

Microwave Waveguide Specification Chart

EIA designation (Standard US) and /RG number	RCSC Designation (Standard UK)	Band	Inside Dimensions inches	Outside Dimensions inches (typ)	Standard Freq Range, GHz	Cutoff Freq GHz, Source #1, (Source #2)	Loss per foot Low end - High end of waveguide band	Power Handling Low to High freq MW=Megawatts, kW=Kilowatts
WR650 /RG69	WG 6	-	6.50, 3.25	6.66, 3.41	1.12 to 1.70	? (0.91)	-	-
WR430 /RG104	WG 8	-	4.30, 2.15	4.46, 2.31	1.70 to 2.60	? (1.37)	-	-
WR340	WG 9A	-	3.40, 1.70	3.56, 1.86	2.10 to 3.00	? (1.6)	-	-
WR284 /RG48	WG 10	-	2.84, 1.34	3.00, 1.50	2.60 to 3.95	? (2.08)	-	2.2 - 3.2 MW
WR229	WG11A	-	2.29, 1.145	2.418, 1.273	3.30 to 4.90	? (2.58)	-	1.6 - 2.2 MW
WR187 /RG49	WG12	-	1.872, 0.872	2.000, 1.000	3.95 to 5.85	? (3.16)	-	1.4 - 2.0 MW
WR159	WG13	-	1.590, 0.795	1.718, 0.923	4.90 to 7.05	? (3.71)	-	0.79 - 1.0 MW
WR137 /RG50	WG14	-	1.372, 0.622	1.500, 0.750	5.85 to 8.20	? (4.31)	-	560 - 710 kW
WR112 /RG51	WG15		1.122, 0.497	1.250, 0.625	7.05 to 10.00	? (5.27)	-	350 - 460 kW
WR90 /RG52	WG16	X	0.900, 0.400	1.000, 0.500	8.20 to 12.4	? (6.56)	-	200 - 290 kW
WR75	WG17	-	0.750, 0.375	0.850, 0.475	10.0 to 15.0	? (7.87)	-	170 - 230 kW
WR62 /RG91	WG18	Ku	0.622, 0.311	0.702, 0.391	12.4 to 18.0	9.50 (9.52)	-	120 - 160 kW
WR51	WG19	-	0.510, 0.255	0.590, 0.335	15.0 to 22.0	? (11.57)	-	80 - 107 kW
WR42 /RG53	WG20	K	0.420, 0.170	0.500, 0.250	18.0 to 26.5	14.08 (14.05)	0.26 - 0.20 dB	43 - 58 kW
WR28 /RG96	WG22	Ka	0.280, 0.140	0.360, 0.220	26.5 to 40.0	21.08 (21.08)	0.44 - 0.30 dB	22 - 31 kW
WR22 /RG97	WG23	Q	0.224, 0.112	0.304, 0.192	33.0 to 50.0	26.34 (26.82)	0.62 - 0.42 dB	14 - 20 kW
WR19	WG24	U	0.188, 0.094	0.268, 0.174	40.0 to 60.0	31.36 (31.06)	0.77 - 0.54 dB	? kW
WR15 /RG98	WG 25	V	0.148, 0.074	0.228, 0.154	50.0 to 75.0	39.87 (39.34)	0.10 - 0.80 dB	? kW
WR12 /RG99	WG 26	E	0.122, 0.061	0.202, 0.141	60.0 to 90.0	48.35 (49.18)	1.8 - 1.0 dB	? kW
WR10	WG 27	W	0.100, 0.050	0.180, 0.130	75.0 to 110.0	59.01 (59.01)	2.0 - 1.4 dB	? kW
WR8	WG 28	F	0.080, 0.040	0.160, 0.120	90.0 to 140.0	73.77 (73.77)	3.0 - 2.0 dB	? kW
WR6	WG ?	D	0.065, 0.0325	0.145, 0.112	110 to 170	90.79 (84.31)	3.8 - 3.0 dB	? kW
WR5	WG ?	G	0.0510, 0.0255	0.131, 0.105	140 to 220	115.7 (118.03)	6.1 - 3.8 dB	? kW
WR3	WG ?	Y	0.034, 0.0170	0.114, 0.097	220 to 325	196.71 (196.71)	10.0 - 0.7 dB	? kW