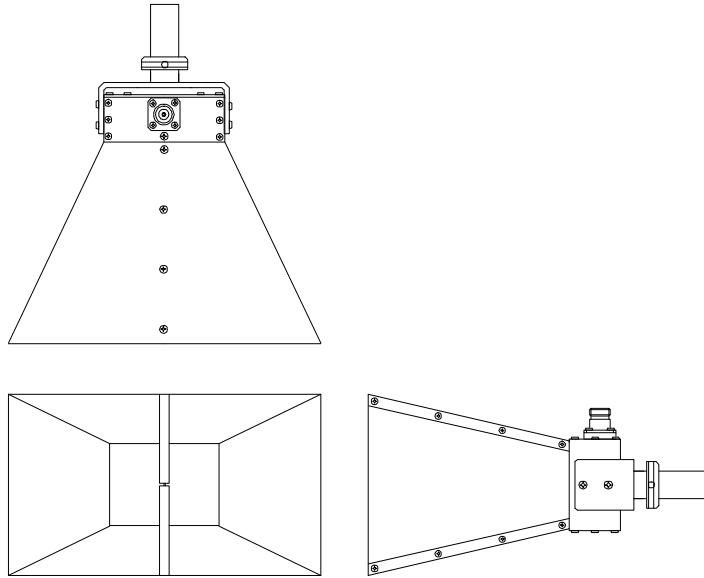


SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet



Technische Daten:

Bauart:
Linear polarisierte Doppelsteg
Breitband Hornantenne in
Aluminiumausführung für
Empfangs- und Sendeanwendungen.
Für hohe Leistungen kann die
Antenne optional mit 7-16 Buchse
ausgestattet werden.

Frequenzbereich, nominell:	200 MHz...2 GHz
Nutzbarer Frequenzbereich:	200 MHz ... 2.3 GHz
Isotropiegewinn:	12 dBi +/-2 dB (0.3-2 GHz)
Antennenfaktor:	11...26 dB/m
Impedanz, nominell:	50 Ω
Stehwellenverhältnis SWR typisch:	2
Stehwellenverhältnis SWR max.:	3.5
Vor- Rückverhältnis:	typ. 25 dB
Polarisationsentkopplung:	typ. > 25 dB
3 dB Öffnungswinkel typ.(E-Ebene):	45°
3 dB Öffnungswinkel typ.(H-Ebene):	45°

Max. Eingangsleistung:	1.5 kW @ 200 MHz
Anschlußart: N-Buchse	0.5 kW @ 2 GHz
Max. Eingangsleistung:	3.5 kW @ 200 MHz
Option: 7-16 Buchse	1.5 kW @ 2 GHz
Halterung (Zentralbefestigung):	3/8", M12
Breite x Länge x Dicke:	950 x 680 x 960 mm
Gewicht:	16 kg
Empfohlenes Zubehör:	AM 9144 Mast

Specifications:

Type:
Linear polarized double ridged
broadband horn antenna for receive
and transmit applications made of
aluminium. An optional 7-16 connector
is available for high power
applications.

Nominal Frequency Range:	200 MHz...2 GHz
Usable Frequency Range:	200 MHz ... 2.3 GHz
Isotropic Gain:	12 dBi +/-2 dB (0.3-2 GHz)
Antenna Factor:	11...26 dB/m
Nominal Impedance:	50 Ω
Standing Wave Ratio SWR typical:	2
Standing Wave Ratio SWR max.:	3.5
Front to Back Ratio:	typ. 25 dB
Cross Polarisation:	typ. > 25 dB
3 dB Beamwidth typ. (E-Plane):	45°
3 dB Beamwidth typ. (H-Plane):	45°

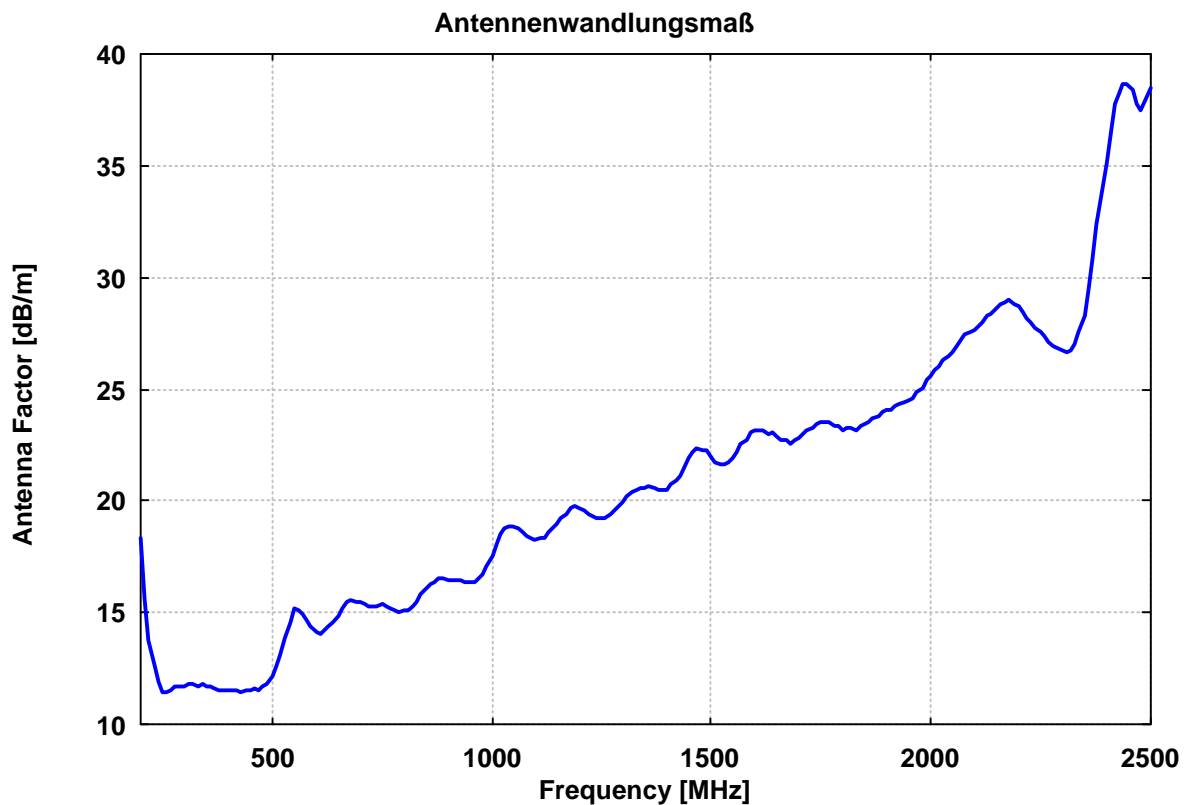
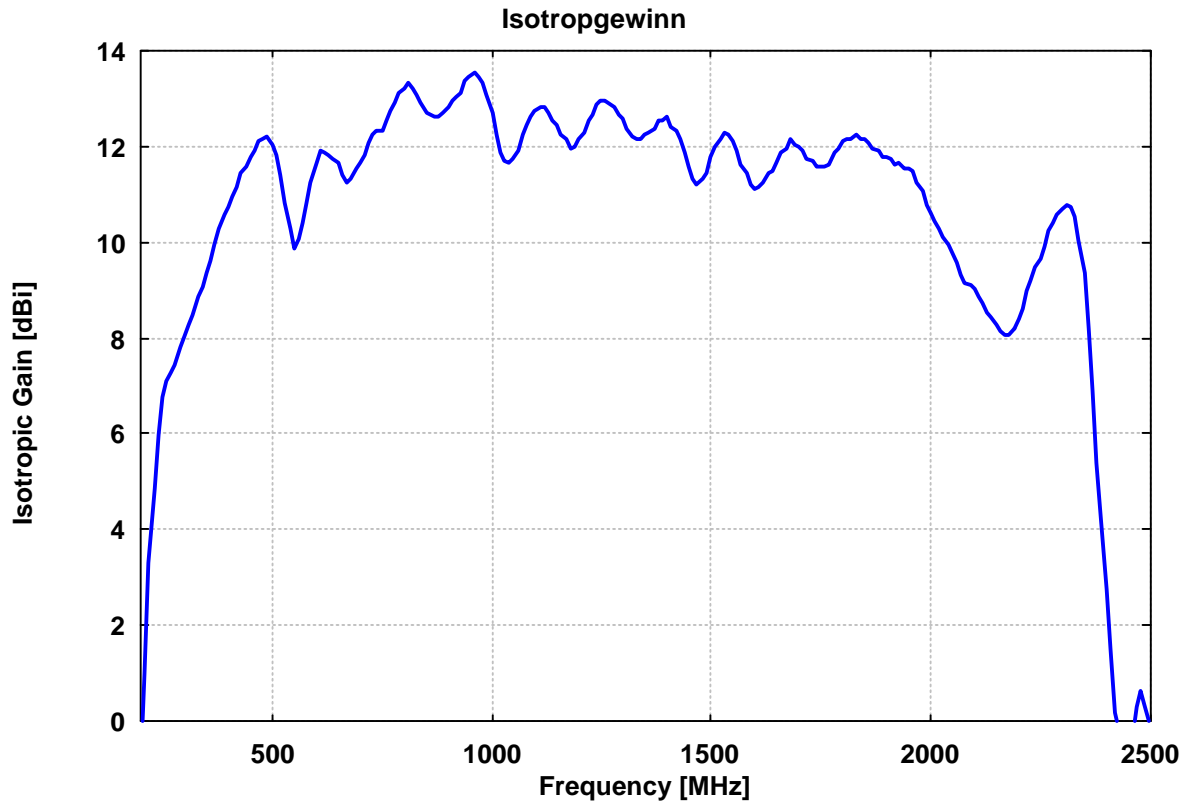
Max. Input Power:	1.5 kW @ 200 MHz
N-Connector female	0.5 kW @ 2 GHz
Max. Input Power:	3.5 kW @ 200 MHz
Option: 7-16 connector female	1.5 kW @ 2 GHz
Center Mount:	3/8", M12
Width x Length x Thickness:	950 x 680 x 960 mm
Weight:	16 kg
Recommended Accessories:	AM 9144 Mast

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An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet



SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
200.00	5.00	1.500	36.60	-2.08	-4.23	18.32
210.00	5.00	1.429	30.86	1.00	-1.15	15.66
220.00	5.00	1.364	26.63	3.32	1.17	13.75
230.00	5.00	1.304	24.00	4.83	2.68	12.63
240.00	5.00	1.250	22.07	5.98	3.82	11.85
250.00	5.00	1.200	20.88	6.75	4.60	11.43
260.00	5.00	1.154	20.50	7.11	4.96	11.41
270.00	5.00	1.111	20.47	7.29	5.14	11.56
280.00	5.00	1.071	20.50	7.43	5.28	11.73
290.00	5.00	1.034	20.05	7.81	5.66	11.66
300.00	5.00	1.000	19.90	8.03	5.88	11.73
310.00	5.00	0.968	19.73	8.26	6.11	11.79
320.00	5.00	0.938	19.54	8.49	6.34	11.83
330.00	5.00	0.909	19.08	8.86	6.71	11.73
340.00	5.00	0.882	18.87	9.09	6.94	11.76
350.00	5.00	0.857	18.57	9.37	7.22	11.73
360.00	5.00	0.833	18.33	9.61	7.46	11.74
370.00	5.00	0.811	17.87	9.96	7.80	11.63
380.00	5.00	0.789	17.48	10.27	8.12	11.55
390.00	5.00	0.769	17.11	10.57	8.41	11.48
400.00	5.00	0.750	16.94	10.76	8.61	11.50
410.00	5.00	0.732	16.77	10.96	8.80	11.52
420.00	5.00	0.714	16.53	11.18	9.03	11.51
430.00	5.00	0.698	16.17	11.46	9.31	11.43
440.00	5.00	0.682	16.12	11.59	9.43	11.50
450.00	5.00	0.667	15.92	11.78	9.63	11.50
460.00	5.00	0.652	15.88	11.90	9.75	11.58
470.00	5.00	0.638	15.62	12.12	9.97	11.54
480.00	5.00	0.625	15.72	12.16	10.01	11.68
490.00	5.00	0.612	15.81	12.21	10.06	11.82
500.00	5.00	0.600	16.33	12.04	9.89	12.16
510.00	5.00	0.588	16.94	11.82	9.67	12.55
520.00	5.00	0.577	17.88	11.43	9.28	13.11
530.00	5.00	0.566	19.22	10.84	8.69	13.86
540.00	5.00	0.556	20.56	10.26	8.10	14.61
550.00	5.00	0.545	21.50	9.86	7.71	15.17
560.00	5.00	0.536	21.21	10.09	7.94	15.10
570.00	5.00	0.526	20.75	10.39	8.24	14.94
580.00	5.00	0.517	20.04	10.82	8.67	14.67
590.00	5.00	0.508	19.33	11.25	9.10	14.38
600.00	5.00	0.500	18.68	11.65	9.50	14.13
610.00	5.00	0.492	18.31	11.91	9.76	14.02
620.00	5.00	0.484	18.55	11.86	9.71	14.21
630.00	5.00	0.476	18.74	11.83	9.68	14.37
640.00	5.00	0.469	19.03	11.76	9.60	14.59
650.00	5.00	0.462	19.34	11.67	9.52	14.81
660.00	5.00	0.455	20.03	11.39	9.24	15.22
MHz	m	m	dB	dBi	dBd	dB/m

SCHWARZBECK MESS - ELEKTRONIK

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Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
670.00	5.00	0.448	20.45	11.25	9.10	15.49
680.00	5.00	0.441	20.45	11.31	9.16	15.56
690.00	5.00	0.435	20.15	11.53	9.38	15.47
700.00	5.00	0.429	20.04	11.64	9.49	15.48
710.00	5.00	0.423	19.76	11.84	9.69	15.40
720.00	5.00	0.417	19.42	12.07	9.92	15.29
730.00	5.00	0.411	19.21	12.24	10.09	15.25
740.00	5.00	0.405	19.11	12.35	10.20	15.26
750.00	5.00	0.400	19.21	12.35	10.20	15.37
760.00	5.00	0.395	18.96	12.54	10.39	15.30
770.00	5.00	0.390	18.68	12.74	10.59	15.21
780.00	5.00	0.385	18.42	12.92	10.77	15.14
790.00	5.00	0.380	18.09	13.14	10.99	15.03
800.00	5.00	0.375	18.09	13.19	11.04	15.09
810.00	5.00	0.370	17.95	13.32	11.17	15.07
820.00	5.00	0.366	18.23	13.23	11.08	15.26
830.00	5.00	0.361	18.61	13.10	10.95	15.50
840.00	5.00	0.357	19.07	12.92	10.77	15.79
850.00	5.00	0.353	19.56	12.73	10.58	16.08
860.00	5.00	0.349	19.75	12.68	10.53	16.23
870.00	5.00	0.345	19.97	12.62	10.47	16.39
880.00	5.00	0.341	20.11	12.60	10.45	16.51
890.00	5.00	0.337	19.98	12.72	10.57	16.49
900.00	5.00	0.333	19.87	12.82	10.67	16.48
910.00	5.00	0.330	19.72	12.94	10.79	16.46
920.00	5.00	0.326	19.64	13.03	10.88	16.47
930.00	5.00	0.323	19.55	13.12	10.97	16.47
940.00	5.00	0.319	19.16	13.36	11.21	16.32
950.00	5.00	0.316	19.08	13.45	11.30	16.33
960.00	5.00	0.313	19.01	13.53	11.38	16.34
970.00	5.00	0.309	19.25	13.45	11.30	16.50
980.00	5.00	0.306	19.59	13.33	11.18	16.72
990.00	5.00	0.303	20.13	13.10	10.95	17.03
1000.00	5.00	0.300	21.02	12.70	10.55	17.52
1010.00	5.00	0.297	22.02	12.24	10.09	18.06
1020.00	5.00	0.294	22.84	11.88	9.73	18.52
1030.00	5.00	0.291	23.29	11.69	9.54	18.78
1040.00	5.00	0.288	23.45	11.65	9.50	18.91
1050.00	5.00	0.286	23.35	11.75	9.60	18.90
1060.00	5.00	0.283	23.09	11.92	9.77	18.81
1070.00	5.00	0.280	22.54	12.23	10.08	18.58
1080.00	5.00	0.278	22.19	12.45	10.30	18.44
1090.00	5.00	0.275	21.89	12.64	10.49	18.33
1100.00	5.00	0.273	21.72	12.76	10.61	18.28
1110.00	5.00	0.270	21.66	12.84	10.69	18.29
1120.00	5.00	0.268	21.73	12.84	10.69	18.37
1130.00	5.00	0.265	22.04	12.72	10.57	18.56
1140.00	5.00	0.263	22.46	12.55	10.40	18.81
1150.00	5.00	0.261	22.71	12.46	10.31	18.97
MHz	m	m	dB	dBi	dBd	dB/m

SCHWARZBECK MESS - ELEKTRONIK

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Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
1160.00	5.00	0.259	23.19	12.26	10.11	19.25
1170.00	5.00	0.256	23.49	12.15	10.00	19.44
1180.00	5.00	0.254	23.93	11.96	9.81	19.69
1190.00	5.00	0.252	23.96	11.98	9.83	19.75
1200.00	5.00	0.250	23.68	12.16	10.01	19.64
1210.00	5.00	0.248	23.50	12.29	10.14	19.59
1220.00	5.00	0.246	23.11	12.52	10.37	19.43
1230.00	5.00	0.244	22.89	12.66	10.51	19.36
1240.00	5.00	0.242	22.55	12.87	10.72	19.22
1250.00	5.00	0.240	22.40	12.98	10.83	19.18
1260.00	5.00	0.238	22.46	12.98	10.83	19.24
1270.00	5.00	0.236	22.71	12.89	10.74	19.40
1280.00	5.00	0.234	22.92	12.82	10.67	19.54
1290.00	5.00	0.233	23.30	12.67	10.51	19.77
1300.00	5.00	0.231	23.57	12.57	10.42	19.93
1310.00	5.00	0.229	24.03	12.37	10.22	20.20
1320.00	5.00	0.227	24.41	12.21	10.06	20.42
1330.00	5.00	0.226	24.53	12.18	10.03	20.51
1340.00	5.00	0.224	24.62	12.17	10.02	20.59
1350.00	5.00	0.222	24.51	12.26	10.11	20.57
1360.00	5.00	0.221	24.53	12.28	10.13	20.61
1370.00	5.00	0.219	24.44	12.36	10.20	20.60
1380.00	5.00	0.217	24.10	12.56	10.41	20.46
1390.00	5.00	0.216	24.16	12.56	10.41	20.52
1400.00	5.00	0.214	24.13	12.61	10.46	20.53
1410.00	5.00	0.213	24.55	12.43	10.28	20.78
1420.00	5.00	0.211	24.79	12.34	10.19	20.93
1430.00	5.00	0.210	25.17	12.18	10.03	21.15
1440.00	5.00	0.208	25.82	11.88	9.73	21.51
1450.00	5.00	0.207	26.49	11.58	9.43	21.87
1460.00	5.00	0.205	27.05	11.33	9.18	22.18
1470.00	5.00	0.204	27.37	11.20	9.05	22.37
1480.00	5.00	0.203	27.17	11.33	9.18	22.30
1490.00	5.00	0.201	26.99	11.45	9.30	22.24
1500.00	5.00	0.200	26.40	11.77	9.62	21.97
1510.00	5.00	0.199	25.97	12.02	9.86	21.78
1520.00	5.00	0.197	25.70	12.18	10.03	21.68
1530.00	5.00	0.196	25.51	12.30	10.15	21.61
1540.00	5.00	0.195	25.67	12.25	10.10	21.72
1550.00	5.00	0.194	25.99	12.12	9.97	21.91
1560.00	5.00	0.192	26.46	11.91	9.76	22.17
1570.00	5.00	0.191	27.12	11.61	9.46	22.53
1580.00	5.00	0.190	27.46	11.47	9.32	22.72
1590.00	5.00	0.189	28.02	11.22	9.06	23.03
1600.00	5.00	0.188	28.22	11.14	8.99	23.16
1610.00	5.00	0.186	28.21	11.17	9.02	23.18
1620.00	5.00	0.185	28.16	11.23	9.07	23.18
1630.00	5.00	0.184	27.77	11.45	9.30	23.02
1640.00	5.00	0.183	27.75	11.48	9.33	23.03
MHz	m	m	dB	dBi	dBd	dB/m

SCHWARZBECK MESS - ELEKTRONIK

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Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotropgewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
1650.00	5.00	0.182	27.50	11.64	9.49	22.93
1660.00	5.00	0.181	27.09	11.87	9.72	22.76
1670.00	5.00	0.180	26.93	11.97	9.82	22.70
1680.00	5.00	0.179	26.60	12.16	10.01	22.56
1690.00	5.00	0.178	26.88	12.05	9.90	22.73
1700.00	5.00	0.176	27.02	12.01	9.86	22.82
1710.00	5.00	0.175	27.25	11.91	9.76	22.97
1720.00	5.00	0.174	27.60	11.76	9.61	23.17
1730.00	5.00	0.173	27.76	11.71	9.56	23.27
1740.00	5.00	0.172	28.12	11.56	9.41	23.47
1750.00	5.00	0.171	28.16	11.56	9.41	23.52
1760.00	5.00	0.170	28.16	11.59	9.44	23.54
1770.00	5.00	0.169	28.12	11.63	9.48	23.55
1780.00	5.00	0.169	27.72	11.86	9.71	23.37
1790.00	5.00	0.168	27.55	11.96	9.81	23.31
1800.00	5.00	0.167	27.29	12.12	9.97	23.20
1810.00	5.00	0.166	27.28	12.15	10.00	23.22
1820.00	5.00	0.165	27.33	12.15	10.00	23.27
1830.00	5.00	0.164	27.14	12.26	10.11	23.20
1840.00	5.00	0.163	27.37	12.17	10.02	23.34
1850.00	5.00	0.162	27.45	12.16	10.01	23.41
1860.00	5.00	0.161	27.66	12.08	9.93	23.53
1870.00	5.00	0.160	27.99	11.94	9.79	23.72
1880.00	5.00	0.160	28.06	11.92	9.77	23.78
1890.00	5.00	0.159	28.42	11.77	9.62	23.98
1900.00	5.00	0.158	28.45	11.77	9.62	24.02
1910.00	5.00	0.157	28.55	11.75	9.60	24.09
1920.00	5.00	0.156	28.85	11.62	9.47	24.27
1930.00	5.00	0.155	28.86	11.64	9.49	24.29
1940.00	5.00	0.155	29.11	11.53	9.38	24.44
1950.00	5.00	0.154	29.15	11.53	9.38	24.49
1960.00	5.00	0.153	29.29	11.49	9.34	24.58
1970.00	5.00	0.152	29.80	11.26	9.11	24.85
1980.00	5.00	0.152	30.20	11.08	8.93	25.08
1990.00	5.00	0.151	30.84	10.78	8.63	25.42
2000.00	5.00	0.150	31.22	10.61	8.46	25.63
2010.00	5.00	0.149	31.59	10.45	8.30	25.84
2020.00	5.00	0.149	31.99	10.27	8.12	26.06
2030.00	5.00	0.148	32.37	10.10	7.95	26.27
2040.00	5.00	0.147	32.71	9.95	7.80	26.46
2050.00	5.00	0.146	33.12	9.77	7.62	26.69
2060.00	5.00	0.146	33.60	9.55	7.40	26.95
2070.00	5.00	0.145	34.11	9.31	7.16	27.22
2080.00	5.00	0.144	34.49	9.14	6.99	27.44
2090.00	5.00	0.144	34.59	9.12	6.97	27.51
2100.00	5.00	0.143	34.83	9.02	6.87	27.64
2110.00	5.00	0.142	35.17	8.87	6.72	27.84
2120.00	5.00	0.142	35.47	8.74	6.59	28.01
2130.00	5.00	0.141	35.90	8.55	6.39	28.24
MHz	m	m	dB	dBi	dBd	dB/m

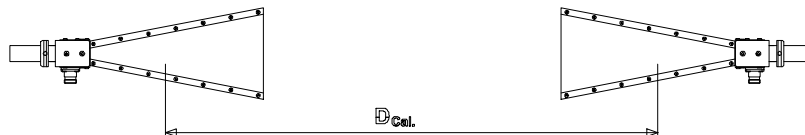
SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

Frequency Frequenz	Distance Abstand	Wavelength Wellenlänge	Attenuation Dämpfung	Gain(Isotr.) Isotrop-gewinn	Gain(Dipole) Gewinn über Dipol	Ant.-Factor Ant.-Wandlungsmaß
MHz	m	m	dB	dBi	dBd	dB/m
2140.00	5.00	0.140	36.15	8.44	6.29	28.39
2150.00	5.00	0.140	36.56	8.26	6.11	28.61
2160.00	5.00	0.139	36.82	8.14	5.99	28.77
2170.00	5.00	0.138	37.02	8.06	5.91	28.89
2180.00	5.00	0.138	37.10	8.05	5.90	28.94
2190.00	5.00	0.137	36.81	8.21	6.06	28.82
2200.00	5.00	0.136	36.48	8.40	6.25	28.67
2210.00	5.00	0.136	36.08	8.61	6.46	28.49
2220.00	5.00	0.135	35.38	8.99	6.83	28.16
2230.00	5.00	0.135	34.97	9.21	7.06	27.98
2240.00	5.00	0.134	34.40	9.51	7.36	27.71
2250.00	5.00	0.133	34.13	9.67	7.52	27.59
2260.00	5.00	0.133	33.67	9.92	7.77	27.39
2270.00	5.00	0.132	33.05	10.24	8.09	27.10
2280.00	5.00	0.132	32.73	10.42	8.27	26.96
2290.00	5.00	0.131	32.44	10.59	8.44	26.83
2300.00	5.00	0.130	32.28	10.69	8.54	26.76
2310.00	5.00	0.130	32.11	10.79	8.64	26.70
2320.00	5.00	0.129	32.24	10.75	8.60	26.78
2330.00	5.00	0.129	32.75	10.51	8.36	27.06
2340.00	5.00	0.128	33.75	10.03	7.88	27.57
2350.00	5.00	0.128	35.15	9.35	7.20	28.30
MHz	m	m	dB	dBi	dBd	dB/m



Kalibrierbezugspunkt:
Mitte zwischen Aperturöffnung und
Anschluß-Buchse

Calibration Reference Point:
Center between Coaxial-Connector and
Aperture-Plane

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

Doppelsteg Breitband-Hornantenne BBHA 9120 F Double Ridged Broadband Horn Antenna BBHA 9120 F

Vorläufiges Datenblatt - Preliminary Datasheet

