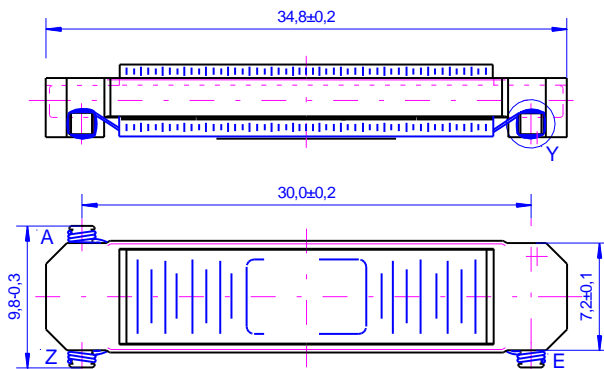


Rx/Tx-Antennas

Series Ms 62

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res ≥</sub> [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
3,58	45	5,5	0,35	2,5	-	006169 01
0,715	170	134,2	1,2	1,3	-	006169 10
0,960	170	125	1,1	1,5	-	888026 39
3	60	125	0,4	3	-	888022 42
7,2	50	125	-	5	-	888026 41

Verklebung mit PCB durch HSF optional



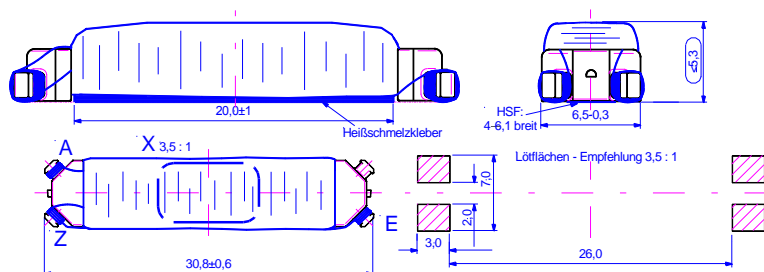
Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in frequency selective circuits



Series Ms 65

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res ≥</sub> [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
3,74	27	5,5		2,7	-	006169 51
2,2	40	125		1,7	-	006169 52
1	50	125	0,9	1,1	-	888026 03
3	50	125	0,45	2,1	-	888026 05
5	50	125	0,33	4	-	888026 07

Verklebung mit PCB durch HSF optional



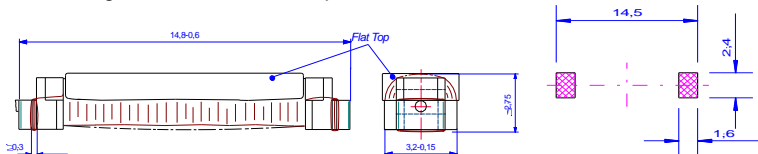
Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in frequency selective circuits



Series Ms 32c [10µH-39mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
1,2	-	10	0,7	6,5	60	006132 34
5,6	-	10	0,4	27	30	006132 35
8,2	6	5	0,3	40	20	006132 60
9,5	8	19,2	0,3	48	-	006132 36
39	-	5	0,15	175	10	006132 70

Verklebung mit PCB durch HSF optional



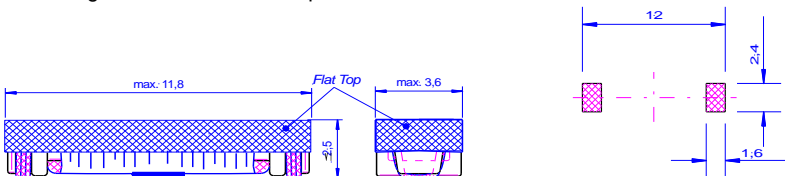
Applications:
Transponder-, Identification- and Safety-Devices (e.g. for automotive systems)
Data transmission 5-200 kHz



Series Ms 32k [1µH-39mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
0,4	12	125	1,5	2,8	-	888012 02
1,6	10	125	0,9	11	-	888012 03
2,37	15	125	0,6	17	-	888012 00
7,2	10	125	0,4	62	-	888012 01
26	4	5,5	0,23	153	-	006172 80
[µH]		[MHz]	[MHz]	[mΩ]		
5,82	-	13,56	100	0,1	-	888025 67

Verklebung mit PCB durch HSF optional



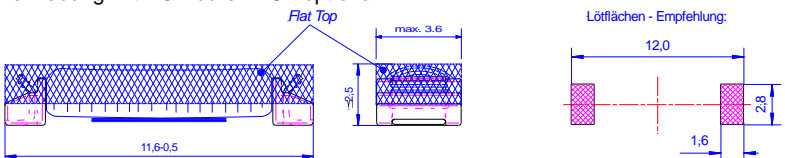
Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in frequency selective circuits



Series Ms 32ka [1µH-39mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
0,047	25	125	100	1,5	-	006172 75
0,190	35	125	2,6	3	-	888025 00
2,38	45	125	0,6	23	-	006172 40
7,2	40	125	0,35	56	-	006172 43
µH		[MHz]	[MHz]	[mΩ]		
5,82		13,56	100	0,1	-	888025 68

Verklebung mit PCB durch HSF optional



Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in frequency selective circuits

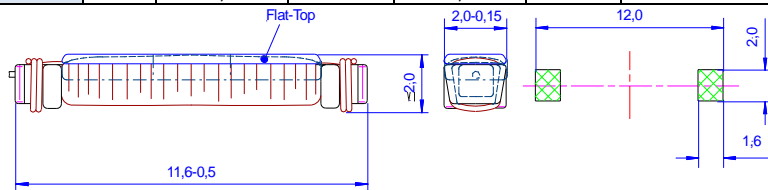


# Transponder antenna for RFID-Systems

## HAC-Antennas

### Series Ms 18k [1µH-14mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ±10%	I <sub>max</sub> [mA]	Art. Nr.:
1,3	-	10	1,4	11	45	006170 40
2,2	-	10	1,0	22	35	006170 43
3,5	-	10	0,5	36	25	006170 41
14	-	10	0,25	144	10	006170 42
[µH]		[MHz]	[MHz]	[mΩ]		
1		13,56	-	0,9	-	888032 37

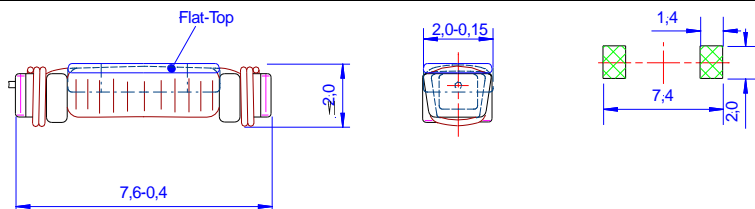


Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in frequency selective circuits



### Series Ms 2074 [1µH-12mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ±10%	I <sub>max</sub> [mA]	Art. Nr.:
0,625	-	10	2,45	11	70	006171 40
2,0	-	10	1,45	22	35	006171 41
3,2	-	10	1,1	36	30	006171 42
10,8	-	10	0,6	144	15	006171 43
[µH]		[MHz]	[MHz]	[mΩ]		
1,88	-	13,56	-	2	-	888025 69
5,82	-	13,56	-	4	-	888025 70

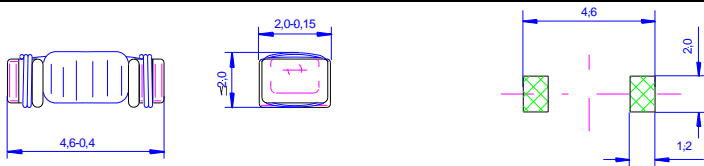


Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in hearing aids
Use in frequency selective circuits



### Series Ms 2046 [1µH-3,5mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ±10%	I <sub>max</sub> [mA]	Art. Nr.:
0,35	-	10	4,2	11	90	888031 40
0,65	-	10	3,0	22	75	888031 41
1,0	-	10	2,2	36	50	888031 42
3,5	-	10	1,0	85	25	006171 63
[µH]		[MHz]		[mΩ]		
1,88	-	13,56	-	4	-	888025 72
5,82	-	13,56	-	6	-	888025 73



Applications:
Transponder antenna
Decoupling in RF-and IF-circuits
Use in hearing aids
Use in frequency selective circuits

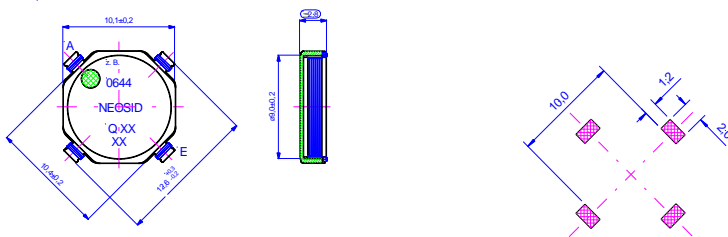


Z-Antenna

Series SM-W 902 [1µH-65mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
0,11	50	100	9	0,8	-	006161 30
1,2	55	100	1,5	5,5	-	006161 20
2,2	80	125	1,2	10	-	006161 21
7,2	60	125	0,9	35	-	006161 22
52,3	15	19,2	0,4	190	-	006161 00
65	15	19,2	0,3	220	-	006161 10

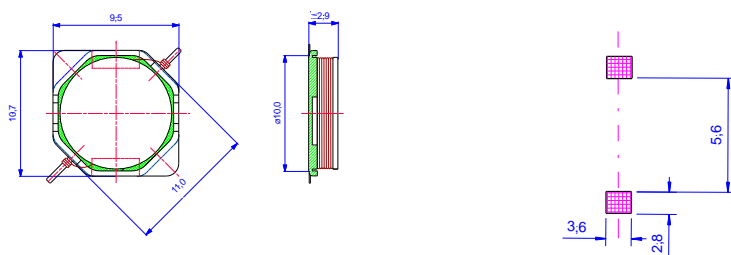
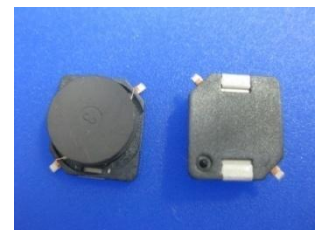
Applications:
Keyless entry systems
Safety systems RFID



Series SM-W903 [1µH-65mH]

L [mH]	Q ≥	f <sub>L,Q</sub> [kHz]	f <sub>res</sub> ≥ [MHz]	R <sub>DC</sub> [Ω] ≤	I <sub>max</sub> [mA]	Art. Nr.:
3,9	80	125	1,0	13,5	-	888031 00
2,37	80	125	1,1	12	-	888031 01
1,2	55	100	1,5	5,5	-	006161 50
2,2	80	125	1,2	11	-	006161 51
7,2	60	125	0,9	35	-	888031 04
52,3	15	19,2	0,4	190	-	006161 52
65	15	19,2	0,3	230	-	006161 53

Applications:
Keyless entry systems
Safety systems RFID

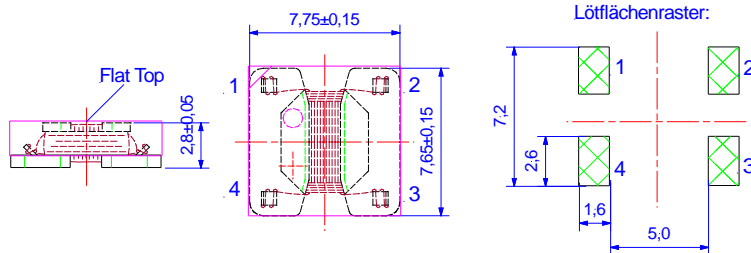


## 2 D-Antenne X(Y)/Z

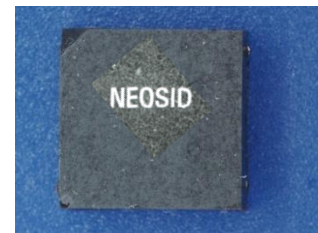
### Series 2D-77-Antenna

$L_1$ [mH]	$Q_1$ $\geq$	$R_{DC1}$ [ $\Omega$ ] $\leq$	$L_2$ [mH]	$Q_2$ $\geq$	$R_{DC2}$ [ $\Omega$ ] $\leq$	$f_{L,Q}$ [kHz]	Art. Nr.:
4,09	32	81	5,87	35	112	125	888025 27
2,86	40	62	3,45	40	70	125	888025 22
[ $\mu$ H]			[ $\mu$ H]			[MHz]	
5,82			5,82			13,56	888025 73

Verklebung mit PCB durch HSF optional



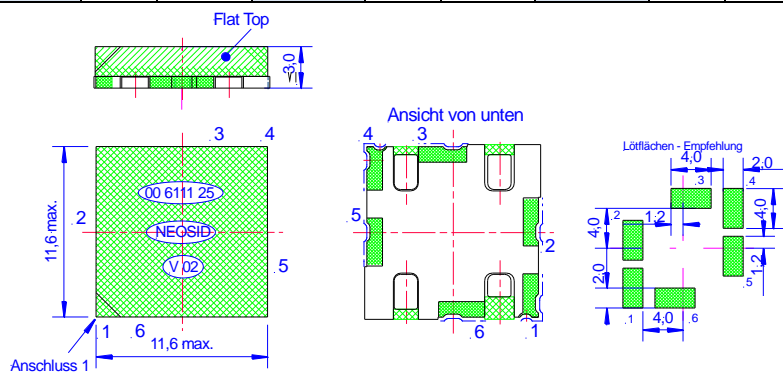
Applications:
Keyless entry systems
Keyless go
Safety systems RFID



## 3 D-Antenna

### Series 3D-11

$L_1$ [mH]	$Q_1$ $\geq$	$R_{DC1}$ [ $\Omega$ ] $\leq$	$L_2$ [mH]	$Q_2$ $\geq$	$R_{DC2}$ [ $\Omega$ ] $\leq$	$L_3$ [mH]	$Q_3$ $\geq$	$R_{DC2}$ [ $\Omega$ ] $\leq$	$f_{L,Q}$ [kHz]	Art. Nr.:
11,5	5	260	11,5	5	260	15,5	5	440	21,8	006111 21
4,82	15	120	4,82	15	120	5,87	15	150	125	006111 25
2,38	15	100	2,38	15	100	3,45	15	100	125	888015 08
2,47	15	70	2,47	15	70	2,47	15	70	125	888023 56
4,7	15	160	4,7	15	160	4,7	15	160	125	888015 91
7,1	15	200	7,1	15	200	9,0	15	200	125	888015 69
[ $\mu$ H]			[ $\mu$ H]			[ $\mu$ H]			MHz	
17,58		20	-	17,58		20	-	13,56		888023 89



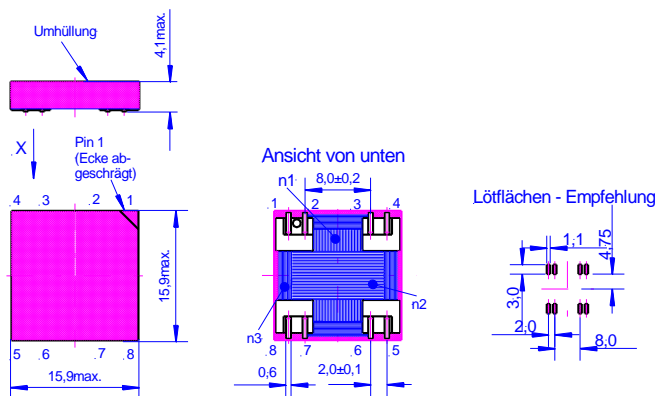
Applications:
Keyless entry systems
Keyless go
Safety systems RFID



3 D-Antenna

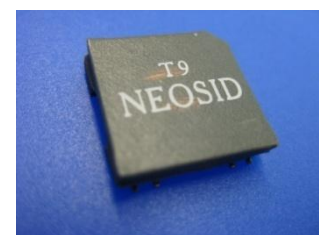
Series 3D-15

L <sub>1</sub> [mH]	Q <sub>1</sub> ≥	R <sub>DC1</sub> [Ω] ≤	L <sub>2</sub> [mH]	Q <sub>2</sub> ≥	R <sub>DC2</sub> [Ω] ≤	L <sub>3</sub> [mH]	Q <sub>3</sub> ≥	R <sub>DC2</sub> [Ω] ≤	f <sub>L,Q</sub> [kHz]	Art. Nr.:
4,7	11	140	4,7	11	140	4,7	26	115	125	006115 25
4,5	25	80	4,5	25	80	5,0	25	120	125	006115 26
2,38	17	80	2,38	17	80	3,45	26	80	125	006115 27
2,47	23	45	2,47	23	45	2,47	25	72	125	006115 28
2,47	27	45	2,47	27	45	2,8	26	72	125	006115 29
[μH]	-	-	[μH]	-	-	[μH]	-	-	[MHz]	
5,82	-	-	5,82	-	-	5,82	-	-	13,56	888025 74



Applications:

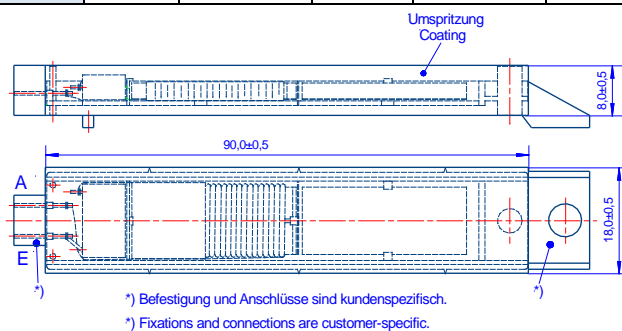
Keyless entry systems  
Keyless go  
Safety systems RFID



Universal-Antenna

Series molded Antenna: Waterproof to IP67

f <sub>res</sub> ≥ [kHz]	± [kHz]	L [μH]	± [%]	Q (ohne C) ≥	f <sub>L,Q</sub> [kHz]	Art. Nr.:
125	1	238	3	90	125	888024 00
119	1	263	3	90	125	888026 71
115	1	282	3	90	125	888026 14



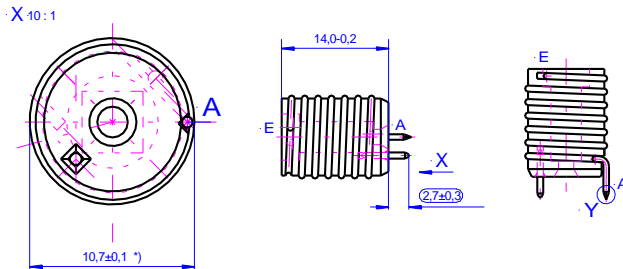
Applications:

Keyless entry systems  
Keyless go  
Door-, interior-, bumper-  
and rear-antenna



Helix-Antenna

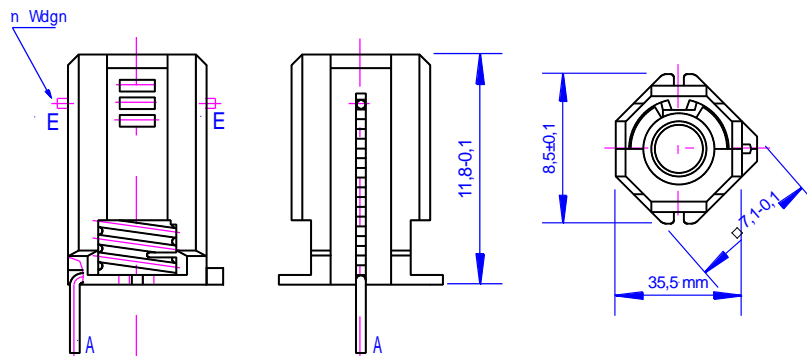
454,5 MHz-Antenna



Applications:
RF circuits
Receivers/transmitters



868 MHz-Antenna



Applications:
RF circuits
Receivers/transmitters

