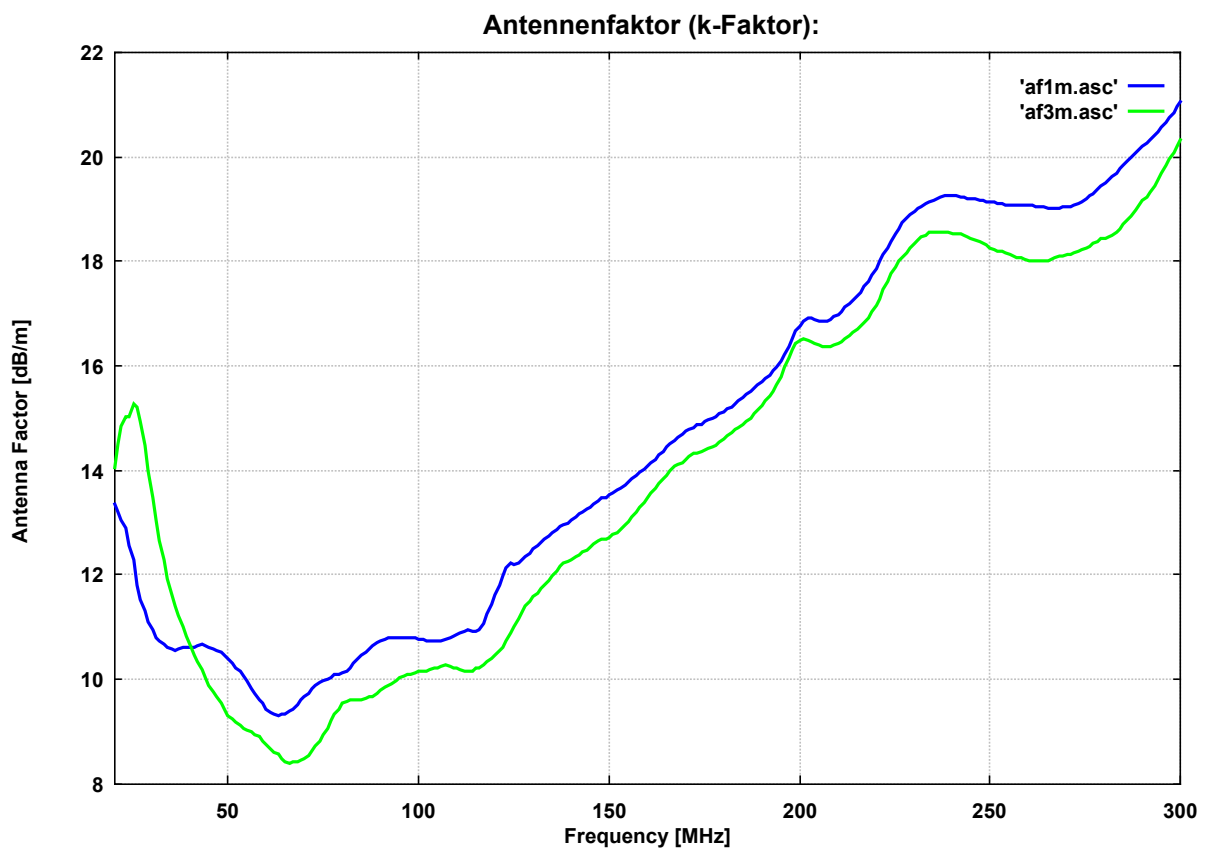
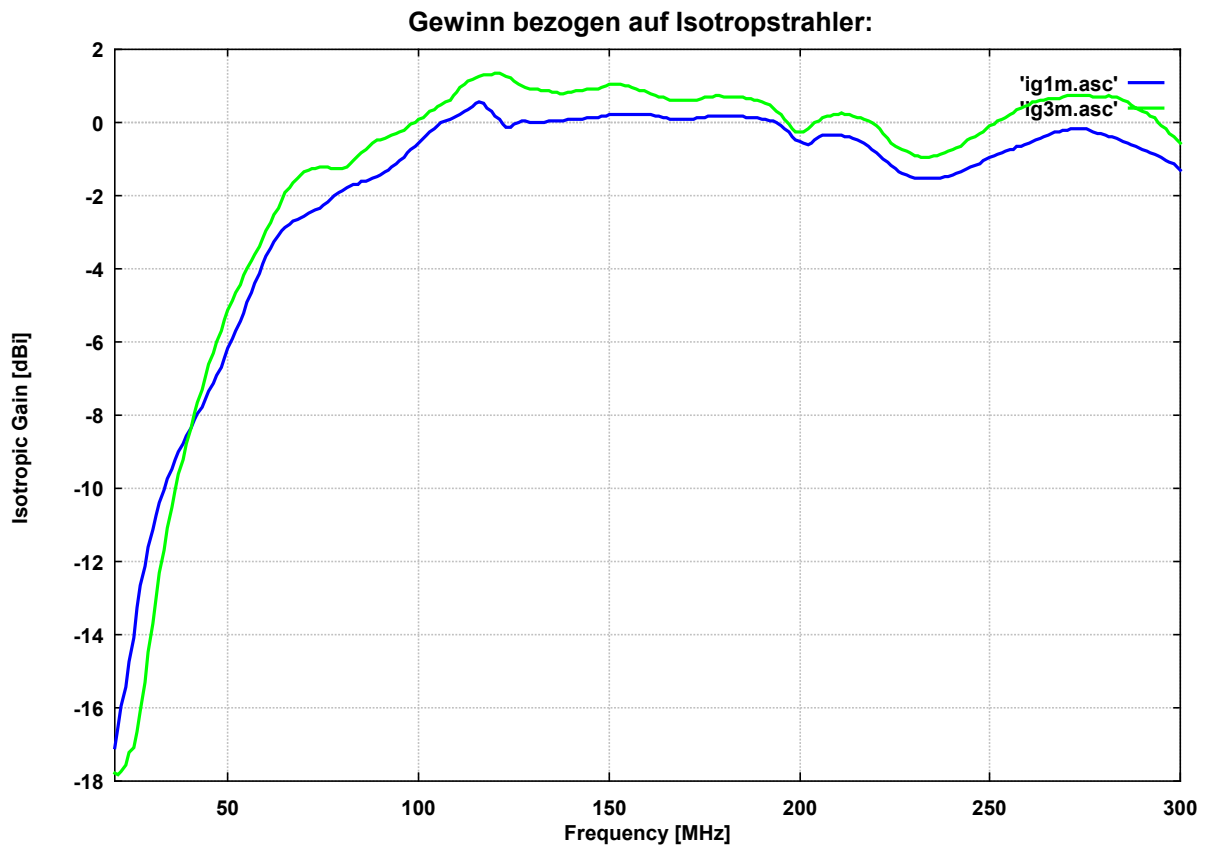


# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177



# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

| Frequency | Gain(Isotr.)<br>3 m | Ant.-Factor<br>3 m | Gain(Isotr.)<br>1 m | Ant.-Factor<br>1 m |
|-----------|---------------------|--------------------|---------------------|--------------------|
| MHz       | dBi                 | dB/m               | dBi                 | dB/m               |
| 25.00     | -17.09              | 15.27              | -14.09              | 12.27              |
| 26.00     | -16.68              | 15.20              | -13.27              | 11.79              |
| 27.00     | -16.10              | 14.95              | -12.67              | 11.52              |
| 28.00     | -15.32              | 14.48              | -12.14              | 11.30              |
| 29.00     | -14.51              | 13.98              | -11.63              | 11.10              |
| 30.00     | -13.73              | 13.49              | -11.16              | 10.93              |
| 31.00     | -13.00              | 13.05              | -10.75              | 10.80              |
| 32.00     | -12.32              | 12.65              | -10.39              | 10.72              |
| 33.00     | -11.69              | 12.28              | -10.07              | 10.66              |
| 34.00     | -11.08              | 11.93              | -9.76               | 10.61              |
| 35.00     | -10.53              | 11.63              | -9.47               | 10.57              |
| 36.00     | -10.06              | 11.41              | -9.22               | 10.56              |
| 37.00     | -9.62               | 11.21              | -8.99               | 10.58              |
| 38.00     | -9.20               | 11.02              | -8.78               | 10.60              |
| 39.00     | -8.78               | 10.82              | -8.56               | 10.60              |
| 40.00     | -8.35               | 10.61              | -8.34               | 10.60              |
| 41.00     | -7.98               | 10.45              | -8.14               | 10.62              |
| 42.00     | -7.64               | 10.33              | -7.96               | 10.65              |
| 43.00     | -7.29               | 10.18              | -7.77               | 10.66              |
| 44.00     | -6.94               | 10.03              | -7.56               | 10.65              |
| 45.00     | -6.60               | 9.88               | -7.34               | 10.62              |
| 46.00     | -6.29               | 9.76               | -7.11               | 10.59              |
| 47.00     | -6.00               | 9.66               | -6.90               | 10.56              |
| 48.00     | -5.71               | 9.55               | -6.68               | 10.52              |
| 49.00     | -5.40               | 9.43               | -6.44               | 10.46              |
| 50.00     | -5.12               | 9.31               | -6.18               | 10.38              |
| 51.00     | -4.87               | 9.24               | -5.94               | 10.31              |
| 52.00     | -4.65               | 9.19               | -5.69               | 10.23              |
| 53.00     | -4.41               | 9.12               | -5.46               | 10.16              |
| 54.00     | -4.19               | 9.06               | -5.20               | 10.07              |
| 55.00     | -4.00               | 9.03               | -4.93               | 9.96               |
| 56.00     | -3.80               | 8.98               | -4.65               | 9.83               |
| 57.00     | -3.61               | 8.95               | -4.39               | 9.73               |
| 58.00     | -3.41               | 8.90               | -4.14               | 9.62               |
| 59.00     | -3.19               | 8.82               | -3.89               | 9.53               |
| 60.00     | -2.96               | 8.74               | -3.66               | 9.44               |
| 61.00     | -2.74               | 8.67               | -3.44               | 9.37               |
| 62.00     | -2.53               | 8.60               | -3.26               | 9.33               |
| 63.00     | -2.35               | 8.56               | -3.10               | 9.31               |
| 64.00     | -2.14               | 8.48               | -2.97               | 9.32               |
| 65.00     | -1.93               | 8.41               | -2.86               | 9.34               |
| 66.00     | -1.77               | 8.38               | -2.77               | 9.38               |
| 67.00     | -1.66               | 8.40               | -2.69               | 9.43               |
| 68.00     | -1.54               | 8.41               | -2.64               | 9.51               |
| 69.00     | -1.44               | 8.44               | -2.59               | 9.59               |
| 70.00     | -1.34               | 8.47               | -2.55               | 9.67               |
| 71.00     | -1.29               | 8.53               | -2.49               | 9.74               |
| 72.00     | -1.26               | 8.63               | -2.45               | 9.82               |
| 73.00     | -1.24               | 8.73               | -2.40               | 9.89               |
| 74.00     | -1.22               | 8.82               | -2.35               | 9.95               |
| 75.00     | -1.22               | 8.94               | -2.26               | 9.98               |
| 76.00     | -1.23               | 9.06               | -2.17               | 10.01              |
| 77.00     | -1.25               | 9.20               | -2.09               | 10.04              |
| 78.00     | -1.27               | 9.33               | -2.01               | 10.08              |
| 79.00     | -1.27               | 9.44               | -1.93               | 10.10              |
| 80.00     | -1.25               | 9.53               | -1.84               | 10.13              |
| 81.00     | -1.19               | 9.58               | -1.77               | 10.16              |
| 82.00     | -1.11               | 9.61               | -1.73               | 10.22              |
| 83.00     | -1.02               | 9.62               | -1.70               | 10.30              |

# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

| Frequency | Gain(Isotr.)<br>3 m | Ant.-Factor<br>3 m | Gain(Isotr.)<br>1 m | Ant.-Factor<br>1 m |
|-----------|---------------------|--------------------|---------------------|--------------------|
| MHz       | dBi                 | dB/m               | dBi                 | dB/m               |
| 84.00     | -0.91               | 9.61               | -1.67               | 10.38              |
| 85.00     | -0.81               | 9.62               | -1.63               | 10.44              |
| 86.00     | -0.73               | 9.64               | -1.60               | 10.51              |
| 87.00     | -0.64               | 9.65               | -1.57               | 10.58              |
| 88.00     | -0.55               | 9.66               | -1.54               | 10.65              |
| 89.00     | -0.50               | 9.71               | -1.49               | 10.70              |
| 90.00     | -0.47               | 9.78               | -1.43               | 10.73              |
| 91.00     | -0.45               | 9.85               | -1.35               | 10.75              |
| 92.00     | -0.39               | 9.89               | -1.28               | 10.78              |
| 93.00     | -0.33               | 9.92               | -1.20               | 10.79              |
| 94.00     | -0.28               | 9.97               | -1.12               | 10.80              |
| 95.00     | -0.26               | 10.04              | -1.02               | 10.79              |
| 96.00     | -0.21               | 10.07              | -0.93               | 10.79              |
| 97.00     | -0.13               | 10.09              | -0.83               | 10.79              |
| 98.00     | -0.05               | 10.09              | -0.74               | 10.79              |
| 99.00     | 0.01                | 10.12              | -0.65               | 10.78              |
| 100.00    | 0.08                | 10.14              | -0.55               | 10.77              |
| 101.00    | 0.15                | 10.16              | -0.45               | 10.76              |
| 102.00    | 0.22                | 10.17              | -0.35               | 10.74              |
| 103.00    | 0.29                | 10.19              | -0.26               | 10.74              |
| 104.00    | 0.36                | 10.20              | -0.17               | 10.74              |
| 105.00    | 0.43                | 10.22              | -0.09               | 10.73              |
| 106.00    | 0.48                | 10.25              | -0.00               | 10.73              |
| 107.00    | 0.55                | 10.26              | 0.05                | 10.75              |
| 108.00    | 0.64                | 10.25              | 0.10                | 10.78              |
| 109.00    | 0.74                | 10.23              | 0.15                | 10.82              |
| 110.00    | 0.85                | 10.20              | 0.19                | 10.85              |
| 111.00    | 0.94                | 10.18              | 0.24                | 10.89              |
| 112.00    | 1.04                | 10.17              | 0.29                | 10.91              |
| 113.00    | 1.13                | 10.15              | 0.35                | 10.93              |
| 114.00    | 1.19                | 10.17              | 0.43                | 10.92              |
| 115.00    | 1.24                | 10.20              | 0.51                | 10.92              |
| 116.00    | 1.28                | 10.23              | 0.56                | 10.95              |
| 117.00    | 1.32                | 10.27              | 0.53                | 11.05              |
| 118.00    | 1.33                | 10.32              | 0.41                | 11.25              |
| 119.00    | 1.33                | 10.40              | 0.29                | 11.44              |
| 120.00    | 1.34                | 10.47              | 0.18                | 11.62              |
| 121.00    | 1.34                | 10.54              | 0.07                | 11.81              |
| 122.00    | 1.33                | 10.62              | -0.04               | 11.98              |
| 123.00    | 1.28                | 10.74              | -0.12               | 12.13              |
| 124.00    | 1.21                | 10.88              | -0.12               | 12.21              |
| 125.00    | 1.14                | 11.02              | -0.03               | 12.19              |
| 126.00    | 1.07                | 11.16              | 0.01                | 12.21              |
| 127.00    | 1.01                | 11.28              | 0.03                | 12.27              |
| 128.00    | 0.98                | 11.39              | 0.03                | 12.33              |
| 129.00    | 0.93                | 11.50              | 0.02                | 12.41              |
| 130.00    | 0.91                | 11.59              | 0.01                | 12.49              |
| 131.00    | 0.91                | 11.65              | 0.02                | 12.55              |
| 132.00    | 0.90                | 11.73              | 0.00                | 12.63              |
| 133.00    | 0.90                | 11.80              | 0.02                | 12.67              |
| 134.00    | 0.88                | 11.88              | 0.03                | 12.73              |
| 135.00    | 0.84                | 11.98              | 0.04                | 12.79              |
| 136.00    | 0.82                | 12.08              | 0.04                | 12.85              |
| 137.00    | 0.79                | 12.16              | 0.04                | 12.91              |
| 138.00    | 0.78                | 12.24              | 0.05                | 12.97              |
| 139.00    | 0.82                | 12.26              | 0.08                | 13.00              |
| 140.00    | 0.85                | 12.29              | 0.09                | 13.05              |
| 141.00    | 0.87                | 12.33              | 0.10                | 13.10              |
| 142.00    | 0.88                | 12.39              | 0.11                | 13.16              |
| 143.00    | 0.90                | 12.43              | 0.11                | 13.21              |
| 144.00    | 0.92                | 12.47              | 0.13                | 13.26              |

# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

| Frequency | Gain(Isotr.)<br>3 m | Ant.-Factor<br>3 m | Gain(Isotr.)<br>1 m | Ant.-Factor<br>1 m |
|-----------|---------------------|--------------------|---------------------|--------------------|
| MHz       | dBi                 | dB/m               | dBi                 | dB/m               |
| 145.00    | 0.92                | 12.53              | 0.14                | 13.31              |
| 146.00    | 0.92                | 12.59              | 0.14                | 13.37              |
| 147.00    | 0.93                | 12.64              | 0.15                | 13.42              |
| 148.00    | 0.95                | 12.67              | 0.17                | 13.46              |
| 149.00    | 1.00                | 12.68              | 0.20                | 13.49              |
| 150.00    | 1.03                | 12.71              | 0.22                | 13.53              |
| 151.00    | 1.04                | 12.76              | 0.23                | 13.57              |
| 152.00    | 1.06                | 12.80              | 0.24                | 13.62              |
| 153.00    | 1.05                | 12.87              | 0.24                | 13.67              |
| 154.00    | 1.02                | 12.95              | 0.24                | 13.73              |
| 155.00    | 1.00                | 13.02              | 0.24                | 13.79              |
| 156.00    | 0.96                | 13.12              | 0.23                | 13.85              |
| 157.00    | 0.92                | 13.21              | 0.23                | 13.91              |
| 158.00    | 0.89                | 13.30              | 0.23                | 13.96              |
| 159.00    | 0.86                | 13.38              | 0.23                | 14.02              |
| 160.00    | 0.84                | 13.47              | 0.23                | 14.07              |
| 161.00    | 0.80                | 13.56              | 0.22                | 14.14              |
| 162.00    | 0.76                | 13.65              | 0.20                | 14.21              |
| 163.00    | 0.72                | 13.74              | 0.17                | 14.29              |
| 164.00    | 0.69                | 13.83              | 0.15                | 14.37              |
| 165.00    | 0.67                | 13.90              | 0.13                | 14.44              |
| 166.00    | 0.63                | 13.99              | 0.11                | 14.52              |
| 167.00    | 0.61                | 14.07              | 0.09                | 14.58              |
| 168.00    | 0.62                | 14.11              | 0.09                | 14.64              |
| 169.00    | 0.62                | 14.16              | 0.09                | 14.69              |
| 170.00    | 0.61                | 14.22              | 0.08                | 14.74              |
| 171.00    | 0.61                | 14.27              | 0.10                | 14.78              |
| 172.00    | 0.62                | 14.31              | 0.11                | 14.83              |
| 173.00    | 0.64                | 14.34              | 0.12                | 14.86              |
| 174.00    | 0.67                | 14.36              | 0.14                | 14.89              |
| 175.00    | 0.69                | 14.39              | 0.15                | 14.93              |
| 176.00    | 0.70                | 14.43              | 0.17                | 14.96              |
| 177.00    | 0.72                | 14.46              | 0.19                | 14.99              |
| 178.00    | 0.75                | 14.48              | 0.20                | 15.03              |
| 179.00    | 0.74                | 14.54              | 0.20                | 15.08              |
| 180.00    | 0.72                | 14.60              | 0.20                | 15.13              |
| 181.00    | 0.71                | 14.67              | 0.20                | 15.17              |
| 182.00    | 0.70                | 14.72              | 0.20                | 15.22              |
| 183.00    | 0.69                | 14.78              | 0.19                | 15.27              |
| 184.00    | 0.69                | 14.83              | 0.19                | 15.33              |
| 185.00    | 0.68                | 14.88              | 0.18                | 15.39              |
| 186.00    | 0.67                | 14.94              | 0.16                | 15.45              |
| 187.00    | 0.65                | 15.01              | 0.14                | 15.51              |
| 188.00    | 0.62                | 15.08              | 0.13                | 15.58              |
| 189.00    | 0.60                | 15.15              | 0.12                | 15.63              |
| 190.00    | 0.57                | 15.23              | 0.10                | 15.69              |
| 191.00    | 0.52                | 15.32              | 0.08                | 15.76              |
| 192.00    | 0.47                | 15.42              | 0.05                | 15.83              |
| 193.00    | 0.41                | 15.52              | 0.03                | 15.90              |
| 194.00    | 0.33                | 15.64              | -0.01               | 15.98              |
| 195.00    | 0.23                | 15.80              | -0.06               | 16.08              |
| 196.00    | 0.09                | 15.97              | -0.16               | 16.22              |
| 197.00    | -0.05               | 16.16              | -0.27               | 16.38              |
| 198.00    | -0.17               | 16.32              | -0.38               | 16.53              |
| 199.00    | -0.23               | 16.43              | -0.46               | 16.66              |
| 200.00    | -0.26               | 16.50              | -0.53               | 16.77              |
| 201.00    | -0.23               | 16.52              | -0.57               | 16.86              |
| 202.00    | -0.17               | 16.50              | -0.59               | 16.92              |
| 203.00    | -0.10               | 16.47              | -0.56               | 16.93              |
| 204.00    | -0.02               | 16.44              | -0.49               | 16.90              |
| 205.00    | 0.05                | 16.41              | -0.41               | 16.87              |

# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

| Frequency | Gain(Isotr.)<br>3 m | Ant.-Factor<br>3 m | Gain(Isotr.)<br>1 m | Ant.-Factor<br>1 m |
|-----------|---------------------|--------------------|---------------------|--------------------|
| MHz       | dBi                 | dB/m               | dBi                 | dB/m               |
| 206.00    | 0.12                | 16.38              | -0.36               | 16.85              |
| 207.00    | 0.17                | 16.37              | -0.33               | 16.87              |
| 208.00    | 0.20                | 16.38              | -0.32               | 16.90              |
| 209.00    | 0.22                | 16.40              | -0.32               | 16.94              |
| 210.00    | 0.23                | 16.43              | -0.32               | 16.99              |
| 211.00    | 0.25                | 16.46              | -0.34               | 17.05              |
| 212.00    | 0.24                | 16.51              | -0.37               | 17.12              |
| 213.00    | 0.22                | 16.57              | -0.40               | 17.19              |
| 214.00    | 0.19                | 16.64              | -0.43               | 17.26              |
| 215.00    | 0.16                | 16.71              | -0.47               | 17.34              |
| 216.00    | 0.14                | 16.77              | -0.51               | 17.42              |
| 217.00    | 0.11                | 16.84              | -0.57               | 17.52              |
| 218.00    | 0.06                | 16.93              | -0.64               | 17.63              |
| 219.00    | 0.00                | 17.03              | -0.72               | 17.75              |
| 220.00    | -0.08               | 17.15              | -0.80               | 17.87              |
| 221.00    | -0.19               | 17.30              | -0.89               | 18.00              |
| 222.00    | -0.31               | 17.46              | -0.98               | 18.12              |
| 223.00    | -0.43               | 17.61              | -1.08               | 18.26              |
| 224.00    | -0.55               | 17.77              | -1.17               | 18.39              |
| 225.00    | -0.63               | 17.89              | -1.26               | 18.52              |
| 226.00    | -0.70               | 18.00              | -1.34               | 18.64              |
| 227.00    | -0.75               | 18.09              | -1.40               | 18.74              |
| 228.00    | -0.79               | 18.17              | -1.45               | 18.83              |
| 229.00    | -0.84               | 18.26              | -1.49               | 18.90              |
| 230.00    | -0.90               | 18.35              | -1.51               | 18.96              |
| 231.00    | -0.91               | 18.40              | -1.53               | 19.02              |
| 232.00    | -0.93               | 18.46              | -1.53               | 19.06              |
| 233.00    | -0.94               | 18.51              | -1.54               | 19.10              |
| 234.00    | -0.95               | 18.55              | -1.54               | 19.14              |
| 235.00    | -0.92               | 18.57              | -1.54               | 19.18              |
| 236.00    | -0.90               | 18.57              | -1.53               | 19.21              |
| 237.00    | -0.85               | 18.56              | -1.52               | 19.23              |
| 238.00    | -0.81               | 18.56              | -1.49               | 19.25              |
| 239.00    | -0.77               | 18.55              | -1.46               | 19.25              |
| 240.00    | -0.72               | 18.54              | -1.43               | 19.25              |
| 241.00    | -0.68               | 18.54              | -1.39               | 19.25              |
| 242.00    | -0.63               | 18.53              | -1.34               | 19.24              |
| 243.00    | -0.57               | 18.50              | -1.29               | 19.23              |
| 244.00    | -0.50               | 18.47              | -1.25               | 19.21              |
| 245.00    | -0.44               | 18.45              | -1.20               | 19.20              |
| 246.00    | -0.38               | 18.42              | -1.16               | 19.19              |
| 247.00    | -0.31               | 18.38              | -1.11               | 19.18              |
| 248.00    | -0.23               | 18.34              | -1.06               | 19.17              |
| 249.00    | -0.16               | 18.31              | -1.01               | 19.15              |
| 250.00    | -0.09               | 18.27              | -0.96               | 19.14              |
| 251.00    | -0.03               | 18.24              | -0.92               | 19.13              |
| 252.00    | 0.04                | 18.21              | -0.87               | 19.12              |
| 253.00    | 0.10                | 18.18              | -0.82               | 19.11              |
| 254.00    | 0.16                | 18.16              | -0.78               | 19.09              |
| 255.00    | 0.22                | 18.14              | -0.74               | 19.09              |
| 256.00    | 0.28                | 18.11              | -0.71               | 19.09              |
| 257.00    | 0.34                | 18.08              | -0.67               | 19.09              |
| 258.00    | 0.39                | 18.06              | -0.63               | 19.09              |
| 259.00    | 0.45                | 18.04              | -0.59               | 19.08              |
| 260.00    | 0.50                | 18.02              | -0.56               | 19.08              |
| 261.00    | 0.55                | 18.00              | -0.52               | 19.07              |
| 262.00    | 0.58                | 18.01              | -0.47               | 19.05              |
| 263.00    | 0.60                | 18.02              | -0.43               | 19.05              |
| 264.00    | 0.63                | 18.02              | -0.39               | 19.04              |
| 265.00    | 0.66                | 18.03              | -0.34               | 19.03              |
| 266.00    | 0.66                | 18.05              | -0.30               | 19.02              |

# SCHWARZBECK MESS - ELEKTRONIK

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

## 4:1 Balun VHBA 9123 mit Faltbikonus-Elementen FBAB 9177 4:1 Balun VHBA 9123 with Collapsible Conical Elements FBAB 9177

| Frequency | Gain(Isotr.)<br>3 m | Ant.-Factor<br>3 m | Gain(Isotr.)<br>1 m | Ant.-Factor<br>1 m |
|-----------|---------------------|--------------------|---------------------|--------------------|
| MHz       | dBi                 | dB/m               | dBi                 | dB/m               |
| 267.00    | 0.67                | 18.08              | -0.27               | 19.02              |
| 268.00    | 0.67                | 18.11              | -0.25               | 19.03              |
| 269.00    | 0.71                | 18.11              | -0.22               | 19.04              |
| 270.00    | 0.73                | 18.12              | -0.20               | 19.04              |
| 271.00    | 0.74                | 18.14              | -0.18               | 19.06              |
| 272.00    | 0.74                | 18.17              | -0.18               | 19.09              |
| 273.00    | 0.74                | 18.20              | -0.18               | 19.12              |
| 274.00    | 0.75                | 18.23              | -0.18               | 19.15              |
| 275.00    | 0.75                | 18.25              | -0.19               | 19.19              |
| 276.00    | 0.74                | 18.30              | -0.21               | 19.25              |
| 277.00    | 0.72                | 18.35              | -0.24               | 19.31              |
| 278.00    | 0.71                | 18.39              | -0.28               | 19.38              |
| 279.00    | 0.70                | 18.43              | -0.31               | 19.44              |
| 280.00    | 0.72                | 18.44              | -0.34               | 19.50              |
| 281.00    | 0.73                | 18.47              | -0.37               | 19.57              |
| 282.00    | 0.72                | 18.51              | -0.41               | 19.64              |
| 283.00    | 0.70                | 18.56              | -0.45               | 19.70              |
| 284.00    | 0.65                | 18.63              | -0.49               | 19.78              |
| 285.00    | 0.61                | 18.71              | -0.53               | 19.85              |
| 286.00    | 0.56                | 18.79              | -0.57               | 19.92              |
| 287.00    | 0.49                | 18.88              | -0.61               | 19.99              |
| 288.00    | 0.42                | 18.99              | -0.66               | 20.07              |
| 289.00    | 0.36                | 19.08              | -0.70               | 20.14              |
| 290.00    | 0.31                | 19.16              | -0.73               | 20.20              |
| 291.00    | 0.27                | 19.23              | -0.77               | 20.27              |
| 292.00    | 0.20                | 19.32              | -0.81               | 20.33              |
| 293.00    | 0.12                | 19.44              | -0.85               | 20.41              |
| 294.00    | 0.02                | 19.57              | -0.90               | 20.49              |
| 295.00    | -0.08               | 19.70              | -0.96               | 20.58              |
| 296.00    | -0.19               | 19.84              | -1.03               | 20.67              |
| 297.00    | -0.30               | 19.97              | -1.09               | 20.77              |
| 298.00    | -0.39               | 20.10              | -1.15               | 20.86              |
| 299.00    | -0.49               | 20.22              | -1.23               | 20.96              |
| 300.00    | -0.58               | 20.34              | -1.31               | 21.07              |
| 301.00    | -0.68               | 20.47              | -1.40               | 21.19              |
| 302.00    | -0.80               | 20.62              | -1.49               | 21.31              |
| 303.00    | -0.93               | 20.77              | -1.59               | 21.44              |
| 304.00    | -1.09               | 20.96              | -1.72               | 21.60              |
| 305.00    | -1.27               | 21.18              | -1.88               | 21.79              |
| 306.00    | -1.49               | 21.42              | -2.07               | 22.01              |
| 307.00    | -1.72               | 21.68              | -2.28               | 22.24              |
| 308.00    | -1.93               | 21.92              | -2.51               | 22.50              |
| 309.00    | -2.12               | 22.14              | -2.74               | 22.76              |
| 310.00    | -2.28               | 22.33              | -2.96               | 23.01              |
| 311.00    | -2.37               | 22.45              | -3.12               | 23.19              |
| 312.00    | -2.38               | 22.48              | -3.21               | 23.31              |
| 313.00    | -2.31               | 22.44              | -3.20               | 23.33              |
| 314.00    | -2.15               | 22.31              | -3.11               | 23.26              |
| 315.00    | -1.95               | 22.13              | -2.93               | 23.12              |
| 316.00    | -1.72               | 21.94              | -2.71               | 22.92              |
| 317.00    | -1.50               | 21.74              | -2.47               | 22.71              |
| 318.00    | -1.38               | 21.65              | -2.34               | 22.61              |
| 319.00    | -1.26               | 21.55              | -2.21               | 22.50              |
| 320.00    | -1.13               | 21.45              | -2.07               | 22.39              |