Portfolio]

Frequency Range	Code <sup>1</sup>	Description	RL (dB)	IL (dB)	Ports
4 GHz (3.6-4.2 GHz)	AWW6882-248.9	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6882-560.05	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6882-871.2	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6882-1182.35	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-93	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-117	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-210	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-327	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWF6883	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER48 – UER48
	AWF6881	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER48 – UER48
	AWF6872	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER48 – UER48
	AWW6875	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.



# Waveguide Parts – R48 Wg – 4 & 5 GHz

[Product Portfolio]

Frequency Range	Code <sup>1</sup>	Description	RL (dB)	IL (dB)	Ports
4 & 5 GHz (3.6-5.0 GHz)	AWF6736	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER48 – UER48
	AWW6724-40	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-80	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-106.5	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-186.5	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-213	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-311.15	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6724-319.5	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.



# Waveguide Parts – R48 Wg – 5 GHz

[Product Portfolio]

Frequency Range	Code <sup>1</sup>	Description	RL (dB)	IL (dB)	Ports
5 GHz (4.4-5.0 GHz)	AWW6721-251.4	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-352.9	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-479.5	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-562.6	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-664	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-790.7	W/G Straight	≥ 32	≤ 0.15	UER48 – PDR48
	AWW6721-873.7	W/G Straight	≥ 32	≤ 0.15	UER48 – PDR48
	AWW6721-975.2	W/G Straight	≥ 32	≤ 0.15	UER48 – PDR48
	AWW6721-1101.8	W/G Straight	≥ 32	≤ 0.15	UER48 – PDR48
	AWW6721-1184.9	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWW6721-1286.3	W/G Straight	≥ 32	≤ 0.2	UER48 – PDR48
	AWW6721-1413	W/G Straight	≥ 32	≤ 0.2	UER48 – PDR48
	AWW6721-1597.5	W/G Straight	≥ 32	≤ 0.2	UER48 – PDR48
	AWF6735	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER48 – UER48

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.

# Waveguide Parts – R48 Wg – 5 GHz cont.

[Product Portfolio]

Frequency Range	Code <sup>1</sup>	Description	RL (dB)	IL (dB)	Ports
5 GHz (4.4-5.0 GHz)	AWF6737	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER48 – UER48
	AWF6737-2	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER48 – UER48
	AWW6738	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW7130-196.3	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW7130-176.2	W/G Straight	≥ 32	≤ 0.1	UER48 – UER48
	AWW6729-205.9	W/G Straight	≥ 32	≤ 0.1	UER48 – PDR48
	AWF7132-332.5	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.1	UER48 – PDR48
	AWF7132-517.1	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.1	UER48 – PDR48
	AWF7132-643.6	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.15	UER48 – PDR48
	AWF7132-828.2	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.15	UER48 – PDR48
	AWF7132-954.8	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.15	UER48 – PDR48
	AWF7132-1139.4	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.2	UER48 – PDR48
	AWF7132-1266	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.2	UER48 – PDR48
	AWF7132-1450.5	2 Bends – S-shaped – 90 H-Plane	≥ 26	≤ 0.2	UER48 – PDR48

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.



# Waveguide Parts – R70 Wg – 6 GHz

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
6 GHz (5.9-7.1 GHz)	AWW6717-251.4	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-352.9	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-479.5	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-562.6	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-664	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-790.7	W/G Straight	≥ 32	≤ 0.15	UER70 – PDR70
	AWW6717-873.7	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-975.2	W/G Straight	≥ 32	≤ 0.15	UER70 – PDR70
	AWW6717-1101.8	W/G Straight	≥ 32	≤ 0.15	UER70 – PDR70
	AWW6717-1184.9	W/G Straight	≥ 32	≤ 0.1	UER70 – PDR70
	AWW6717-1286.3	W/G Straight	≥ 32	≤ 0.2	UER70 – PDR70
	AWW6717-1413	W/G Straight	≥ 32	≤ 0.2	UER70 – PDR70
	AWW6717-1597.5	W/G Straight	≥ 32	≤ 0.2	UER70 – PDR70

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.

# Waveguide Parts – R70 Wg – 6 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
6 GHz (5.9-7.1 GHz)	AWF6727	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER70 – UER70
	AWF6728	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER70 – UER70
	AWF7136	2 Bends – S-shaped – 90H-Plane	≥ 25	≤ 0.15	UER70 – UER70
	AWF6729	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER70 – UER70
	AWW6730	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-80	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-106.5	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-186.5	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-213	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-311.15	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW6718-319.5	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW7141-176.2	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70
	AWW7141-196.3	W/G Straight	≥ 32	≤ 0.1	UER70 – UER70

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.

# Waveguide Parts – R70 Wg – 6 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
6 GHz (5.9-7.1 GHz)	AWW7139-211.9	W/G Straight	$\geq 32$	$\leq 0.1$	UER70 – PDR70
	AWF7140-338.5	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.1$	UER70 – PDR70
	AWF7140-523.1	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.15$	UER70 – PDR70
	AWF7140-649.6	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.15$	UER70 – PDR70
	AWF7140-834.2	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.15$	UER70 – PDR70
	AWF7140-960.8	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.15$	UER70 – PDR70
	AWF7140-1145.4	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.2$	UER70 – PDR70
	AWF7140-1272	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.2$	UER70 – PDR70
	AWF7140-1456.5	2 Bends – S-shaped – 90H-Plane	$\geq 26$	$\leq 0.2$	UER70 – PDR70

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.





# Waveguide Parts – R84 Wg – 7 & 8 GHz

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
7 & 8 GHz (7.1-8.5 GHz)	AWW6722-251.4	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-352.9	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-479.5	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-562.6	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-664	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-790.7	W/G Straight	≥ 32	≤ 0.15	UER84 – PDR84
	AWW6722-873.7	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-975.2	W/G Straight	≥ 32	≤ 0.15	UER84 – PDR84
	AWW6722-1101.8	W/G Straight	≥ 32	≤ 0.15	UER84 – PDR84
	AWW6722-1184.9	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWW6722-1286.3	W/G Straight	≥ 32	≤ 0.2	UER84 – PDR84
	AWW6722-1413	W/G Straight	≥ 32	≤ 0.2	UER84 – PDR84
	AWW6722-1597.5	W/G Straight	≥ 32	≤ 0.2	UER84 – PDR84

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.

# Waveguide Parts – R84 Wg – 7 & 8 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
7 & 8 GHz (7.1-8.5 GHz)	AWF6731	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER84 – UER84
	AWF6732	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER84 – UER84
	AWF7254	2 Bends – S-shaped – 90H-Plane	≥ 25	≤ 0.15	UER84 – UER84
	AWF6733	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER84 – UER84
	AWW6734	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-80	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-106.5	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-186.5	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-213	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-311.15	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW6725-319.5	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW7150-176.2	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84
	AWW7150-196.3	W/G Straight	≥ 32	≤ 0.1	UER84 – UER84

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.



# Waveguide Parts – R84 Wg – 7 & 8 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
7 & 8 GHz (7.1-8.5 GHz)	AWW7152-215.9	W/G Straight	≥ 32	≤ 0.1	UER84 – PDR84
	AWF7153-342.5	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.1	UER84 – PDR84
	AWF7153-527.1	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER84 – PDR84
	AWF7153-653.6	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER84 – PDR84
	AWF7153-838.2	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER84 – PDR84
	AWF7153-964.8	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER84 – PDR84
	AWF7153-1149.4	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER84 – PDR84
	AWF7153-1276	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER84 – PDR84
	AWF7153-1460.5	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER84 – PDR84

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.



# Waveguide Parts – R100 Wg – 10 & 11 GHz

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
10 & 11 GHz (10.0-11.7 GHz)	AWW6723-251.4	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-352.9	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-479.5	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-562.6	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-664	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-790.7	W/G Straight	≥ 32	≤ 0.15	UER100 – PDR100
	AWW6723-873.7	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-975.2	W/G Straight	≥ 32	≤ 0.15	UER100 – PDR100
	AWW6723-1101.8	W/G Straight	≥ 32	≤ 0.15	UER100 – PDR100
	AWW6723-1184.9	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWW6723-1286.3	W/G Straight	≥ 32	≤ 0.2	UER100 – PDR100
	AWW6723-1413	W/G Straight	≥ 32	≤ 0.2	UER100 – PDR100
	AWW6723-1597.5	W/G Straight	≥ 32	≤ 0.2	UER100 – PDR100

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.



# Waveguide Parts – R100 Wg – 10 & 11 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
10 & 11 GHz (10.0-11.7 GHz)	AWF6739	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER100 – UER100
	AWF6740	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER100 – UER100
	AWF6741	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER100 – UER100
	AWW6742	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-80	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-106.5	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-186.5	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-213	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-311.15	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW6726-319.5	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW7154-176.2	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100
	AWW7154-196.3	W/G Straight	≥ 32	≤ 0.1	UER100 – UER100

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.



# Waveguide Parts – R100 Wg – 10 & 11 GHz cont.

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
10 & 11 GHz (10.0-11.7 GHz)	AWW7155-217.9	W/G Straight	≥ 32	≤ 0.1	UER100 – PDR100
	AWF7156-342.5	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.1	UER100 – PDR100
	AWF7156-527.1	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER100 – PDR100
	AWF7156-653.6	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER100 – PDR100
	AWF7156-838.2	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER100 – PDR100
	AWF7156-964.8	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.15	UER100 – PDR100
	AWF7156-1149.4	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER100 – PDR100
	AWF7156-1276	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER100 – PDR100
	AWF7156-1460.5	2 Bends – S-shaped – 90H-Plane	≥ 26	≤ 0.2	UER100 – PDR100

<sup>1</sup> For straight and S-shaped waveguides, the number after “-” is the total length in mm.



# Waveguide Parts – R120 Wg – 13 GHz

[Product Portfolio]

Frequency Range	Code	Description	RL (dB)	IL (dB)	Ports
13 GHz (12.75-13.25 GHz)	AWW7095-251.4	W/G Straight	≥ 32	≤ 0.1	UER120 – PBR120
	AWW7095-562.6	W/G Straight	≥ 32	≤ 0.1	UER120 – PBR120
	AWW7095-873.7	W/G Straight	≥ 32	≤ 0.1	UER120 – PBR120
	AWW7095-1184.9	W/G Straight	≥ 32	≤ 0.1	UER120 – PBR120
	AWW7094-106.5	W/G Straight	≥ 32	≤ 0.1	UER120 – PDR120
	AWW7094-213	W/G Straight	≥ 32	≤ 0.1	UER120 – PDR120
	AWW7094-311.15	W/G Straight	≥ 32	≤ 0.1	UER120 – PDR120
	AWW7094-319.5	W/G Straight	≥ 32	≤ 0.1	UER120 – PDR120
	AWF7091	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER120 – PDR120
	AWF7087	Bend – 180 E-Plane	≥ 25	≤ 0.15	UER120 – PDR120
	AWF7092	Bend – 90 H-Plane	≥ 27	≤ 0.15	UER120 – PDR120
	AWW7093	W/G Straight	≥ 32	≤ 0.1	UER120 – PDR120

<sup>1</sup> For straight waveguides, the number after “-” is the length in mm.

# Waveguide Terminations

[Product Portfolio]



- Available from 4 to 13 GHz (from WR187 to WR75);
- On all ports: UER-compatible flanges;
- Return Loss  $\geq 23$  dB.





# Waveguide Terminations – cont.

[Product Portfolio]

Frequency	Code	Freq. Range (GHz)	Return Loss (dB)	Port	Dimensions (mm)
4-5 GHz	N-T048	3.6 – 5.0	≥ 23	UER48 Compatible	70.6 x 45.2 x 28.5
L6 GHz	N-T070-6L	5.9 – 6.4	≥ 23	UER70 Compatible	57.9 x 38.9 x 20
U6 GHz	N-T070-6U	6.4 – 7.1	≥ 23	UER70 Compatible	57.9 x 38.9 x 20
7 GHz	N-T084-7	7.1 – 7.9	≥ 23	UER84 Compatible	51.2 x 34.9 x 20
8 GHz	N-T084-8	7.7 – 8.5	≥ 23	UER84 Compatible	51.2 x 34.9 x 20
10-11 GHz	N-T100	10.0 – 11.7	≥ 23	UER100 Compatible	44.9 x 32.2 x 15.5
13 GHz	N-T120	12.75 – 13.25	≥ 23	UER120 Compatible	41.0 x 31.0 x 15.5