CernexWave

Mechanical and Electrical Specifications for Rigid Waveguides

E.I.A.	Type MIL-W-85G	153-IEC	British Std.	Material Δ	Dimensions (Inches/mm) Inside	Outside	Wall	Freq.GHz	Cut-Off Freq. (Ghz)	Cover Flange	Choke Flange	CMR Flange	CPR G Flange	CPR F Flange
WR-650	RG-69/U RG-103/U	R 14	WG 6	Bronze Alum (6061)	6.500/ 3.250/	6.660/ 3.410/	.080	1.12-1.70	------	UG-417A/U UG-418A/U	------	------	UG-1362/U UG1343/U	UG-1714/U UG-1720/U
WR-430	RG-104/U RG-105/U	R 22	WG 8	Bronze Alum (6061)	3.250/ 2.150/	4.460/ 2.310/	.080	1.70-2.60	------	UG-435A UG-437A/U	------	------	UG-1344/U UG-1345/U	UG-1716/U UG-1711/U
WR-340	RG-112/U RG-113/U	R 26	WG 9A	Bronze Alum (6061)	3.400/ 1.700/	3.560/ 1.860/	.080	2.20-3.30	------	--------	------	------	UG-1346/U UG-1347/U	UG-1712/U UG-1713/U
WR-284	RG-48/U RG-75/U	R 32	WG 10	Bronze Alum (6061)	2.840/ 1.340/	3.000/ 1.500/	.080	2.60-3.95	------	UG-53/U UG-584/U	UG-54B/U UG-585A/U	UG-1479/U UG-1484/U	UG-1348/U UG-1349/U	UG-1721/U UG-1725/U
WR-229	RG-340/U RG-341/U	R 40	WG 11A	Bronze Alum (6061)	2.290/ 1.145/	2.418/ 1.273/	0.64	3.30-4.90	------	------	------	CMR-229	UG-1350/U UG-1351/U	UG-1726/U UG-1727/U
WR-187	RG-49/U RG-95/U	R 48	WG 12	Bronze Alum (6061)	1.872/ .872/	2.000/ 1.000/	0.64	3.95-5.85	------	UG-149A/U UG-407/U	UG-148C/U UG-406B/U	UG-1475/U UG-1480/U	UG-1352/U UG-1353/U	UG-1728/U UG-1729/U
WR-159	RG-343/U RG-344/U	R 58	WG 13	Bronze Alum (6061)	1.590/ .795/	1.718/ .923/	0.64	4.90-7.05	------	------	------	CMR-159	UG-1354/U UG-1355/U	UG-1730/U UG-1731/U
WR-137	RG-50/U RG-106/U	R 70	WG 14	Bronze Alum (6061)	1.372/ .622/	1.500/ .750/	0.64	5.85-8.20	------	UG-344/U UG-441/U	UG-343B/U UG-440B/U	UG-1476/U UG-481B/U	UG-1356/U UG-1357/U	UG-1732/U UG-1733/U
WR-112	RG-51/U RG-68/U	R 84	WG 15	Bronze Alum (6061)	1.122/ .497/	1.250/ .625/	0.64	7.05-10.00	------	UG-51/U UG-138/U	UG-52B/U UG-137B/U	UG-1477/U UG-1482/U	UG-1358/U UG-1359/U	UG-1734/U UG-1735/U
WR-102	RG-320/U	------	------	Bronze Alum (6061)	1.020/ .510/	1.148/ .638/	0.64	7.00-11.00	------	UG-1493/U	UG-1494/U	-------	------	------
WR-90	RG-52/U RG-67/U	R 100	WG 16	Bronze Alum (6061)	.900/ .400/	1.000/ .500/	0.50	8.20-12.40	6.56	UG-39/U UG-135/U	UG-40B/U UG-136B/U	UG-1478/U UG-1483/U	UG-1360/U UG-1361/U	UG-1736U UG-1737/U
WR-75	RG-346/U RG-347/U	R 120	WG 17	Bronze Alum (6061)	.750/ .375/	.850/ .475/	.050	10.00-15.00	7.87	WR75 COVER	WR75 CHOKE	CONSULT WL ENG.	CONSULT WL ENG.	CONSULT WL ENG.
WR-62	RG-91/U RG-349/U	R 140	WG 18	Bronze Alum (6061)	.622/ .311/	.702/ .391/	.040	12.40-18.00	9.48	UG-419/U UG-1665/U	UG-541A/U UG-1666/U	CONSULT WL ENG.	CONSULT WL ENG.	CONSULT WL ENG.
WR-51	RG-353/U RG-351/U	R 180	WG 19	Bronze Alum (6061)	.510/ .255/	.590/ .335/	.040	15.00-22.00	11.57	WR51 COVER	WR51 CHOKE	------	------	------
WR-42	RG-53/U RG-121/U	R 220	WG 20	Bronze Alum (6061)	.420/10.7 .170/4.3	.500/ .250/	.040	18.00-26.50	14.05	UG-595/U UG-597/U	UG-596A/U UG-598A/U	------	------	------
WR-34	RG-354/U RG-355/U	R 260	WG 21	Bronze Alum (6061)	.340/8.64 .170/4.32	.420/ .250/	.040	22.00-33.00	17.33	UG-1530/U	------	------	------	------

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E.I.A.	Type MIL-W-85G	153-IEC	British Std.	Material Δ	Dimensions (Inches/mm)			Freq.GHz	Cut-Off Freq. (Ghz)	Cover Flange	Choke Flange	CMR Flange	CPR G Flange	CPR F Flange
					Inside	Outside	Wall							
WR-28	RG-271/U	R 320	WG 22	Bronze	.280/7.11 .140/3.56	.360/ .220/	.040	26.50-40.00	21.08	UG-599/U	UG-600A/U	------	------	------
WR-22	RG-272/U	R 400	WG 23	Bronze	.224/5.7 .112/2.8	.304/ .192/	.040	33.00-50.00	26.34	UG-383/U	------	------	------	------
WR-19	------	R500	WG 24	Bronze	.188/4.8 .094/2.4	------	------	40.00-60.00	31.36	UG-383/U-M	------	------	------	------
WR-15	------	R620	WG 25	Bronze	.148/3.8 .074/1.9	------	------	50.00-75.00	39.86	UG385/U	------	------	------	------
WR-12	------	R740	WG 26	Bronze	.122/3.1 .061/1.5	------	------	60.00-90.00	48.35	UG-387/U	------	------	------	------
WR-10	------	R900	WG 27	Bronze	.100/2.54 .050/1.27	------	------	75.00-110.0	59.01	UG-387/U-M	------	------	------	------
WR-8	------	R1200	WG 28	Bronze	.080/2.32 .040/1.02	------	------	90.00-140.0	73.84	UG-387/U-M	------	------	------	------
WR-6	------	R1400	WG 29	Bronze	.065/1.7 .0325/.83	------	------	110.0-170.0	90.84	UG-387/U-M	------	------	------	------
WR-5	------	------	------	Bronze	.051/1.30 .0255/.65	------	------	140.0-220.0	------	UG-387/U-M	------	------	------	------
WR-4	------	------	------	Bronze	.043/1.1 .0215/.55	------	------	170.0-260.0	------	UG-387/U-M	------	------	------	------
WR-3	------	------	------	Bronze	.034/.86 .017/.43	------	------	220.0-325.0	------	UG-387/U-M	------	------	------	------
WR-2.8	------	------	------	Bronze	.028/.71 .014/.355	------	------	325.0-400.0	------	UG-387/U-M	------	------	------	------
WR-2.2	------	------	------	Bronze	.022/.56 .011/.28	------	------	400.0-500.0	------	UG-387/U-M	------	------	------	------

Δ STANDARD SUPPLIED MATERIAL – OTHER MATERIALS AVAILABLE, i.e. COPPER, ALUM (1100).

E.I.A.	Type MIL-W-23351/45G	Material	Dimensions (Inches)			Freq.GHz	Cover (Flat)	Cover (Groove)
			Inside	Outside	Wall			
WRD650	WRD650D28A	Alum (6061)	.720 .321	0820 .421	0.50	6.50 – 18.00	WRD650 Flat with (4) .145 Dia. Thru Holes	WRD650 Grooved With (4) .145 Dia. Thru Holes
WRD750	WRD750D24A	Alum (6061)	.691 .321	.691 .321	.050	7.50 – 18.00	WRD750 Flat With (4) .145 Dia. Thru Holes M39000/3-076	WRD650 Grooved With (4) .145 Dia. Thru Holes M39000/3-82