

Magnetische Feldsensorspule FESP 5134-1

Field Monitoring Loop FESP 5134-1



Beschreibung:

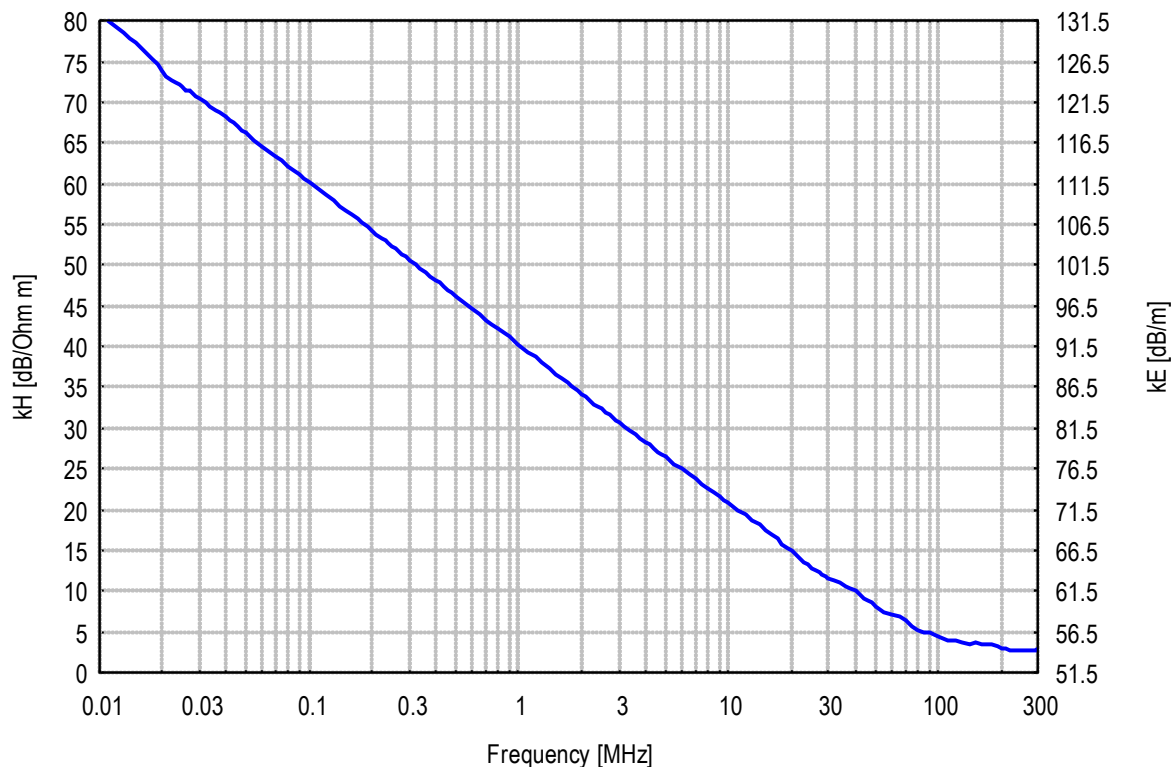
Die handgeführte, magnetische Feldsensorspule FESP 5134-1 dient zur Ermittlung der magnetischen Feldstärke bei Immunitätsprüfungen. Sie besteht aus einer geschirmten Rahmenwindung und kann bis 400 MHz eingesetzt werden. Die FESP 5134-1 ist für den Anschluß an 50 Ω Messgeräte vorgesehen, wie z.B. Spektrumanalysatoren oder Messempfängern. Aufgrund der geschirmten Rahmenwindung wird hohe Symmetrie und gute E-Feld-Unterdrückung erreicht. Typische Anwendungen sind z.B. Messungen nach IEC 61000-4-39:2017 6.1.3.2, diverse Automobilnormen und die Messung von Personenschutzgrenzwerten nach IEEE C.95-2005, 26. BImSchV, ICNIRP u. v. a

Description:

The magnetic, handheld field sensor coil FESP 5134-1 was designed to determine the magnetic field strength during immunity tests. The loop sensor consists of a single shielded turn and can be used up to 400 MHz. The FESP 5134-1 is intended to be used with 50 Ω measuring equipment, e.g. spectrum analyzers or measuring receivers. Thanks to the shielded turn the loop sensor achieves high symmetry and good E-field rejection. Typical applications are immunity tests acc. IEC 61000-4-39, several automotive standards, the measurement of human exposure limits acc. to ICNIRP, IEEE C.95-2005, 26.BImSchV and many others.

Technische Daten:		Specifications:
Windungszahl:	1	Number of Turns:
Spulendurchmesser:	40 mm	Coil Diameter:
Nutzbarer Frequenzbereich:	10 kHz -400 MHz	Usable Frequency Range:
Nomineller Frequenzbereich:	100 kHz – 300 MHz	Nominal Frequency Range:
Induktivität:	ca. 125 nH	Inductance:
Gewicht:	ca. 70 g	Weight:
Abmessungen:	46 x 18 x 95 mm	Dimensions:
Anschluss:	BNC	Connector:

Wandlungsmaß für magnetische und fiktive elektrische Feldstärke
Conversion for magnetic fieldstrength and fictious electric fieldstrength



Frequency MHz	kE dB/m	kH dB/Ohm m
0.009	133.75	82.22
0.010	132.74	81.21
0.011	131.58	80.05
0.012	130.78	79.25
0.013	130.04	78.51
0.014	129.38	77.85
0.015	128.78	77.25
0.016	128.10	76.57
0.017	127.48	75.95
0.018	126.98	75.45
0.019	126.19	74.66
0.020	125.41	73.88
0.021	124.64	73.11
0.022	124.33	72.80
0.023	123.97	72.44
0.024	123.72	72.19
0.025	123.38	71.85
0.026	123.09	71.56
0.027	122.90	71.37
0.028	122.58	71.05
0.029	122.34	70.81
0.030	122.06	70.53
0.032	121.54	70.01

Frequency MHz	kE dB/m	kH dB/Ohm m
0.034	121.14	69.61
0.036	120.58	69.05
0.038	120.25	68.72
0.040	119.80	68.27
0.042	119.33	67.80
0.044	118.95	67.42
0.046	118.60	67.07
0.048	118.11	66.58
0.050	117.76	66.23
0.055	116.94	65.41
0.060	116.03	64.50
0.065	115.34	63.81
0.070	114.90	63.37
0.075	114.30	62.77
0.080	113.70	62.17
0.085	113.22	61.69
0.090	112.63	61.10
0.095	112.16	60.63
0.100	111.79	60.26
0.110	110.96	59.43
0.120	110.13	58.60
0.130	109.43	57.90
0.140	108.83	57.30

Frequency	kE	kH
MHz	dB/m	dB/Ohm m
0.150	108.24	56.71
0.160	107.65	56.12
0.170	107.17	55.64
0.180	106.69	55.16
0.190	106.21	54.68
0.200	105.74	54.21
0.210	105.26	53.73
0.220	104.90	53.37
0.230	104.55	53.02
0.240	104.20	52.67
0.250	103.84	52.31
0.260	103.48	51.95
0.270	103.13	51.60
0.280	102.78	51.25
0.290	102.54	51.01
0.300	102.18	50.65
0.320	101.71	50.18
0.340	101.11	49.58
0.360	100.64	49.11
0.380	100.18	48.65
0.400	99.70	48.17
0.420	99.34	47.81
0.440	98.87	47.34
0.460	98.51	46.98
0.480	98.15	46.62
0.500	97.80	46.27
0.550	96.97	45.44
0.600	96.15	44.62
0.650	95.55	44.02
0.700	94.84	43.31
0.750	94.25	42.72
0.800	93.65	42.12
0.850	93.18	41.65
0.900	92.71	41.18
0.950	92.23	40.70
1.000	91.76	40.23
1.100	90.93	39.40
1.200	90.22	38.69
1.300	89.50	37.97
1.400	88.79	37.26
1.500	88.21	36.68
1.600	87.73	36.20
1.700	87.12	35.59
1.800	86.65	35.12
1.900	86.19	34.66
2.000	85.71	34.18
2.100	85.36	33.83
2.200	84.89	33.36
2.300	84.54	33.01
2.400	84.18	32.65
2.500	83.83	32.30
2.600	83.48	31.95
2.700	83.12	31.59
2.800	82.90	31.37
2.900	82.55	31.02

Frequency	kE	kH
MHz	dB/m	dB/Ohm m
3.000	82.32	30.79
3.200	81.73	30.20
3.400	81.15	29.62
3.600	80.69	29.16
3.800	80.22	28.69
4.000	79.87	28.34
4.200	79.43	27.90
4.400	79.07	27.54
4.600	78.62	27.09
4.800	78.28	26.75
5.000	77.94	26.41
5.500	77.15	25.62
6.000	76.47	24.94
6.500	75.81	24.28
7.000	75.25	23.72
7.500	74.70	23.17
8.000	74.15	22.62
8.500	73.60	22.07
9.000	73.16	21.63
9.500	72.72	21.19
10.000	72.28	20.75
11.000	71.51	19.98
12.000	70.84	19.31
13.000	70.16	18.63
14.000	69.58	18.05
15.000	69.00	17.47
16.000	68.40	16.87
17.000	67.91	16.38
18.000	67.29	15.76
19.000	66.80	15.27
20.000	66.42	14.89
21.000	65.92	14.39
22.000	65.55	14.02
23.000	65.07	13.54
24.000	64.72	13.19
25.000	64.38	12.85
26.000	64.06	12.53
27.000	63.87	12.34
28.000	63.58	12.05
29.000	63.31	11.78
30.000	63.15	11.62
32.000	62.75	11.22
34.000	62.47	10.94
36.000	62.16	10.63
38.000	61.83	10.30
40.000	61.48	9.95
42.000	61.07	9.54
44.000	60.73	9.20
46.000	60.37	8.84
48.000	60.00	8.47
50.000	59.65	8.12
55.000	58.98	7.45
60.000	58.59	7.06
65.000	58.28	6.75
70.000	57.83	6.30

Frequency	kE	kH
MHz	dB/m	dB/Ohm m
75.000	57.22	5.69
80.000	56.68	5.15
85.000	56.46	4.93
90.000	56.38	4.85
95.000	56.25	4.72
100.000	55.90	4.37
110.000	55.33	3.80
120.000	55.43	3.90
130.000	55.18	3.65
140.000	54.96	3.43
150.000	55.14	3.61
160.000	54.92	3.39
170.000	54.86	3.33
180.000	54.89	3.36
190.000	54.66	3.13
200.000	54.55	3.02
210.000	54.48	2.95
220.000	54.28	2.75

Frequency	kE	kH
MHz	dB/m	dB/Ohm m
230.000	54.18	2.65
240.000	54.12	2.59
250.000	54.11	2.58
260.000	54.11	2.58
270.000	54.15	2.62
280.000	54.28	2.75
290.000	54.29	2.76
300.000	54.37	2.84
320.000	54.41	2.88
340.000	54.40	2.87
360.000	54.25	2.72
380.000	54.18	2.65
400.000	54.31	2.78
420.000	54.43	2.90
440.000	54.66	3.13
460.000	54.87	3.34
480.000	54.93	3.40
500.000	55.02	3.49



Betrag der Impedanz an der BNC-Buchse
Magnitude of Impedance at BNC-Connector

