



1425 Highland Avenue (Rt. 10) P.O. Box 728
 Cheshire, CT 06410 - 1216 U.S.A.
 Phone # 203 - 272 - 3234
 Fax # 203 - 271 - 0352
 E - mail: Sales@microtech-inc.com
 Visit our Web site: <http://www.microtech-inc.com>

RECTANGULAR FLEXIBLE WAVEGUIDE SPECIFICATIONS

TYPICAL ELECTRICAL SPECIFICATIONS							
EIA WR SIZE	FREQUENCY RANGE (GHz)	MCKS Flexible Non-Twistable		MTPS Flexible Twistable		MSBS Seamless (Brass)	
		*VSWR	**INSERTION LOSS	*VSWR	**INSERTION LOSS	*VSWR	**INSERTION LOSS
22	33.00 - 50.00	1.35	1.00	1.35	1.20	SEE "MILLIMETER FLEX" DATA SHEET	
28	26.50 - 40.00	1.30	0.50	1.30	0.60		
34	22.00 - 33.00	1.20	0.35	1.30	0.50	1.30	0.35
42	18.00 - 26.50	1.20	0.32	1.20	0.35	1.20	0.30
51	15.00 - 22.00	1.20	0.32	1.20	0.35	1.20	0.30
62	12.40 - 18.00	1.12	0.15	1.12	0.20	1.12	0.15
75	10.00 - 15.00	1.12	0.13	1.12	0.15	1.10	0.12
90	8.20 - 12.40	1.10	0.09	1.10	0.10	1.10	0.09
102	7.00 - 11.00	1.10	0.08	1.10	0.09	1.10	0.06
112	7.05 - 10.00	1.09	0.06	1.10	0.08	1.10	0.06
137	5.85 - 8.20	1.09	0.05	1.09	0.07	1.10	0.05
159	4.90 - 7.05	1.08	0.04	1.09	0.06	1.10	0.04
187	3.95 - 5.85	1.08	0.03	1.09	0.05	1.09	0.03
229	3.30 - 4.90	1.07	0.02	1.07	0.02	1.08	0.02
284	2.60 - 3.95	1.07	0.02	1.07	0.02	1.08	0.02
340	2.20 - 3.30	1.07	0.01	1.07	0.01	N/A	N/A
430	1.70 - 2.60	1.07	0.01	1.07	0.01	N/A	N/A
650	1.12 - 1.70	1.06	0.01	NA	NA	N/A	N/A
* VSWR is per 2 Foot Section ** INSERTION LOSS is in dB per Foot with Silver Plated waveguide							
TYPICAL MECHANICAL SPECIFICATIONS					POWER HANDLING CAPABILITY		
EIA WR SIZE	Bend Radii to Centerline				CW Power In Watts		PEAK Power In Kilowatts
	With Jacket		Without Jacket		MCK/MSB	MTP	
	E - Plane	H - Plane	E - Plane	H - Plane			
22	0.75	1.13	0.44	0.94	75	25	12
28	0.75	1.13	0.44	0.94	150	75	20
34	0.75	1.13	0.44	0.94	200	100	30
42	0.88	1.25	0.57	1.00	300	100	39
51	0.88	1.25	0.57	1.00	500	200	70
62	1.00	1.88	0.69	1.25	1,000	400	100
75	1.13	2.25	0.63	1.25	1,500	750	140
90	1.75	2.50	1.25	1.50	3,000	1,000	180
102	2.00	2.88	1.30	1.94	4,000	1,500	300
112	2.25	3.25	1.40	1.82	4,000	1,500	315
137	2.38	3.38	1.50	2.07	5,000	2,000	500
159	4.00	6.00	1.60	2.25	6,000	2,500	1,100
187	4.38	6.50	1.94	3.00	6,500	3,000	1,250
229	6.50	8.00	2.13	3.25	8,000	4,000	1,550
284	7.00	9.50	2.94	5.50	10,000	4,000	2,000
340	10.00	16.00	4.25	6.00	16,000	8,000	3,700
430	12.00	25.00	4.82	6.63	20,000	10,000	4,700
650	20.00	40.00	14.00	28.00	20,000	NA	10,700

Mechanical Specifications are for Non-Twistable Flexible Waveguide.
Tighter Radii can be accommodated with Seamless Flexible Waveguide.
See other Data Sheets for Double-Ridged and Millimeter Flexible Waveguide.