

Rectangular Waveguides											
Mi-Wave Band	Waveguide Designator(s) (JAN & WR)	Waveguide Inner Dimensions in Inches	Recommended Operating Range for TE <sub>10</sub> Mode		Cut-off for TE <sub>10</sub> Mode		Theoretical Power CW Breakdown Lowest to Highest Frequency (KW)	Theoretical Attenuation Lowest to Highest Frequency (dB/ft)	Flange Type	Historic Designation	New MIL Part Number
			Frequency (GHz)	Wavelength (mm)	Frequency (GHz)	Wavelength (mm)					
<b>KU</b>	RG-91/U WR-62	0.622 x 0.311	12.4–18.0	24.2–16.6	9.486	31.60	400–600	.064–.030	Cover <sup>1</sup> Choke	UG-419/U UG-541/U	M3922/53-4/005 M3922/59-2/001
<b>K</b>	RG-53/U WR-42	0.420 x 0.170	18.0–26.5	16.6–11.3	14.047	21.34	160–240	.17–.11	Cover <sup>1</sup> Choke Cover	UG-595/U UG-596A/U UG-425/U	M3922/54-4/001 M3922/59-2/003 M3922/67-2/004
<b>A</b>	RG-96/U WR-28	0.280 x 0.140	26.5–40.0	11.3–7.5	21.081	14.22	95–145	0.22–0.15	Cover <sup>1</sup> Choke Cover	UG-599/U UG-600/U UG-381/U	M3922/54-4/003 M3922/59-2/005 M3922/67-2/005
<b>B</b>	RG-97/U WR-22	0.224 X 0.112	33.0–50.0	9.1–6.0	26.342	11.38	62–90	0.31–0.21	Cover <sup>1</sup> Cover Cover	UG-383/U 719 719T	M3922/67-2/006 N/A N/A
<b>U</b>	WR-19	0.188 x 0.094	40.0–60.0	7.5–5.0	31.357	9.56	47–64	0.39–0.27	Cover <sup>12</sup> Cover Cover	UG-385/U-M 710 720T	M3922/67-2/007 N/A N/A
<b>V</b>	RG-98/U WR-15	0.148 x 0.074	50.0–75.0	6.0–4.0	39.863	7.52	29–42	0.78–0.53	Cover <sup>1</sup>	UG-385/U	M3922/67-2/008
<b>E</b>	RG-99/U WR-12	0.122 x 0.061	60.0–90.0	5.0–3.3	48.350	6.20	20–29	0.78–0.53	Cover <sup>1</sup>	UG-387/U	M3922/67-2/009
<b>W</b>	WR-10	0.100 x 0.050	75.0–110	4.0–2.7	59.010	5.08	14–20	1.02–0.71	Cover <sup>12</sup>	UG-387/U-M	M3922/67-2/010
<b>F</b>	RG-138/U WR-8	0.080 x 0.040	90.0–140.0	3.3–2.1	73.764	4.06	8.5–13.5	1.52–0.98	Pin <sup>1</sup> Cover <sup>2</sup>	714 UG-387/U-M	M3922/74-001 N/A
<b>D</b>	RG-136/U WR-7	0.065 x 0.0325	110.0–170.0	2.7–1.8	90.786	3.30	5.8–9.0	2.12–1.35	Pin <sup>1</sup> Cover <sup>2</sup>	716 UG-387/U-M	M3922/74-002 N/A
<b>G</b>	RG-135/U WR-5	0.051 x 0.0255	140.0–220.0	2.1–1.4	115.71	2.59	3.7–6.1	3.05–1.93	Pin <sup>1</sup> Cover <sup>2</sup>	715 UG-387/U-M	M3922/74-003 N/A
<b>H</b>	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5
<b>J</b>	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5	RG-135/U WR-5

1. Standard flange unless otherwise specified.

2. Modified (-M) means waveguide opening has been reduced appropriately. Screw and pin pattern are unchanged.