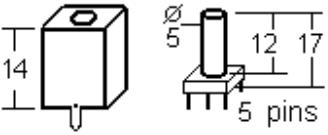
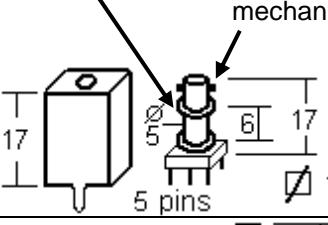
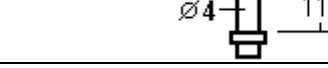
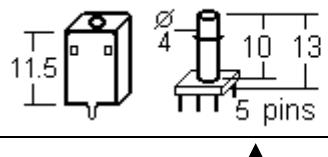
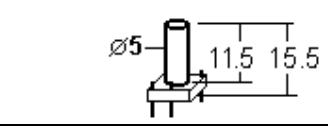
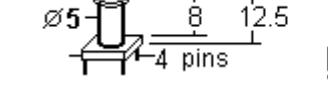


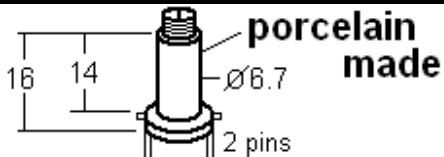
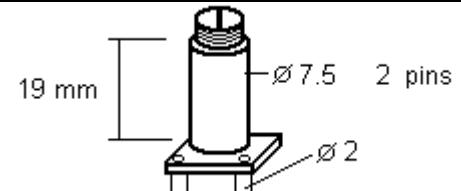
## KITS AND COIL ASSEMBLIES

pag L 1

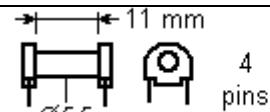
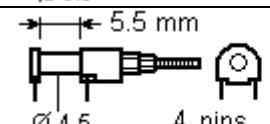
These coil assemblies are used for the construction of RF coils. In the pictures are shown all the parts included in a single kit. All coil assemblies include the tuning core (usually already provided, or provided separately).

Composition and footprint	description	cod.	price € each 1 - 10+ pcs
	shield: 10 mm support: 5 pins 10 mm with ferrite core	SBK-10F	1,05 - 0,95 0,85 / 100 pcs
	cup core mounted on support the cup core is inserted by a byonet coupling mechanism shield: 10 mm support: 5 pins 10 mm with ferrite core the cup core is used to improve Q, inductance and shielding. The winding is made within the 2 rings	SBK-10SCH	1,30 - 1,15 1,05 / 100 pcs
	support: Ø 4 mm without pins with ferrite core	SBK-01N	0,40 - 0,35
	shield: 7.5 mm support: 5 pins 7.5 mm with ferrite core	SBK-71S	1,05 - 0,96 0,88 / 100 pcs
	ferrite cup suitable for SBK-71S or 71K to improve shielding and inductance	SBK-CF1	0,25 - 0,20 0,15 / 100 pcs
	shield: 7.5 mm support: 5 pins 7.5 mm with ferrite core	SBK-71K	1,05 - 0,95 0,85 / 100 pcs
	ferrite drum core as windings support cup core support tuning cup core for frequencies < 5 MHz or for high inductance values	SBK-7A1	1,70 finishing
	Support: 3 pins 10 mm with core without shield	SBK-02N	0,40 - 0,35
	support: Ø 5.5 mm without pins and shield, with core, it has to be fitted into the p.c.b. by pushing the clips	SBK-03N	0,40 - 0,35
	support: 4 pins with upper ring to keep many windings, with core without shield	SBK-05N	0,45 - 0,40

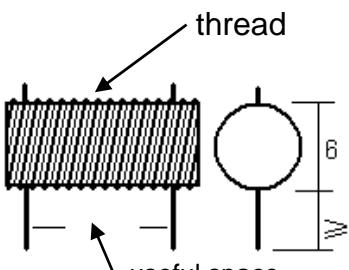
continue

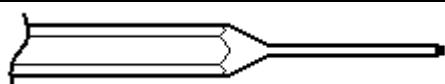
Composition and footprint	description	cod.	price € each 1 - 10+ pcs
 <b>porcelain made</b>	the body is made entirely of porcelain ceramic with a ferrite core	<b>SBK-06N</b>	2,50
	big size support with 2 pins with ferrite core	<b>SBK-07N</b>	0,40 - 0,36

**horizontal mount**

	4 pins support horizontal mount, see SBK-NF1 for the core	<b>SBK-98</b>	0,25 - 0,22
	precision fine tuning, 4 pins support, horizontal mount	<b>SBK-99N</b>	2,40
	ferrite core for SBK-98	<b>SBK-NF1</b>	0,25 - 0,22

**threaded screw supports**

	The thread guarantee the best mechanical fixing of the coils and stability over time. With the thread you can also use silver plated wire because the turns are always kept well insulated by the it, this increase the Q of the coil thanks to the possibility to use silver plated wire. These supports come without tuning core as they does not implement core tuning.		
<b>cod.</b>	<b>SBK-50</b>	useful space for the coil = 5,2 mm , max 10 turns , max wire Ø 0,3 mm, max inductance ~ 500 nH	
<b>cod.</b>	<b>SBK-51</b>	useful space for the coil = 5,7 mm , max 4,5 turns , max wire Ø 0,6 mm, max inductance ~ 100 nH	
<b>price</b>		0,45 € -- 0,40 € each ( 10 + pcs )	



trimmers and coils tuning screwdrivers  
[see variable capacitors page](#)

## INTRODUCTION TO OUR VARIABLE COILS

All these coils have been tested and characterized with our instrumentation: HP 4191A 1-1.000 MHz impedance analyzer, HP 4342A 22 KHz - 70 MHz precision Q meter and Racal 9383M RLC bridge.

Q value is referred to the measurement conditions (frequency and inductance values) and it is measured about at half of the inductance range.

The electrical diagram has to be viewed by the pin side, it is also available the number of turns. The picture shows the complete coil and all its parts, the picture is nearly in 1:1 scale and it shows quite the real size of the coil.

Coils with a parallel capacitor have also the auto-resonance value in MHz due to the internal capacitor, for these coils the maximum frequency is that stated, while the minimum frequency can be decreased by adding an external capacitor.

"MOLDED" indicates a different way of manufacturing of these coils, they are rugged, the turns are winded on a polypropylene support more resistant either to soldering and to mechanical torque and they are often use for VHF - UHF band, in "molded" coil the support has the purpose to keep the turns stable and separate to obtain the highest possible Q and thermal stability.

The "□" symbol indicates the coil external size while in the picture there is the pins pitch.

After a long work of research of technical specifications, we believe that this can be an helpful aid in choosing a component that fits as possible different projects.

The tests results have been collected directly in our lab so the specifications are often more complete than those provided by the manufacturers.



HP 4191A  
impedance analyzer, RLC , phase  
and Q meter  
1 MHz - 1 GHz



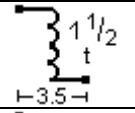
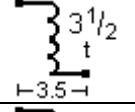
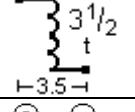
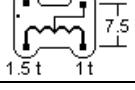
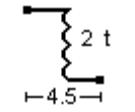
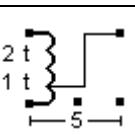
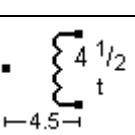
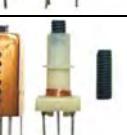
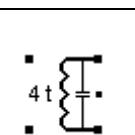
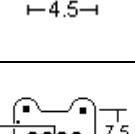
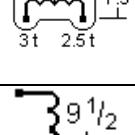
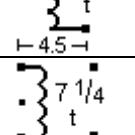
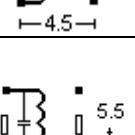
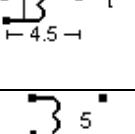
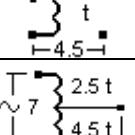
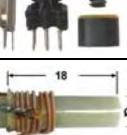
HP 4342A  
high precision Q meter  
22 KHz - 70 MHz



Racal 9343M  
LCR universal bridge

# VARIABLE COILS

pag L 4

bottom view		inductance range	= external size	cod.	price € each 1 - 10 pcs
		10.5 - 14 nH	Toko MC139 Molded NE545BNAS-100081 1.5 turns , brass core, white Q >55 @ 400MHz 5.5 - h 8 mm	<b>BV-100081</b>	1,60 - 1,40
		24 - 31 nH	Toko MC139 Molded NE545BNAS-100083 3.5 turns, brass core, orange Q 55-90 @ 150MHz 5.5 - h 8 mm	<b>BV-100083-5</b>	1,40 - 1,25 1,10 100pcs
		33 - 44 nH	Toko MC139 Molded NE545SNAS-100105 3.5 turns , orange Q 55-90 @ 150 MHz 5.5 - h 8 mm	<b>BV-100105</b>	1,40 - 1,25 1,10 100pcs
		38 - 46 nH	1.5 + 1 turns Q > 80 ( @ 70 MHz @ 40 nH ) 9 - h 12 mm max , without pins	<b>BV-BSP2</b>	1,00 - 0,90
		38 - 46 nH	Coilcraft 150-02J08SL Molded 2.5 turns high quality and high Q VHF coil Q > 80 ( @ 50 MHz @ 40 nH ) SRF > 1.5 GHz , Rdc 0.009 Ω 7 - h 14	<b>BV-150</b>	1,80 - 1,60
		43 - 57 nH	3 silver wire turns ( 2 + 1 ) Q > 110 ( @ 70 MHz @ 50 nH ) 10 - h 20	<b>BV-1717</b>	1,70 finishing
		105 - 140 nH	Neosid 5061 , 4 1/2 turns Q 90 ( @ 130 MHz @ 125 nH ) 7 - h 14	<b>BV-5061</b>	2,00
		125 - 225 nH	4 turns - 100 pF capacity resonance L+C 34-45 MHz if it will be used as resonant circuit the max. frequency will be about 43 MHz coil Q > 65 ( @ 40 MHz @ 170 nH ) 7.5 - h 13 mm	<b>BV-5538</b>	1,00 - 0,90
		145 - 235 nH	2.5 + 3 turns very good Q >90 ( @ 50 MHz @ 180 nH ) >60 >10 MHz the coil has no pins (see picture) 9 - h 14 mm max	<b>BV-BSP5</b>	0,90 - 0,80
		190 - 250 nH	Toko MC136 Molded E542DNAS-100083 9.5 turns , red Q 65-90 @ 70 MHz 7.7 - h 10 mm	<b>BV-100083-7</b>	1,70 - 1,50
		200-340 nH	Neosid 5049 , 7 1/4 turns Q 75 ( @ 40 MHz @ 270 nH ) 7 - h 13 mm	<b>BV-5049</b>	2,20
		210 - 400 nH	5 turns , 58 pF capacity coil Q > 65 ( 25 ÷ 85 MHz ) resonance L+C = 35-47 MHz if it will be used as resonant circuit the max. frequency will be about 45 MHz 7 - h 13 mm	<b>BV-2019</b>	1,50
		230 - 400 nH	5 turns Q > 70 ( @ 40 MHz @ 320 nH ) 7.5 - h 10 mm	<b>BV-612369</b>	1,50 - 1,30
		260 - 400 nH	4.5 + 2.5 turns Q > 90 ( 10 - 55 MHz ) Ø 7.5 - h 18 mm , to insert as clip in the p.c.b. in a hole of Ø 5.8-6 mm	<b>BV-BFB3</b>	0,60 - 0,50

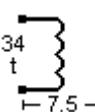
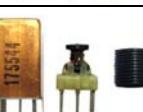
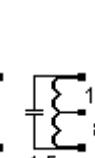
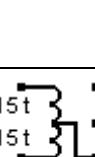
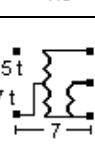
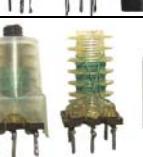
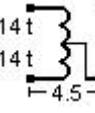
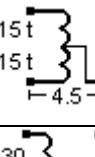
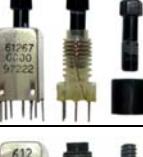
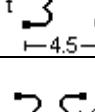
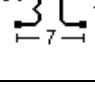
# VARIABLE COILS

pag L 5

bottom view		inductance range	= external size	cod.	price € each 1 - 10 pcs
		270 - 430 nH	7 turns - 7 turns Q 40 ( @ 50 MHz @ 350 nH ) 7 - h 11	<b>BV-304142</b>	0,90 - 0,80 0,70 100pcs
		330 - 630 nH	10 turns Q > 60 ( 15 ÷ 70 MHz @ 500 nH ) 10 - h 15 mm	<b>BV-0721</b>	1,70
		400 - 630 nH	10 turns - capacity 33 pF resonance L+C 35-43 MHz if it will be used as resonant circuit the max. frequency will be about 40 MHz coil Q > 65 ( @ 36 MHz @ 0.5 µH ) 7.5 - h 13 mm	<b>BV-R22G</b>	1,20 - 1,10 0,95 100pcs
		420 - 750 nH	9 turns , capacity 24 pF coil Q > 70 ( 15 ÷ 60 MHz @ 600 nH ) resonance L+C 37 - 50 MHz if it will be used as resonant circuit the max. frequency will be about 48 MHz 7 - h 15 mm	<b>BV-GNA</b>	1,70
		500 - 850 nH	5 + 5 turns , both windings are central tab , Q > 40 ( @ 25 MHz @ 0.7 µH ) 7.5 - h 12 mm	<b>BV-8140</b>	1,00 - 0,90 0,80 100pcs
		500-950 nH	Neosid 5046 , 14 turns Q 70 ( @ 40 MHz @ 730 nH ) 7 - h 15 mm	<b>BV-5046</b>	2,20
		0.5 - 1 µH	8 turns Q > 70 ( 10 - 40 MHz @ 0.75 µH ) 7 - h 14	<b>BV-DM 7066</b>	1,40 - 1,20
		0.6 - 1.5 µH	4 + 4 turns ( central tab ) Q > 55 ( a 8 MHz @ 1.2 µH ) , 10 - h 12 mm	<b>BV-L1-3562</b>	1,50 - 1,30
		0,9 - 1.3 µH	6 turns - 2 turns Q > 70 ( @ 10 MHz @ 1.2 µH ) inductance value and Q are referred to 6 turns side 7.5 - h 7 mm	<b>BV-00302</b>	1,40 - 1,20
		0.9 - 1.4 µH	10 turns Q > 80 ( @ 20 MHz @ 1.2 µH ) 7.5 - h 15 - 20 mm	<b>BV-N809</b>	1,50 - 1,30
		1,2 - 2.8 µH	16 turns Q > 45 ( @ 15 MHz @ 1.8 µH ) O 6 - h 13	<b>BV-J</b>	1,00 - 0,90
		1.6 - 4 µH	20 turns , Q > 40 ( @ 20 MHz @ 3µH ) 7.5 - h 14 mm like Neosid 5056	<b>BV-5056</b>	1,80 - 1,60
		1.7 - 3.2 µH	22 turns , Q > 70 ( @ 10 MHz @ 2.5 µH ) 10 - h 17 mm	<b>BV-1.7-3.2</b>	1,40

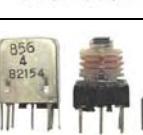
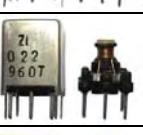
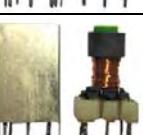
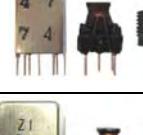
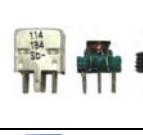
# VARIABLE COILS

pag L 6

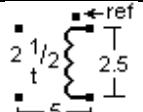
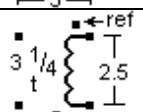
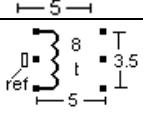
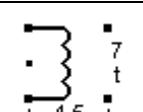
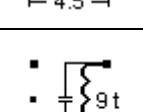
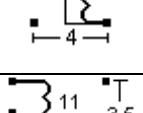
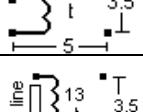
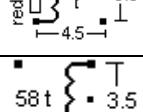
bottom view		inductance range	= external size	cod.	price € each 1 - 10 pcs
		2.1 - 2.6 µH	28 turns Q > 70 ( > 10 MHz @ 2.4 µH ) the coil has no pins (see picture) 9 - h 15 mm max	<b>BV-BSP28</b>	1,00 - 0,90
		3 - 4.6 µH	2 + 13 turns , the inductance value is the sum of the two windings Q > 90 ( @ 8 MHz @ 3.7 µH ) 6 - h 6.5 mm	<b>BV-3777</b>	1,30 - 1,15 1,00 100pcs
		3.9 - 7.4 µH	34 turns , Q > 60 ( @ 8 MHz @ 5 µH ) 10 - h 17 mm	<b>BV-3.9-7.4</b>	1,50
		4 - 6.3 µH	Neosid 175544 16 turns ( 4 - 6.3 µH ) - 4 + 4 turns Q > 75 ( 3.5 - 15 MHz @ 5.3 µH ) 7 - h 12 mm	<b>BV-175544</b>	1,40 - 1,25 1,10 100pcs
		4 - 8 µH	Coilcraft 8141-812-400 16 + 8 turns (the inductance value is the sum of 16 + 8 windings ) capacity 70pF, resonance L+C = 6-9 MHz if it will be used as resonant circuit the max. frequency will be about 8.5 MHz MHz coil Q > 45 ( @ 6.5 µH @ 7 MHz ) 7 - h 16 mm	<b>BV-8141</b>	1,00 - 0,90 0,80 100pcs
		5 - 12 µH	15 + 15 turns ( central tab ) Q > 65 ( @ 3 MHz a 10 µH ) 7.5 - h 15 max 23 mm	<b>BV-3001</b>	1,40 - 1,20
		5,2 - 7,8 µH	7 + 15 turns ( 5.2 ÷ 7.8 µH ) - 2 turns Q > 100 ( 1 ÷ 15 MHz @ 6.5 µH ) high Q due to the litz cable 10.5 - h 23 mm	<b>BV-D</b>	1,00 - 0,90
		6 - 15 µH	14 + 14 turns ( central tab ) Q > 65 ( a 3 MHz @ 10 µH ) 7.5 - h 15 max 23 mm	<b>BV-7000</b>	1,50 - 1,30
		6 - 12 µH	15 + 15 turns ( central tab ) Q > 80 ( @ 7 MHz @ 9 µH ) 7 - h 20 mm	<b>BV-612.670</b>	1,10 - 0,95 0,85 100pcs
		8 - 15 µH	30 turns Q > 80 ( @ 3 MHz @ 12 µH ) 7 - h 14 mm	<b>BV-612.351</b>	1,10 - 0,95 0,85 100pcs
		10 - 16 µH	40 turns - 1.5 turns Q > 45 ( @ 2 MHz @ 12 µH ) 10 - h 18 max 23 mm	<b>BV-10R</b>	1,40 - 1,20

# VARIABLE COILS

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bottom view		inductance range	= external size	cod.	price € each 1 - 10 pcs
		11 - 19 µH	67 turns Q > 80 ( a 5 MHz @ 15 µH ) the coil has no pins (see picture) 9 - h 14 mm max	BV-BSP67	1,00 - 0,90
		13 - 19 µH	21 + 21 turns ( central tab ) Q > 50 ( @ 2 MHz @ 17 µH ) 10.5 - h 18 max 23 mm	BV-15N	1,30 - 1,15 1,00 100pcs
		13 - 20 µH	26 turns , 82 pF capacity resonance L+C = 3.8 ÷ 5 MHz coil Q > 90 ( @ 5 MHz @ 16 µH ) 7 - h 12 mm	BV-R22E	0,80
		14 - 27 µH	39 turns // 82 pF resonance L+C 3,4-5 MHz coil Q = 60 ( 1 ÷ 5 MHz @ 22 µH ) 10.5 - h 14 mm	BV-856	1,20
		23 - 38 µH	34 - 17+17 turns ( central tab ) Q > 70 ( @ 2 MHz @ 30 µH ) 7.5 - h 7 mm	BV-0321	1,20 - 1,05
		32 - 45 µH	27 + 27 turns ( central tab ) Q > 55 (@ 1 MHz @ 40 µH) 10 - h 15 mm	BV-SJ032	1,30 - 1,15
		52 - 70 µH + 45 - 60 µH	45 turns ( 45 ÷ 60 µH ) 50 turns ( 52 ÷ 70 µH ) Q > 50 ( @ 455 KHz ) 11 - h 19 mm	BV - B	1,00
		90 - 160 µH	60 turns Q > 100 ( @ 455 KHz @ 130 µH ) 10 - h 13 mm	BV-960T	1,20 - 1,05
		95 - 130 µH	73 turns , Q > 70 ( @ 455 KHz @ 115 µH ) 11 - h 19 mm	BV - A	1,00 - 0,90
		190 - 275 µH	100 + 4 turns ( 190 - 275 µH ) - 6 turns Q > 70 ( @ 455 KHz @ 230 µH ) 11 - h 19 mm	BV - C	1,00
		270 - 560 µH	88 + 3 turns - 7 turns inductance value is the sum of 88+3 turns Q > 130 ( @ 455 KHz @ 420 µH ) 7.5 - h 12 mm	BV-4774	1,30 - 1,15
		500 - 900 µH	120 + 30 turns , capacity 180 pF Q > 100 ( a 455 KHz @ 700 µH ) 10 - h 13 mm	BV-96HT	0,70 - 0,60
		600 - 930 µH	50 + 100 turns ( 600 - 930 µH ) // 182 pF + 20 turns, resonance L+C 400 - 500 KHz coil Q > 80 ( @ 455 KHz @ 750 µH ) 7 - h 7 mm	BV-114184	1,10 - 0,95
		700 - 1030 µH	195 turns ( 700 - 1030 µH ) + 30 turns Q > 80 (@ 1 MHz @ 880 µH) Q 130 (@ 455 KHz @ 880 µH) 7 - h 12 mm	BV-532910	1,50 - 1,35

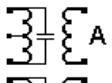
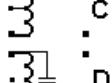
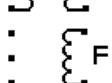
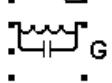
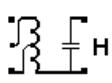
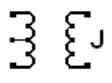
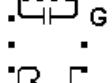
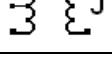
## THESE ARE SMD (SURFACE MOUNT) COILS

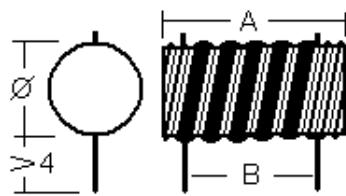
bottom view		inductance range	= external size	cod.	price € each 1 - 10 pcs
		45 - 49 nH	Toko 657BN-A048CDL 5CBM series 2 1/2 turns , Q > 50 ( @ 100 MHz @ 47 nH ) 4.5 - h 2.2 mm , yellow dot reference	<b>BV-A048</b>	0,90 - 0,80 0,70 100pcs
		68 - 74 nH	Toko 657BN-A047CDL 5CBM series 3 1/4 turns , Q > 55 ( a 100 MHz a 70 nH ) 4.5 - h 2.2 mm , red dot reference	<b>BV-A047</b>	0,90 - 0,80 0,70 100pcs
		345 - 445 nH	Toko A638AN-A015HM 5CCE series , 8 turns Q > 60 @ 50 MHz , 6 - h 6 mm	<b>BV-4038</b>	0,90 - 0,80 0,70 100pcs
		150 nH as supplied ( 125 - 180 nH )	7 turns , Q > 60 ( 40 ÷ 140 MHz @ 150 nH ) ( remove the black plastic cover to tune ) max 1 A , SRF > 750 MHz , Rdc 0.04 Ω 5.6 x 4 h 6.8 ( max 9 )	<b>BV-42235</b>	0,70 - 0,60
		1 - 1.4 μH	Toko 5CD series 9 turns // 13 pF, Q > 70 @ 20 MHz optimal frequency up to 30 MHz resonance @ 30MHz add // 12pF @ 10MHz // 250pF , 5 - h 5 mm	<b>BV-83</b>	0,90 - 0,80 0,70 100pcs
		1.8 - 2.3 μH	SMD , 11 turns Q > 70 @ 10.7 MHz - 6 - h 6 mm	<b>BV-1-22</b>	1,00 - 0,90 0,80 100pcs
		2.35 - 2,85 μH	Toko L372PN-1141Z 5CDLS series 13 turns , Q > 50 ( @ 10.7 MHz @ 2.6 MHz ) 5 - h 2 mm	<b>BV-372PN</b>	0,90 - 0,80
		38 - 66 μH	Toko P614BN-0757Z 5CCD series 58 turns , Q > 60 ( @ 2 MHz @ 52 μH ) 6 - h 6 mm	<b>BV-32-5</b>	0,90 - 0,80

# IF Coils and Trasformers : 455 KHz - 5.5 e 10.7 MHz

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They are coils and / or tranformers often used in the amplification of intermediate frequency receivers for AM, FM, etc.. , Intermediate frequency values are 455 / 460 KHz, 10.7 MHz and 5.5 MHz too. Each coil is supplied with shield and tuning ferrite core, choose design represented by the letter A to J according your application (see pictures).

picture	freq.	external size	design		cod.	price €	
	455 KHz	<input type="checkbox"/> 10 mm	A	AM1 yellow	B-455-A-10-G	1,00	
		<input type="checkbox"/> 10 mm	A	AM2 white	B-455-A-10-B	0,80	
		<input type="checkbox"/> 10 mm	A	AM3 black	B-455-A-10-N	1,00	
		<input type="checkbox"/> 10 mm	E	L.O. red	B-455-E-10-R	0,75	
		<input type="checkbox"/> 10 mm	H	yellow , made of 30 + 120 turns and a 180pF internal capacitor	B-455-H-10-G	0,70	
		<input type="checkbox"/> 7 mm	A	AM1 yellow	B-455-A-7-G	0,90	
		<input type="checkbox"/> 7 mm	D	white	B-455-D-7-B	0,60	
		<input type="checkbox"/> 7 mm	A	AM3 black	B-455-A-7-N	0,70	
		<input type="checkbox"/> 6 mm	A	black	B-455-A-6-N	0,65	
		<input type="checkbox"/> 7 mm	G	see also winded coils	B-5.5-G-7-V	0,80	
<hr/>							
<hr/>							
	10 .7 MHz	<input type="checkbox"/> 10 mm	B	green	B-10.7-B-10-V	0,90	
		<input type="checkbox"/> 7 mm	C	azure	B-10.7-C-7-A	0,70	
		<input type="checkbox"/> 7 mm	F	black	B-10.7-F-7-N	0,65	
		<input type="checkbox"/> 7 mm	B	green	B-10.7-B-7-V	0,80	
		<input type="checkbox"/> 7 mm	J	FM1 black , for 10.7MHz resonance the capacitor has to be from 47 to 56pF	B-10.7-J-7- N	0,80	



These coils are winded on an insulate threaded support and they have the following advantages: mechanically rugged, high thermal stability and high repeatability as the turns are forced to remain wrapped within the thread and winded tight and hot made. They have high Q, low parasitic capacity and high SRF, each coil was tested in our laboratory, the Q was measured at a given frequency and shown in "MHz" column.

induct. nH	Q MHz	size			cod.	price €	induct. nH	Q MHz	size			cod.	price €
		A	B	Ø					A	B	Ø		
30	70 100	7.5	3.5	4	<b>B-F30-4</b>	0,55	150	85 70	12	7.5	6	<b>B-F150-6</b>	0,55
50	90 100	11	6.5	6	<b>B-F50-6</b>	0,55	175	100 70	14	9.5	6	<b>B-F175-6</b>	0,55
60	70 100	7.5	3	4	<b>B-F60-4</b>	0,55	200	75 70	12	7.5	4	<b>B-F200-4</b>	0,55
60	85 100	12	7.5	6	<b>B-F60-6</b>	0,55	225	95 70	9	5	6	<b>B-F225-6</b>	0,55
70	70 100	9	5	4	<b>B-F70-4</b>	0,55	250	70 30	10	6	6	<b>B-F250-C</b>	0,55
80	80 100	11	7	6	<b>B-F80-6</b>	0,55	250	80 30	16	11	6	<b>B-F250-L</b>	0,55
100	65 70	9	5	4	<b>B-F100-4</b>	0,55	275	74 30	10	6	6	<b>B-F275-6</b>	0,55
100	78 70	11	6	6	<b>B-F100-6</b>	0,55	280	80 30	18	13.5	6	<b>B-F280-6</b>	0,55
110	80 70	10	6	4	<b>B-F110-4</b>	0,55	300	78 30	11	6.5	6	<b>B-F300-C</b>	0,55
115	80 70	11	6.5	6	<b>B-F115-6</b>	0,55	300	80 30	18	13.5	6	<b>B-F300-L</b>	0,55
125	80 70	10	6	4	<b>B-F125-4</b>	0,55	500 also power apps	120 30	23	18.5	12	<b>B-F500-12</b>	0,70
125	85 70	12	7.5	6	<b>B-F125-6</b>	0,55		90 30	14	9	6	<b>B-F600-6</b>	0,55
130	95 70	16	12	6	<b>B-F130-6</b>	0,55	600	90 30	11	7.5	6	<b>B-F625-6</b>	0,55
150	65 70	12	7.5	4	<b>B-F150-4</b>	0,55	625	90 30	14	9	6	<b>B-F725-6</b>	0,55
							725	100 30	14	9	6		

## SPECIAL Inductances : high SRF , for BIAS - T , QPL and ultra-stable

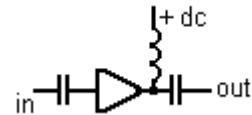
These inductors for microwave have high SRF and very good QPL, they are stable in temperature so they are used for very critical functions like BIAS T or "decoupling on power supply". BIAS T does not come cheap or easy to build, the aim is to supply power to an RF device like broadband MMIC, low noise amp., switch, pin or tuning varactor etc..

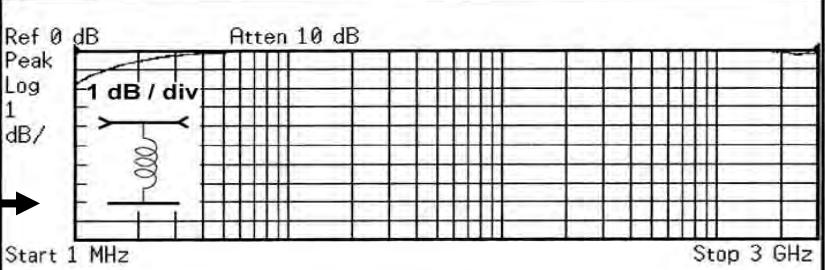
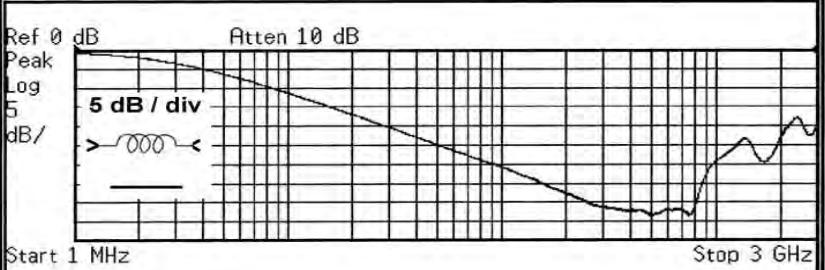
The difficulty is to select critical components, C and L, free from parasitic resonances within a wide frequency range (3-5 decades), technicians well know the importance of good decoupling in amplifiers and high performance active devices. One rule is to reduce the size, in fact, two of these inductors have an SRF > 15 GHz, another inductances can be inserted in order to obtain the desired value. They can be considered as a complementary component of beam-lead capacitors, the size is so small that the similarity is almost appropriate.

value	test freq		SRF self res.	max res.	I dc max	they can even be soldered normally but at lower temperatures	cod.	price € each 1 - 10 pcs
	MHz	Q						
<b>11</b> nH	200	>35	> 15 GHz	0,40 Ω	200 mA	4 turns Ø supp. 0.6mm gold wire Ø 50 µm turn pitch 0,07 mm micro-miniature Microwave Corporation 4-2544-GSA-11	<b>BSRF-11N</b>	4,00 - 3,50
<b>17.5</b> nH	300	100	>2.5GHz tip. 4 GHz	0.05 Ω	4 A	6.5 x 3.2 mm Coilcraft B06TJ 5 % ultra high Q ( Q > 90 100 - 600 MHz )	<b>BCQ-17n5</b>	0,60 - 0,55
<b>24</b> nH	200	>32	> 15 GHz	0.29 Ω	100 mA	ext. Ø 0.6 x 0.3 mm insulated wire Ø 36 µm QPL standards , Piconics M5T47 suitable for bonding	<b>BSRF-24N</b>	5,50 - 5,00
<b>35</b> nH	200	>60	> 1.4 GHz	0.1 Ω	1 A	ext..Ø 2 x lenght 3 mm enameled copper wire, encapsulated in epoxy resin, QPL standards, ultra stable vs. temperature +/- 15 ppm /°C Piconics S350K <b>provided in 5 pcs pack</b>	<b>BSRF-35N</b>	1 pack of 5 pcs = 17,50 € ( = 3,50 € each )  3 packs of 5 pcs = 48,00 € ( = 3,20 € each )
<b>43</b> nH	200	100	>1.5GHz tip. 2.5 GHz	0.08 Ω	4 A	6.5 x 3.2 mm Coilcraft B10TJ 5 % ultra high Q ( Q > 90 100-300 MHz )	<b>BCQ-43N</b>	0,60

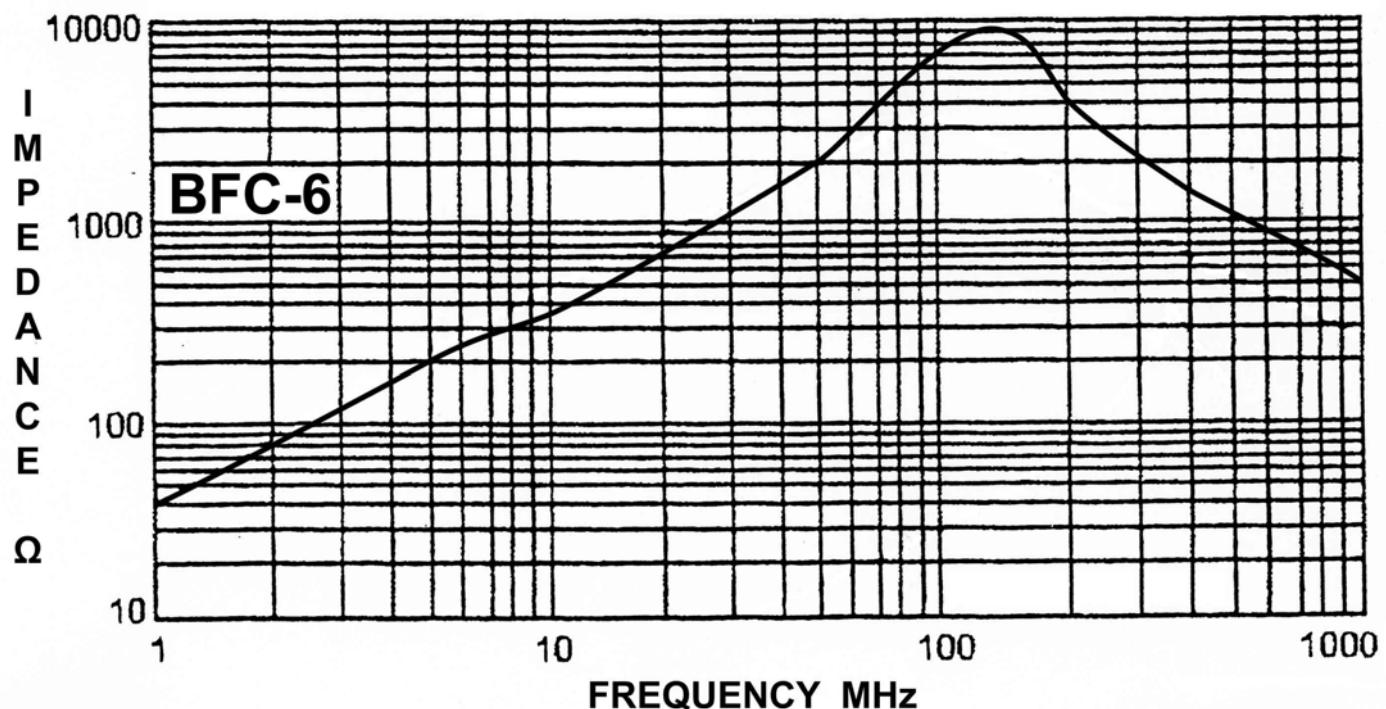


Typical decoupling on wide band  
MMIC power supply



<b>VHF-UHF choke</b>	6 $\mu$ H choke suitable for any use from 20 MHz to 2 GHz for power supply decoupling, winded with $\varnothing$ 0,3 mm enamelled copper wire on ferrite base $\varnothing$ 2 mm, lenght 14 mm, max 1 A, Res. dc 0,06 $\Omega$ 	BFC-6 in parallel ( loss )		
		BFC-6 in series (decoupling)		
<b>cod. BFC-6</b>	price 1 - 9 pcs 0,25 € each	price 10 - 24 pcs 0,23 € each	price 25 - 99 pcs 0,21 € each	price 100 - 249 pcs 0,19 € each

impedance vs. frequency



note that for the construction of this type of impedance (RF choke for HF-VHF-UHF) are available a variety of ferrite rods, for example. types BF1 and BF2. It is possible to build a custom RF choke with an enamelled copper wire winding .

see ferrite rods types BF....

**INDUCTANCES with leads -- RF chokes -- Impedances** pag L 12

pict..	type	value	cod.	price €	value	cod.	price €	value	cod.	price €
	<b>AXIAL small size</b> $\varnothing 3 \times 8$ or $\varnothing 3.5 \times 9$ low voltage	27 nH	BAP-27n	0,45	0,82 $\mu$ H	BAP-0u82	0,45	33 $\mu$ H	BAP-33u	0,45
								39 $\mu$ H	BAP-39u	
		0,1 $\mu$ H	BAP-0u1		1 $\mu$ H	BAP-1u		47 $\mu$ H	BAP-47u	
		0,15 $\mu$ H	BAP-0u15		1,5 $\mu$ H	BAP-1u5		100 $\mu$ H	BAP-100u	
		0,33 $\mu$ H	BAP-0u33		1,8 $\mu$ H	BAP-1u8		120 $\mu$ H	BAP-120u	
					5,6 $\mu$ H	BAP-5u6		180 $\mu$ H	BAP-180u	
		0,56 $\mu$ H	BAP-0u56		12 $\mu$ H	BAP-12u		560 $\mu$ H	BAP-560u	
		0,68 $\mu$ H	BAP-0u68		15 $\mu$ H	BAP-15u		820 $\mu$ H	BAP-820u	
	<b>AXIAL medium size</b> $\varnothing 4 \times 10$ or $\varnothing 5.6 \times 13$ or $6.5 \times 16$ medium voltage	0,15 $\mu$ H	BAM-0u15	0,45			0,45			0,45
		0,39 $\mu$ H	BAM-0u39		2,7 $\mu$ H	BAM-2u7		68 $\mu$ H	BAM-68u	
		0,56 $\mu$ H	BAM-0u56		12 $\mu$ H	BAM-12u		110 $\mu$ H	BAM-110u	
		0,68 $\mu$ H	BAM-0u68					120 $\mu$ H	BAM-120u	
		0,82 $\mu$ H	BAM-0u82		22 $\mu$ H	BAM-22u		220 $\mu$ H	BAM-220u	
		1 $\mu$ H	BAM-1u		27 $\mu$ H	BAM-27u		820 $\mu$ H	BAM-820u	
		1,2 $\mu$ H	BAM-1u2							
	<b>AXIAL high values</b>	1 mH $\varnothing 2,6$	BAA-1m-A	0,50	1,5 mH $\varnothing 3,6$	BAA-1m5	0,50	2,7 mH $\varnothing 3,6$	BAA-2m7	0,50
		1 mH $\varnothing 3,6$	BAA-1m-B							

type	description	pict.	value	cod.	price €
<b>AXIAL</b> for medium voltage	on power supply general purpose		Siemens $\varnothing 4 \times 14$ mm 14 $\mu$ H Rs 0,7 $\Omega$ 1 A	BFC-414	0,75
			Siemens $\varnothing 8 \times 34$ mm 25 $\mu$ H Rs 0,02 $\Omega$ 3 A coated type, B 82111-B-C23	BFC-834	0,90
	HF VHF-UHF		6 $\mu$ H general purpose choke , from 20 MHz to 2 GHz for power supply decoupling, winded with $\varnothing 0,3$ mm enamelled copper wire on ferrite rod $\varnothing 2$ mm, length 14 mm, max 1 A , Res. dc 0,06 $\Omega$	BFC-6	0,25 € 1-9 pz 0,23 € 10-24 pcs

pict.	type	value	cod.	price €	value	cod.	price €	value	cod.	price €
	<b>VERTICAL</b> Neosid TDK or Toko	0,47 $\mu$ H	BV-0u47	0,45	8,2 $\mu$ H	BV-8u2	0,45	47 $\mu$ H	BV-47u	0,45
		2,2 $\mu$ H	BV-2u2		22 $\mu$ H	BV-22u		68 $\mu$ H	BV-68u	
		3,3 $\mu$ H	BV-3u3		33 $\mu$ H	BV-33u		100 $\mu$ H	BV-100u	

type	pict.	description	cod.	price € each 1 - 10 pz
<b>VK 200</b> RF choke for power supply in the TX final power stage , for medium-high current		with 1,5 turns suitable for VHF - UHF	VK 200-1	0,45 - 0,40
		with 2,5 turns suitable for HF - VHF - UHF	VK 200-2	0,50 - 0,45
		2 separate windings to increase common-mode rejection	VK 200-D	0,65
		6 holes ferrite suitable for building VK 200 chokes	VK 200-F	0,25 - 0,20

They are SMD inductors used as general purpose choke to supply power or to decouple RF parts of the power supply, for Bias T etc... for low and medium current. For applications such as RF matching, oscillating circuits (eg VCO) or resonant circuits, it is most recommended to use high-Q inductors described on the next pages.

	SMD NORMAL Choke available values		<b>cod.</b>  <b>BCN + inductance value</b> eg. BCN-5u6	price € each  1 - 4 pcs = 0,25 € 5 - 9 pcs = 0,22 € 10-30 pcs = 0,20 € 31-100pcs = 0,18 € 101 + pcs = 0,16 €
	<b>nH</b>	10n - 12n - 15n - 18n - 22n - 27n - 33n - 39n - 47n - 56n - 68n - 82n - 100n - 120n - 150n - 180n - 220n - 270n - 330n - 390n - 470n - 560n - 680n - 820n		
	<b>μH</b>	1u - 1u2 - 1u5 - 1u8 - 2u2 - 2u7 - 3u3 - 3u9 - 4u7 - 5u6 - 8u2 - 10u - 15u - 18u - 22u - 27u - 33u - 47u - 68u - 82u - 100u - 120u - 180u - 220u - 270u - 330u - 390u - 470u - 1000u (1mH)		

## “HIGH CURRENT” CHIP Inductances for SMD

These SMD inductors are used for high current.

	SMD HIGH CURRENT choke available values		<b>cod.</b>	price € each 1 - 10 pcs
	<b>17.5 nH</b>	4 A 0.08 Ω 3.2 x 6.5 mm Coilcraft B10TJ 5 % high Q ( Q > 90 100-600 MHz ) best use as choke for over 1 GHz power stages power supply		
		<b>43 nH</b> 4 A 0.1 Ω 6.5 x 3.2 mm Coilcraft B10TJ 5 % high Q ( Q > 90 100-300 MHz ) best use as choke for over 400 MHz power stages power supply	<b>BCQ-43N</b>	0,60
		<b>150 nH</b> 1 A 0.04 Ω high Q > 60 ( 40 ÷ 140 MHz ) SRF > 750 MHz 5.6 x 4 h 6.8 mm	<b>BV-42235</b>	0,70 - 0,60
		<b>1.5 μH</b> 0.8 A 0.15 Ω high SRF > 300 MHz 4.5 x 3.2 mm	<b>BCC-1U5</b>	0,35 - 0,30
		<b>3.3 μH</b> 6.4 A 0.015 Ω Coilcraft DO3316P-332 9.4 x 13mm	<b>BCC-3N3</b>	0,60
		<b>10 μH</b> 3.8 A 0.038 Ω Coilcraft DO3316P-103 9.4 x 13 mm	<b>BCC-10U</b>	0,50 - 0,45
		<b>22 μH</b> 1 A 0.11 Ω TDK SLF7032T 9.5 x 12.5 mm	<b>BCC-22U-A</b>	0,50 - 0,45
		<b>22 μH</b> 1.8 A 0.18 Ω Coilcraft DO3308P-223 9.4 x 13 mm	<b>BCC-22U-B</b>	0,60 - 0,55
		<b>68 μH</b> 1.2 A 0.15 Ω Coilcraft 9.4 x 13 mm	<b>BCC-68U</b>	0,50 - 0,45
		<b>150 μH</b> 0.5 A 0,63 Ω Murata shielded type 6.3 x 6.3 mm	<b>BCC-150U</b>	0,35 - 0,30
		<b>470 μH</b> 0.25 A 3 Ω Toko shielded type 817CE-471 Type D73LC 7.6 x 7.6 mm	<b>BCC-470U</b>	0,40 - 0,35

These inductances are used where are required better RF or microwave performances, for example, a higher frequency of self resonance (SRF), or a better Q, or both, with better accuracy and repeatability, they are therefore to be used in VCO, oscillating or resonating circuits, RF filters, matching circuits, etc..



induct. nH	SRF - Self Res. Freq.	Q	Q test freq.	resist Ω	I max	size mm 1.6x0.8=0603 - 2x1.3=0805 2.8x2.6=1008 - 3.2x1.6=1206	cod.	price € 1 - 10+pcs
<b>1.5 nH</b>	> 7 GHz	80	1.8 GHz	0.04	1 A	1.6 x 0.8 Toko LL1608F	<b>BCQ-1n5-A</b>	0,30 - 0,26
	> 6 GHz	>60	2 GHz	0.15	280m	1x0.5 (0402) Murata LQP10 ±0.2nH	<b>BCQ-1n5-B</b>	0,25 - 0,20
<b>1.8 nH</b>	> 10 GHz	52	1.8 GHz	0.05	1 A	1.6 x 0.8 Toko LL1608F	<b>BCQ-1n8-A</b>	0,30 - 0,26
	> 10 GHz	88	1.7 GHz	0.06	2 A	2 x 1.5 Avx AccuL ± 0.2 nH	<b>BCQ-1n8-B</b>	0,80 - 0,70
<b>2.2 nH</b>	> 6 GHz	> 55	1 GHz	0.1	300m	1.6 x 0.8 Murata LQG11A ± 0.3 nH	<b>BCQ-2n2</b>	0,25 - 0,20
<b>2.7 nH</b>	> 6 GHz	72	1.8 GHz	0.07	1 A	1.6 x 0.8 Toko LL1608F	<b>BCQ-2n7-A</b>	0,30 - 0,26
	> 10 GHz	80	1.7 GHz	0.08	2 A	2 x 1.5 Avx AccuL ±0.2 nH	<b>BCQ-2n7-B</b>	0,70 - 0,60
<b>3.3 nH</b>	> 6 GHz	55	1.5 GHz	0.2	300m	1.6 x 0.8 Murata LQP11A-LQP18MN	<b>BCQ-3n3-A</b>	0,35 , 0,30
	> 6 GHz	>55	2 GHz	0.08	600m	2.2 x 1.6 Coilcraft 0805HS	<b>BCQ-3n3-B</b>	0,50 - 0,45
	> 6 GHz	>30	1 GHz	0.3	190m	1x0.5 (0402) Murata LQP10 ±0.2nH	<b>BCQ-3n3-C</b>	0,25 - 0,20
<b>3.9 nH</b>	> 6 GHz	70	1.8 GHz	0.09	1 A	1.6 x 0.8 Toko LL1608F	<b>BCQ-3n9-A</b>	0,30 - 0,26
	> 7.5 GHz	>100	0.8 GHz	0.006	2 A	2.4 x 1.4 Coilcraft 0906-4KL ultra High Q	<b>BCQ-3n9-B</b>	0,60 - 0,55
<b>4.7 nH</b>	> 5.5 GHz	70	1.8 GHz	0.09	1 A	1.6 x 0.8 Toko LL1608F	<b>BCQ-4n7-A</b>	0,32 - 0,28
	> 4 GHz	> 60	1 GHz		300m	2x1.2 Samsung CIH21T4N7SN ±0.3 nH	<b>BCQ-4n7-B</b>	0,25 - 0,20
	5.5 GHz	> 76	1.7 GHz	0.1	750m	2 x 1.5 AVX AccuL ± 0.5 nH	<b>BCQ-4n7-C</b>	0,70 - 0,60
	> 6 GHz	> 30	1 GHz	0.5	160m	1x0.5 (0402) Murata LQP10 ±0.2nH	<b>BCQ-4n7-D</b>	0,25 - 0,20
<b>5.6 nH</b>	> 4 GHz	60	1.8 GHz	0.09	600m	1.6 x 0.8 Toko LL1608F ± 0.3 nH	<b>BCQ-5n6-A</b>	0,30 - 0,26
	> 3 GHz	> 25				3.2 x 2.5 Simid 01	<b>BCQ-5n6-B</b>	0,40 - 0,35
<b>6.8 nH</b>	> 4 GHz	67	1.8 GHz	0.1	600m	1.6 x 0.8 Toko LL1608F	<b>BCQ-6n8-A</b>	0,30 - 0,26
	> 5 GHz	> 70	1.5 GHz	0.06	1 A	3.2 x 1.6 Stettner 5503	<b>BCQ-6n8-B</b>	0,30 - 0,26
<b>8.2 nH</b>	> 3.5 GHz	40	1 GHz	0.2	300m	1.6 x 0.8 Murata	<b>BCQ-8n2-A</b>	0,30 - 0,26
	> 5 GHz	50	1 GHz	0.22	600m	2.8 x 2.6 Coilcraft 1008CT	<b>BCQ-8n2-B</b>	0,40 - 0,35
	> 3.5 GHz	55	1.7 GHz	0.12	1.5A	2 x 1.5 AVX AccuL ± 0.5 nH	<b>BCQ-8n2-C</b>	0,70 - 0,60
	> 3.6 GHz	> 40	1 GHz	0.5	150m	1.6x0.8 Murata LQP11A ± 0.2nH	<b>BCQ-8n2-D</b>	0,32 - 0,28
<b>10 nH</b>	> 2 GHz	60	1 GHz	0.08	1 A	3.2 x 2.5 Murata LQN2A	<b>BCQ-10n-A</b>	0,30 - 0,26
	> 2.5 GHz	60	1 GHz	0.13	1.5 A	2 x 1.5 Avx AccuL ± 5 %	<b>BCQ-10n-B</b>	1,00
	> 4.5 GHz	> 25	1 GHz	1	100m	1x0.5 (0402) Murata LQP10 ± 2 %	<b>BCQ-10n-C</b>	0,25 - 0,20
	> 2 GHz	60	1 GHz	0.06	300m	2 x 1.2 Toko LL2012F	<b>BCQ-10n-D</b>	0,35 - 0,30
	> 3.4 GHz	53	1 GHz	0.12	600m	1.6 x 0.8 Toko LL1608F ± 5 %	<b>BCQ-10n-E</b>	0,30 - 0,26
<b>12 nH</b>	> 2.8 GHz	58	1 GHz	0.13	600m	1.6 x 0.8 Toko LL1608	<b>BCQ-12n-A</b>	0,30 - 0,26
	> 3.3 GHz	> 70	1 GHz	0.09	1 A	2.8 x 2.6 Coilcraft 1008CS 10 %	<b>BCQ-12n-B</b>	0,40 - 0,35
	> 3.2 GHz	> 30				2 x 1.5 Murata LQW2BNH	<b>BCQ-12n-C</b>	0,35 - 0,30
<b>15 nH</b>	> 2.7 GHz	55	1 GHz	0.14	600m	1.6 x 0.8 LL1608F	<b>BCQ-15n-A</b>	0,30 - 0,26
	> 2.5 GHz	> 27				3.2 x 2.5 Simid 02	<b>BCQ-15n-B</b>	0,30 - 0,26
	> 2.5 GHz	> 70	1 GHz	0.1	1 A	2.8 x 2.6 Coilcraft 1008CS ± 5 %	<b>BCQ-15n-C</b>	0,45 - 0,40
	> 2.8 GHz	> 35	0.5 GHz	0.3	300m	1.6 x 0.8 Murata LQG11A15NJ ± 5 %	<b>BCQ-15n-D</b>	0,32 - 0,28
<b>17 nH</b>	> 1.8 GHz	> 60		0.04	650m	3.2 x 1.6 Murata LQN1A ± 5 %	<b>BCQ-17n</b>	0,45 - 0,40
<b>17.5 nH</b>	> 2.5 GHz tip. > 4 GHz	>100	300MHz	0.05	4 A	6.5 x 3.2 Coilcraft B06T ultra high Q ( Q > 90 100-600 MHz ) very good as Bias T in the frequency range of 800 MHz - 3.5 GHz, also suitable for high power stages	<b>BCQ-17n5</b>	0,60 - 0,55
<b>18 nH</b>	> 2 GHz	> 25				3.2 x 2.5 Simid 02	<b>BCQ-18n-A</b>	0,30 - 0,26
	> 2.4 GHz	58	1 GHz	0.18	600m	1.6 x 0.8 Toko LL1608F	<b>BCQ-18n-B</b>	0,30 - 0,26
	> 2.5 GHz	> 70	1 GHz	0.11	1 A	2.8 x 2.6 Coilcraft 1008CS	<b>BCQ-18n-C</b>	0,45 - 0,40
	> 2.6 GHz	> 35	0.5 GHz	0.35	300m	1.6x0.8 Murata LQG11A18NJ ± 5%	<b>BCQ-18n-D</b>	0,32 - 0,28

# "HIGH Q" CHIP inductances for SMD

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induct. nH	SRF - Self Res. Freq.	Q	Q test freq.	resist Ω	I max	size mm 1.6x0.8=0603 - 2x1.3=0805 2.8x2.6=1008 - 3.2x1.6=1206	cod.	price € 1 - 10+pcs
22 nH	> 1.8 GHz	> 35		0.25	410m	3.2 x 2.5 Murata LQN2A	BCQ-22n-A	0,30 - 0,26
	> 2.2 GHz	> 30	1 GHz		100m	1.6 x 0.8 Murata LQP18MN 2 %	BCQ-22n-B	0,30 - 0,26
	> 2.4 GHz	> 70	1 GHz	0.12	1 A	2.8 x 2.6 Coilcraft 1008CS	BCQ-22n-C	0,45 - 0,40
	> 2.5 GHz	> 70	1 GHz	0.14	600m	3.2 x 2.5 Simid 02 5 %	BCQ-22n-D	0,30 - 0,23 100pcs / 0,18
	> 2.1 GHz	> 50	500MHz	0.09	720m	2x1.5 Murata LQN21A22NJ ± 5 %	BCQ-22n-E	0,30 - 0,26
23 nH	> 1.6 GHz	> 60		0.05	590m	3.2 x 1.6 Murata LQN1A 5 %	BCQ-23n	0,35 - 0,30
27 nH	> 1,8 GHz	50	1 GHz	0.22	600m	1.6 x 0.8 Toko LL1608F	BCQ-27n-A	0,30 - 0,26
	> 1.5 GHz	> 60		0.05	560m	3.2 x 1.6 Murata LQN1A 5 %	BCQ-27n-B	0,35 - 0,30
	> 2.5 GHz tip. 3.5 GHz	> 60	500MHz	0.25	500m	2 x 1.5 Coilcraft 0805HS ± 5 %	BCQ-27n-C	0,40 - 0,35
	> 2 GHz	> 40	500MHz	0.5	300m	1.6x0.8 Murata LQG11A27NJ	BCQ-27n-D	0,30 - 0,26
33 nH	> 1.9 GHz	30		0.15	570m	2 x 1.5 Murata LQN21A	BCQ-33n-A	0,35 - 0,30
	> 1.7 GHz	50	900MHz	0.18	540m	3.2 x 2.5 Simid 02	BCQ-33n-B	0,35 - 0,30
	> 1.6 GHz	47	1 GHz	0.27	600m	1.6 x 0.8 Toko LL1608F 5 %	BCQ-33n-C	0,30 - 0,26
	> 2 GHz	60	500MHz	0.27	500m	2 x 1.5	BCQ-33n-D	0,35 - 0,30
39 nH	> 1.4 GHz	60	300MHz	0.18	530m	3.2 x 2.5 Simid 02	BCQ-39n-A	0,30 - 0,26
	> 1.4 GHz	44	1 GHz	0.26	600m	1.6 x 0.8 Toko LL1608F	BCQ-39n-B	0,30 - 0,26
	> 1.7 GHz	40				2 x 1.5 Murata LQN21A 5 %	BCQ-39n-C	0,35 - 0,30
43 nH	> 1.5 GHz tip. 2.5 GHz	100	200MHz	0,08	4 A	6.5 x 3.2 Coilcraft B10T 5 % ultra high Q ( Q > 90 100-300 MHz )	BCQ-43n	0,70
47 nH	> 1.3 GHz	> 60	300MHz	0,13	500m	3.2 x 2.5 Murata LQN2A	BCQ-47n-A	0,30 - 0,26
	> 1.5 GHz	> 60	350MHz	0,16	1 A	2.8 x 2.6 Coilcraft 1008CS 5 %	BCQ-47n-B	0,35 - 0,30
	> 1.5 GHz	40	250MHz	0,23	450m	2 x 1.5 Murata LQN21A	BCQ-47n-C	0,30 - 0,26
	> 1.4 GHz	> 55	300MHz	0,13	1 A	3.2 x 1.6 Stettner 5135	BCQ-47n-D	0,30 - 0,26
56 nH	> 1.3 GHz	65	350MHz	0,18	1 A	2.8 x 2.6 Coilcraft 1008CS	BCQ-56n-A	0,35
	> 1.1 GHz	30	500MHz			2 x 1.3 Murata LQP21A 2 %	BCQ-56n-C	0,30 - 0,26
	> 1.2 GHz	38	500MHz	0,34	500m	1.6 x 0.8 Toko LL1608F 5 %	BCQ-56n-D	0,30 - 0,26
64 nH	> 1 GHz	> 60	430MHz	0,18	290m	3.2 x 1.6 Murata LQN1A 5 %	BCQ-64n	0,35 - 0,30
68 nH	> 0.8 GHz	> 45	400MHz	0,25	500m	3 x 2.5 Murata LQN2A	BCQ-68n-A	0,35 - 0,30
	> 1.3 GHz	> 30				3.2 x 2.5 Simid 01	BCQ-68n-B	0,30 - 0,26
	> 1.4 GHz tip. 2 GHz	> 60	500MHz	0,38	500m	2 x 1.5 Coilcraft 0805HS ± 5 %	BCQ-68n-C	0,40 - 0,35
	> 1 GHz	> 30	300MHz	0,7	300m	1.6x0.8 Murata LQG11A68N	BCQ-68n-D	0,30 - 0,26
82 nH	> 0.7 GHz	> 45	300MHz	0,25	300m	3.2 x 2.5 Murata LQN2A	BCQ-82n-A	0,28 - 0,25
	> 1 GHz	> 45	300MHz	0,4	320m	2 x 1.5 Murata LQN21A 5 %	BCQ-82n-B	0,35 - 0,30
	> 1 GHz	> 30		0,27	430m	3.2 x 2.5 Simid 01	BCQ-82n-C	0,30 - 0,26
100 nH	> 0.9 GHz	> 45	300MHz	0,38	350m	2 x 1.5 Murata LQN21A 5 %	BCQ-100n-A	0,30 - 0,26
	> 0.9 GHz	> 45	200MHz	0,15	820m	2.5 x 2.5 Stettner 5130	BCQ-100n-B	0,35 - 0,30
	> 1 GHz	> 30		0,3	400m	3.2 x 2.5 Simid 01	BCQ-100n-C	0,35 - 0,30
120 nH	> 900MHz	> 60	350MHz	0,6	650m	2.8 x 2.6 Coilcraft 1008CS 5 %	BCQ-120n-A	0,30 - 0,26
	> 900MHz	> 45	200MHz	0,15	820m	2.5 x 2.5 Stettner 5130	BCQ-120n-B	0,35 - 0,30
	> 800MHz	> 45	300MHz	0,4	320m	2 x 1.5 Murata 5 %	BCQ-120n-C	0,30 - 0,26
150 nH	> 800MHz	> 35	200MHz	0,36	370m	3.2 x 2.5 Simid 01 o Simid 02	BCQ-150n-A	0,30 - 0,26
	> 970MHz	> 45	100MHz	0,3	530m	3.2 x 2.5 Stettner 1210	BCQ-150n-B	0,35 - 0,30
	> 750MHz	60	40-140MHz	0,04	2 A	5.6 x 4 h 6.8	BCQ-150n-C	0,70 - 0,60
180 nH	> 1 GHz	> 50	250MHz	0,64	400m	2.2 x 1.6 Coilcraft 0805CS 2 %	BCQ-180n	0,35 - 0,32
220 nH	> 700MHz	> 30	100MHz	0,64	280m	3.2 x 2.5 Simid 02	BCQ-220n-A	0,30 - 0,26
	> 500MHz	> 35	100MHz	0,65	240m	2 x 1.5 Murata LQN21A 5 %	BCQ-220n-B	0,30 - 0,26
	> 850MHz	> 35	50 MHz	0,47	430m	3.2 x 1.6 Stettner 5503	BCQ-220n-C	0,35 - 0,32
270 nH	> 650MHz	> 35	100MHz	0,9	235m	3.2 x 2.5 Simid 02	BCQ-270n-A	0,30 - 0,26
	> 600MHz	> 45	100MHz	0,9	500m	2.8 x 2.6 Coilcraft 1008CS o 1008CT	BCQ-270n-B	0,30 - 0,26

**"HIGH Q" CHIP inductances for SMD**

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induct. nH	SRF - Self Res. Freq.	Q	Q test freq.	resist Ω	I max	size mm 1.6x0.8=0603 - 2x1.3=0805 2.8x2.6=1008 - 3.2x1.6=1206	cod.	price € 1 - 10+pcs
<b>390 nH</b>	> 500MHz	> 35	100MHz	0.75	500m	3.2 x 2.5 Simid 01	<b>BCQ-390n</b>	0,30 - 0,26
<b>470 nH</b>	> 450MHz	> 45	100MHz	1.1	470m	2.8 x 2.6 Coilcraft 1008CS	<b>BCQ-470n</b>	0,30 - 0,26
<b>560 nH</b>	> 400MHz	> 45	100MHz	1,3	400m	2.8 x 2.6 Coilcraft 1008CS 5 %	<b>BCQ-560n-A</b>	0,35 - 0,30
	> 400MHz	> 35	100MHz	2	400m	3.2 x 2.5 Simid 02	<b>BCQ-560n-B</b>	0,30 - 0,26
<b>680 nH</b>	> 500MHz	> 30	75 MHz	3	200m	2 x 1,5	<b>BCQ-680n</b>	0,30 - 0,26
<b>820 nH</b>	> 350MHz	> 30	50 MHz	1.7	300m	2.6 x 2.2	<b>BCQ-820n</b>	0,30 - 0,26
<b>1 μH</b>	> 330MHz	> 35	30 MHz	0.45	300m	3.2 x 2.5 Simid 01	<b>BCQ-1u-A</b>	0,30 - 0,26
	> 290MHz	> 35	50 MHz	1.8	370m	2.8 x 2.6 Coilcraft 1008CS o 1008HS	<b>BCQ-1u-B</b>	0,30 - 0,26
<b>1.2 μH</b>	> 230MHz	> 50	30 MHz	1.2	480m	4.8 x 3.8 Coilcraft 1812CS 2 %	<b>BCQ-1u2</b>	0,30 - 0,26
<b>1.5 μH</b>	> 210MHz	> 30	30 MHz	1.6	430m	4.8 x 3.8 Coilcraft 1812CS 2 %	<b>BCQ-1u5-A</b>	0,30 - 0,26
	> 270MHz	> 25	30 MHz	0.42	340m	3.2 x 2.5 Simid 02	<b>BCQ-1u5-B</b>	0,35 - 0,30
<b>1.8 μH</b>	> 140MHz	> 50	30 MHz	0.6	330m	3.2 x 2.5 TDK ACL3225S	<b>BCQ-1u8</b>	0,30 - 0,26
<b>2.2 μH</b>	> 160MHz	> 25	30 MHz	2.5	280m	2.8 x 2.6 Coilcraft 1008CS 5 %	<b>BCQ-2u2-A</b>	0,30 - 0,26
	> 240MHz	> 25	8 MHz	1.3	300m	3.2 x 1.6 Stettner 5503	<b>BCQ-2u2-B</b>	0,30 - 0,26
<b>2.7 μH</b>	> 180MHz	> 30	8 MHz	0,9	290m	3.2 x 2.5 Simid 02	<b>BCQ-2u7</b>	0,30 - 0,26
<b>4.7 μH</b>	> 90 MHz	> 25	10 MHz	4	260m	2.8 x 2.6 Coilcraft 1008CS	<b>BCQ-4u7-A</b>	0,30 - 0,26
	> 140MHz	> 35	8 MHz	1.8	160m	3.2 x 2.5 Simid 01	<b>BCQ-4u7-B</b>	0,35 - 0,30
<b>10 μH</b>	> 95 MHz	> 35	8 MHz	5.5	90 m	3.2 x 2.5 Simid 01	<b>BCQ-10u</b>	0,30 - 0,26
<b>18 μH</b>	> 30 MHz	> 50	5 MHz	5.5	130m	2.6 x 2.6 Delevan 130	<b>BCQ-18u</b>	0,35 - 0,30
<b>27 μH</b>	> 24 MHz	> 50	4 MHz	6	120m	2.6 x 2.6 Delevan 130	<b>BCQ-27u</b>	0,35 - 0,30
<b>33 μH</b>	> 13 MHz	> 27	2.5 MHz	4.5	105m	3.2 x 2.5 Simid 02	<b>BCQ-33u</b>	0,30 - 0,26

## FERRITE BEADS

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RF beads  
or  
filters to be inserted  
on power supply  
cables to decrease  
RF interferences

• ■ PF 2 + PF6  
• ■ PF 3

○ ■ PF 5

○ ■ PF 8

○ ■ PF 9

● ■ PF12

● ■ PF13

○ ■ PF16 PF7

○ ■ PF17

● ■ PF18

○ ■ PF20 PF19

○ ■ PF21

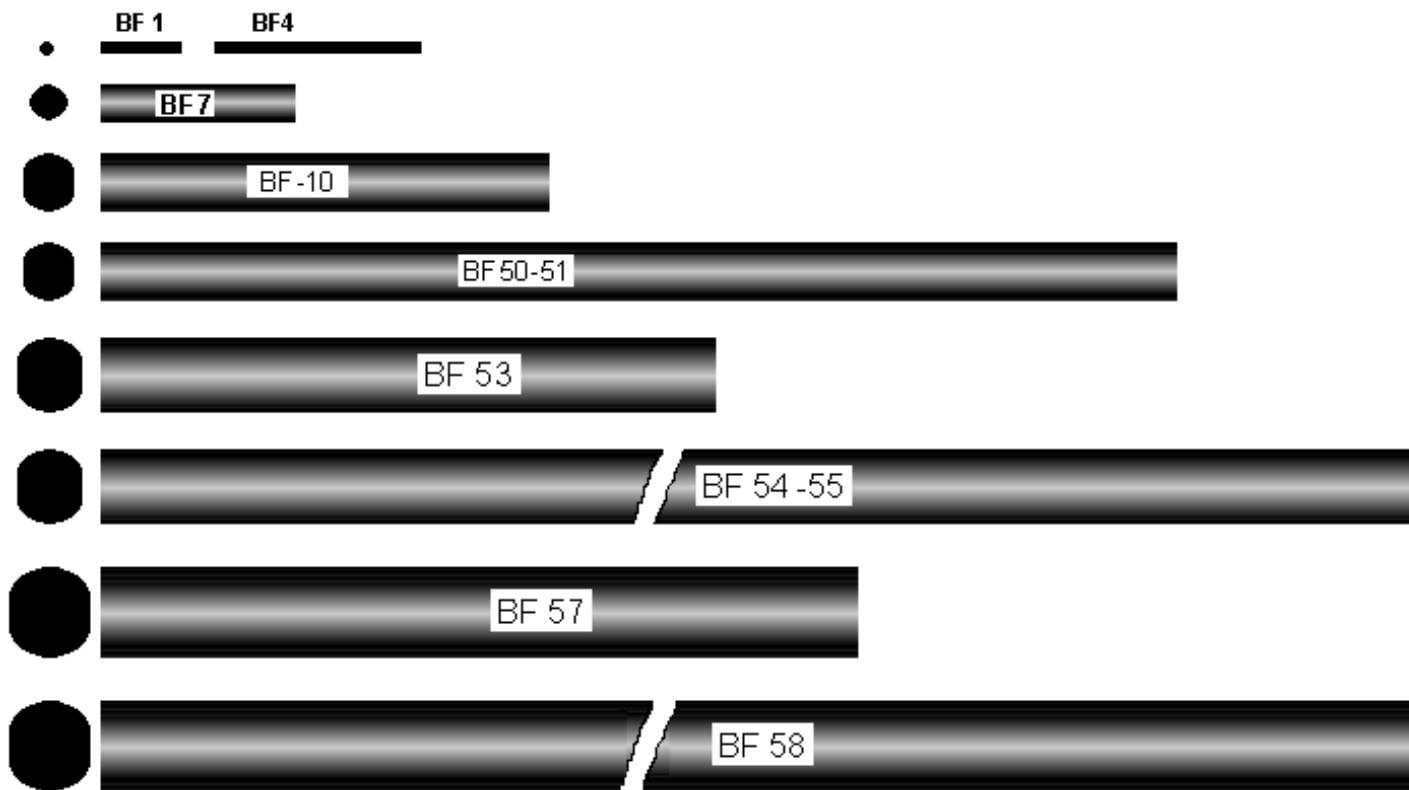
○ ■ PF22

○ ■ PF23

○ ■ PF24

			cod.	price €	
∅ e = 2	∅ i = 1.2	Length = 0.5 mm	micro bead	PF - 1	10 pcs = 0,70
∅ e = 2.5	∅ i = 0.9	Length = 5 mm		PF - 13	10 pcs = 0,70
∅ e = 2.6	∅ i = 1	Length = 1.6 mm	Philips 4E1 μ i 15	PF - 12	10 pcs = 0,70
∅ e = 3	∅ i = 0.7	Length = 4 mm	48 Ω a 3 MHz	PF - 18	10 pcs = 0,70
∅ e = 3.5	∅ i = 1.3	Length = 3.2 mm		PF - 2	10 pcs = 0,80
<b>Amidon mix 43 FB43-101</b>					
μ i = 850 , impedance 26 Ω @ 25 MHz , 40 Ω @ 100 MHz					
∅ e = 3.5	∅ i = 1.4	Length = 5 mm		PF - 3	10 pcs = 1,00
∅ e = 3.5	∅ i = 1.5	Length = 1 mm	TDK L6 with μ i = 1.500	PF - 19	10 pcs = 0,80
∅ e = 4.1	∅ i = 2	Length = 3 mm		PF - 6	10 pcs = 0,70
∅ e = 4	∅ i = 2	Length = 6 mm		PF - 8	5 pcs = 0,60
∅ e = 5	∅ i = 2.3	Length = 4 mm		PF - 9	10 pcs = 0,80
∅ e = 5	∅ i = 2.2	Length = 15 mm	3B1 Philips	PF - 17	10 pcs = 1,60
∅ e = 5	∅ i = 0.8	Length = 10 mm	high impedance 160 Ω @ 10 MHz ferrite type 3S1 Philips con μ i = 4.000	PF - 16	10 pcs = 1,20
∅ e = 5.2	∅ i = 2	Length = 19 mm		PF - 5	0,20
∅ e = 5.9	∅ i = 3	Length = 1.6 mm		PF - 20	10 pcs = 0,75
∅ e = 6.5	∅ i = 3.8	Length = 2.6 mm		PF - 21	10 pcs = 0,85
∅ e = 6.6	∅ i = 3.4	Length = 2.9 mm		PF - 22	10 pcs = 0,95
∅ e = 8	∅ i = 4	Length = 10	Siemens M25 μ i 650	PF - 7	0,40 finishing
e = 9.5 - i = 5.2 - L = 9.5 μ i 700 Z = 30 Ω @ 25 MHz 80 Ω @ 100MHz				PF - 23	0,50 - 0,40
e = 9.5 - i = 4.7 - L = 12.7 μ i 700 Z = 5Ω @ 25 MHz 100Ω @ 100MHz				PF - 24	0,50 - 0,40
SMD		it is equivalent to PF15 bead, the wire is already inserted inside so it is similar to a normal SMD component 3 x 4.6 mm, 50 Ω @ 100 MHz, Philips BDS 3-3-4.6 in ferrite 4S2, < 0.6 mΩ	PF - 14	0,08 € 1 - 9 pcs 0,07 € 10-30 pcs 0,06 € 31-100 pcs	
∅ 3.5 x 6		they are 2 beads with an inserted wire, it makes an RF choke impedance Z = 80 Ω @ 10 MHz , 120 Ω @ 30 MHz 150 Ω @ 100 MHz , max 7 A , Murata BL02RN2-R62	PF - 15	0,25 € 1 - 9 pcs 0,22 € 10 + pcs	
∅ 3.8 x 5.2		beads with wire ∅ 3.8 x 5.2 mm , max 15 A impedance Z=12Ω @ 100MHz - 50Ω @ 300MHz - 150Ω @ 1GHz	PF - 25	0,20 € 1 - 9 pcs 0,15 € 10 + pcs	

<b>FERRITE RODS or FERROXCUBE</b>		<b>cod.</b>	price € each		
			1-3 pcs	4-9 pcs	10+pcs
small ferrites used as support to build RF choke	ROUNDED Ø 1,5 x 11 mm	<b>BF - 1</b>		10pz = 0,80	
	ROUNDED Ø 1,5 x 28 mm	<b>BF - 4</b>		10pz = 1,20	
ROUNDED Ø 5 x 25 mm	3B1 Philips	<b>BF - 7</b>	0,35	0,35	0,30
ROUNDED Ø 8 x 61 mm		<b>BF - 10</b>	1,30	1,20	1,10
ROUNDED Ø 8 x 140 mm	μ i 300	28 g	<b>BF - 50</b>	2,50	2,20
ROUNDED Ø 8 x 140 mm	μ i 400	29 g	<b>BF - 51</b>	2,20	1,93
ROUNDED Ø 10 x 80 mm	μ i 400	25 g	<b>BF - 53</b>	1,50	1,35
ROUNDED Ø 10 x 200 mm	μ i 300	65 g	<b>BF - 54</b>	4,90	4,40
ROUNDED Ø 10 x 200 mm	μ i 400	65 g	<b>BF - 55</b>	4,10	3,70
ROUNDED Ø 12 x 100 mm	μ i 300	45 g	<b>BF - 57</b>	3,60	3,35
ROUNDED Ø 12 x 200 mm	μ i 300	92 g	<b>BF - 58</b>	6,90	6,40
					5,90

**real size**

		The Amidon binocular ferrite cores are used with great performances in wide band transformers, both small size for signal HF - VHF - UHF and bigger power for HF - VHF.								
		Amidon type	size mm				$\mu$ i		cod.	price € each 1 - 10+pcs
			D	H	L	d				
	8	BN 61-2702	4,2	3,1	7	1,7	125	AL $\approx$ 65 $\mu$ H	FB 61-2702	0,40 - 0,33
		BN 43-2702					850		FB 43-2702	0,45 - 0,38
		BN 73-2702					2500		FB 73-2702	0,50
	8 mixer H mode	BN 61-2402	4,2	6,4	7	1,7	125	AL $\approx$ 160 $\mu$ H	FB 61-2402	0,55 - 0,45
		BN 43-2402					850	AL $\approx$ 1275 $\mu$ H	FB 43-2402	0,60 - 0,50
		BN 73-2402					2500		FB 73-2402	0,65 - 0,55
	1,7 g	BN 61-1502	7,5	6,6	13,3	3,8	125		FB 61-1502	0,80 - 0,70
		BN 43-1502					850		FB 43-1502	0,75 - 0,65
		BN 73-1502					2500		FB 73-1502	0,80 - 0,70
	8	BN 61-302	7,5	10,3	13,3	3,8	125		FB-61-302	0,90 - 0,80
		BN 43-302	7,5	10,3	13,3	3,8	850		FB-43-302	0,85 - 0,75
		BN 73-302	7,5	10,3	13,3	3,8	2500		FB-73-302	0,85 - 0,75
	4.7g	BN 61-202	7,5	14,3	13,3	3,8	125	AL $\approx$ 425 $\mu$ H	FB 61-202	0,95 - 0,85
		BN 43-202					850	AL $\approx$ 2890 $\mu$ H	FB 43-202	0,95 - 0,85
		BN 73-202					2500	AL $\approx$ 8500 $\mu$ H	FB 73-202	0,95 - 0,85
	8g	BN 61-6802	7,5	26,5	13,3	3,8	125		FB 61-6802	1,80 - 1,60
		BN 43-6802					850		FB 43-6802	1,70
		BN 73-6802					2500		FB 73-6802	1,90
	8g	BN 43-10402	9,5	12,7	19,5	4,8	850	max 100 - 80 W in the HF	FB 43 - 10402	1,50 - 1,30 ----- in blisters of 96 pcs 1,10 € each
		BN 43-3312	9,5	25,4	19,5	4,8	850		FB 43 - 3312	1,90
		BN 43 - 7051	14,2	28,7	28,7	6,3	850		FB 43 - 7051	4,40
	52g		15	28,7	30	6,8	125	biggest internal diameter	FB 61 - 002	6,90
	Siemens U60 for VHF-UHF	8,2	8	14	4	8	AL $\approx$ 23 $\mu$ H	FB - 05	1,20	
	TDK	6	2	9	1,9		AL $\approx$ 100 $\mu$ H	FB - 07	0,30 - 0,24	
	2,5 g	TDK	6	6	8,8	1,9			FB - 08	0,40 - 0,33
			2,2	2,7	3,6	0,9			FB - 10	0,40

We inform our kind customers that are available silver unipolar teflon coated wires useful to build inductances and transformers on toroids, see end of section J "cables".

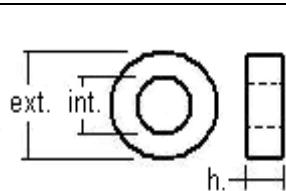


Amidon toroids are often used for high Q narrow-band tuned circuits in the specified frequency or for wide band not tuned circuits on a much larger bandwidth than specified.

color	size mm			$\mu$	i 100 turns	AL $\mu$ H ( $\mu$ H inductance for 100 turns )	number of turns = $\sqrt{2} \cdot (\text{induct. value : AL}\mu\text{H}) \times 100$	cod.	price € 1 - 10 pcs
	$\varnothing$ ext	$\varnothing$ int	h						
grey	9.4	5.2	3.2	35	120	20 KHz - 1 MHz		T-37-3	0,50
	11.2	5.8	4	35	180	20 KHz - 1 MHz		T-44-3	0,60
	12.7	7.6	4.8	35	175	20 KHz - 1 MHz		T-50-3	0,70
	17.3	9.5	4.8	35	195	20 KHz - 1 MHz		T-68-3	0,90
	20.3	12.6	6.3	35	180	20 KHz - 1 MHz		T 80-3	1,40
RED	5	2.2	1.8	10	25	0.25 - 20 MHz		T-20-2	0,45 - 0,35
	6.3	3	2.4	10	34	0.25 - 20 MHz		T-25-2	0,45 - 0,35
	7.5	3.8	3.2	10	43	0.25 - 20 MHz		T-30-2	0,50 - 0,40
	9.4	5.2	3.2	10	40	0.25 - 20 MHz	max 25 W @ 1 MHz	T-37-2	0,55 - 0,45
	11.2	5.8	4	10	52	0.25 - 20 MHz		T-44-2	0,60 - 0,50
	12.7	7.6	4.8	10	49	0.25 - 20 MHz	max 40 W @ 1 MHz	T-50-2	0,65 - 0,55
	17.3	9.5	4.8	10	57	0.25 - 20 MHz	max 30 W	T-68-2	0,75 - 0,65
	20.3	12.6	6.3	10	55	0.25 - 20 MHz	max 60 W	T-80-2	0,90 - 0,80
	23.9	14.2	7.9	10	84	0.25 - 20 MHz	max 100 W	T-94-2	1,20 - 1,10
	27	14.3	11.1	10	135	0.25 - 20 MHz	max 150-300 W	T-106-2	1,60 - 1,40
	33	19.8	11.1	10	110	0.25 - 20 MHz		T-130-2	2,40 - 2,20
	40	24	14.5	10	140	0.25 - 20 MHz	max 250 W , 500 W a 1MHz	T-157-2	3,60 - 3,40
	47	24.2	18	10	240	0.25 - 20 MHz	max 400 W	T-184-2	6,50
	51	31.7	14	10	120	0.25 - 20 MHz	max 400 W	T-200-2	6,00 - 5,60
	51	31.7	26	10	218	more power than T-200-2 normal type	155g	T-200-2B	9,90
	77.2	49	12.7	10	114	0.25 - 20 MHz		T-300-2	10,80
	102	57.2	16.5	10	180	0.25 - 20 MHz		T-400-2	21,50
white	6.3	3	2.4	9	29	1 - 25 MHz		T-25-7	0,70 finishing
	9.4	5.2	3.2	9	32	1 - 25 MHz		T-37-7	0,70
	12.7	7.6	4.8	9	43	1 - 25 MHz		T-50-7	0,70
YELLOW	3.2	1,57	1,27	8	17	3 - 40 MHz		T-12-6	0,45 - 0,35
	5	2.2	1.8	8	22	3 - 40 MHz		T-20-6	0,45 - 0,35
	6.3	3	2.4	8	27	3 - 40 MHz		T-25-6	0,45 - 0,35
	7.5	3.8	3.2	8	36	3 - 40 MHz		T-30-6	0,50 - 0,40
	9.4	5.2	3.2	8	30	3 - 40 MHz		T-37-6	0,55 - 0,45
	11.2	5.8	4	8	42	3 - 40 MHz		T-44-6	0,65 - 0,55
	12.7	7.6	4.8	8	40	3 - 40 MHz		T-50-6	0,75 - 0,65
	17.3	9.5	4.8	8	47	3 - 40 MHz		T-68-6	0,95 - 0,80
	20.3	12.6	6.3	8	45	3 - 40 MHz	6 g	T-80-6	1,40 - 1,25
	23.9	14.2	7.9	8	70	3 - 40 MHz		T-94-6	1,80 - 1,60
	27	14.3	11.1	8	116	3 - 40 MHz	max 150-300 W	T-106-6	2,90 - 2,70
	33	19.8	11.1	8	96	3 - 40 MHz		T-130-6	3,70 - 3,50
	40	24	14.5	8	115	3 - 40 MHz		T-157-6	6,20 - 5,80
	47	24.2	18	8	195	3 - 40 MHz		T-184-6	11,30
	51	31.7	14	8	100	3 - 40 MHz		T-200-6	10,50
black	7.5	3.8	3.2	6	25	15 - 100 MHz		T-30-10	0,60
	9.4	5.2	3.2	6	26	15 - 100 MHz		T-37-10	0,60
	11.2	5.8	4	6	33	15 - 100 MHz		T-44-10	0,90
	12.7	7.6	4.8	6	31	15 - 100 MHz		T-50-10	1,00
	17.3	9.5	4.8	6	32	15 - 100 MHz	3,5 g	T-68-10	1,20
	20.3	12.6	6.3	6	32	15 - 100 MHz	5,5 g	T-80-10	1,60
	23.9	14.2	7.9	6	58	15 - 100 MHz	11 g	T-94-10	2,30

follows Amidon toroids

color	size mm			$\mu i$	AL $\mu H$ 100 turns	( $\mu H$ inductance for 100 turns )		cod.	price € 1 - 10 pcs	
	$\emptyset$ ext	$\emptyset$ int	h			number of turns = $\sqrt{2} \cdot (\text{induct. value : AL}\mu\text{H}) \times 100$				
green white	6.3	3	2.4	4	12	30 - 250 MHz			T-25-12	
	7.5	3.8	3.2	4	16	30 - 250 MHz			T-30-12	
	9.4	5.2	3.2	4	15	30 - 250 MHz			T-37-12	
	11.2	5.8	4	4	18.5	30 - 250 MHz			T-44-12	
	12.7	7.6	4.8	4	18	30 - 250 MHz			T-50-12	
	17.3	9.5	4.8	4	21	30 - 250 MHz			T-68-12	
	20.3	12.6	6.3	4	22	30 - 250 MHz			T-80-12	
	23.9	14.2	7.9	4	30	30 - 250 MHz			T-94-12	
	<b>mix 17 = mix 12</b> ---- mix 17 will substitute mix 12									
yellow blue	7.5	3.8	3.2	4	16	20 - 200 MHz			T-30-17	
	9.4	5.2	3.2	4	15	20 - 200 MHz			T-37-17	
	11.2	5.8	4	4	18.5	20 - 200 MHz			T-44-17	
	12.7	7.6	4.8	4	18	20 - 200 MHz			T-50-17	
	17.3	9.5	4.8	4	21	20 - 200 MHz			T-68-17	
	20.3	12.6	6.3	4	22	20 - 200 MHz			T-80-17	
	23.9	14.2	7.9	4	29	30 - 250 MHz			9 g T-94-17	
	27	14.3	11.1	4	51	20 - 200 MHz			T-106-17	
	33	19.8	11.1	4	40	20 - 200 MHz			T-130-17	
	40	24	14.5	4	53	20 - 200 MHz			45 g T-157-17	
brown	9.4	5.2	3.2	1	6	this is a "not magnetic" mix $\mu i = 1$ suitable for tuned circuits from 50 to 350 MHz or for wide band up to 1 GHz very good thermal stability		T-37-0	0,35	
	11.2	5.8	4	1	6.5			T-44-0	0,40	
	12.7	7.6	4.8	1	6.4		1 g	T-50-0	0,50	
	17.3	9.5	4.8	1	7.5		2 g	T-68-0	0,60	
	20.3	12.6	6.3	1	8.5			T-80-0	0,70	
	23.9	14.2	7.9	1	10.6			T-94-0	1,00	
	27	14.3	11.1	1	19		max 150 W	T-106-0	1,30	
	33	19.8	11.1	1	15		14 g	T-130-0	1,60	
	40	24	14.5	1	19			T-157-0	4,30	



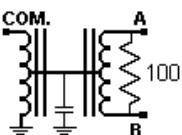
These Amidon toroids are often used for broadband not tuned circuits, for example as transformers in Norton circuits, as component for power splitters, dividers or combiners, HF balun, for input or output matching, on HF - VHF power amplifiers, on high impedance IF filters, etc.. Moreover, for their characteristics of medium-high inductance, they are also used to build decoupling choke coils, power supply EMI filters, etc.. because they could reach high inductance values.

size mm			$\mu$	AL mH ( mH inductance for 1000 turns )	number of turns = $\sqrt{2} \times (\text{induct. value : ALmH}) \times 1000$	<b>Cod.</b>	price € each 1 - 10 pcs
$\emptyset$ ext	$\emptyset$ int	h	i	AL mH ( mH inductance for 1000 turns )			
12.7	7.1	4.9	40	22		<b>FT-50-67</b>	0,95 - 0,90
6	3	1.6	125	25		<b>FT-23-61</b>	0,50 - 0,43
9.5	4.8	3.3		55		<b>FT-37-61</b>	0,60 - 0,50
12.7	7.1	4.9		68		<b>FT-50-61</b>	0,80 - 0,70
21	13.2	6.3		75		<b>FT-82-61</b>	1,30 - 1,15
29	19	7.5		80	11 g	<b>FT-114-61</b>	2,30 - 2,05
35.6	23	12.7		140		<b>FT-140-61</b>	4,00
61	35.5	12.7		170	suitable for HF high power balun up to 1 KW, it is particularly suggested for high part of HF frequencies to 60 MHz	130 g	<b>FT-240-61</b>
6	3	1.6	850	158		<b>FT-23-43</b>	0,50 - 0,43
9.5	4.8	3.3		350		<b>FT-37-43</b>	0,60 - 0,50
12.7	7.1	4.9		440	2 g	<b>FT-50-43</b>	0,80 - 0,70
21	13.2	6.3		470		<b>FT-82-43</b>	1,30 - 1,15
29	19	7.5		510	11 g	<b>FT-114-43</b>	2,30 - 2,10
35.6	23	12.7		885	38 g	<b>FT-140-43</b>	3,80 - 3,50
61	35.5	12.7		1075	suitable for HF high power balun up to 1 KW, it is particularly suggested for low medium part of HF frequencies	130 g	<b>FT-240-43</b>
9.5	4.8	3.3	2.000	880		<b>FT-37-77</b>	0,60 - 0,50
12.7	7.1	4.9		1100		<b>FT-50-77</b>	0,80 - 0,70
21	13.2	6.3		1175		<b>FT-82-77</b>	1,40 - 1,30
9.5	4.8	3.3	5.000	2200		<b>FT-37-75</b>	0,75 - 0,65
12.7	7.1	4.9		2725		<b>FT-50-75</b>	0,90 - 0,80

EXAMPLES of HF – VHF hybrid couplers made with Amidon toroids FT....- 43 series

#### Dividers-combiners @ - 3 dB

with 2 pcs of FT...-43 toroids  
1 - 30 MHz high insulation  
very good return loss

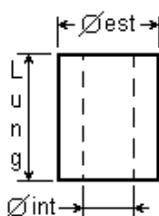


#### Hybrid @ - 6 dB

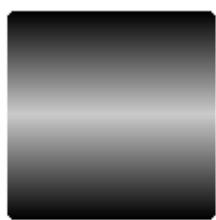
with 1 pc of FT...-43 toroid  
1 - 200 MHz high insulation  
adequate return loss

We inform our kind customers that are available silver plated unipolar wires with teflon insulation useful to build inductances and transformers on toroids,  
see end of section J "cables".

	size mm			$\mu$	AL		cod.	price € each 1 - 10 pz
<b>Toroids various types</b>	$\emptyset$ ext	$\emptyset$ int	h					
	6.3	3	3.2	12		for 50-200MHz resonant circuits for wide band circuits up to 450MHz	TF - 2	0,30
	6.3	3	3.2	50		for 5 - 50 MHz resonant circuits for wide band circuits up to 200MHz	TF - 3	0,30
	6.5	3.8	2.3	100		Philips 4C6	TF - 4	0,40
	8	3	3.5				TF - 5	0,30
	10	5.6	4				TF - 6	0,30
	9.5	5.5	3.5	5.000	1.000	Philips 3E2 azure , max 500 KHz	TF - 7	0,40
	4.5	2	1.5			Philips 3H2 grey	TF - 8	0,40
	6	3	1.6				TF - 10	0,25
	8	5	5	10		Neosid F100b , for 20 - 200MHz resonant circuits	TF - 11	0,30
	9.4	5.5	3.4	100	30	for HF , Philips 4C65 (= FT 37-61 )	TF - 12	0,45 - 0,40
	13	7.4	4.8	90	33	TN12-8-4.4-2P90 Philips ferrite type 2P90 dark brown	TF - 14	0,40 - 0,35 0,20 € each for 500 pcs pack



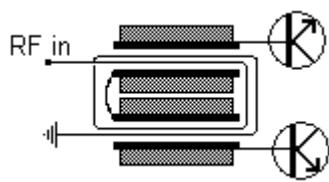
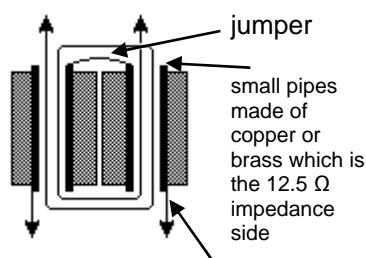
1:1 scale



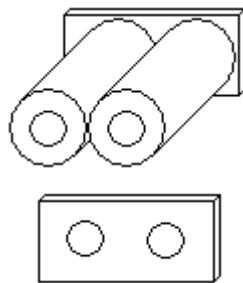
TF 95



TF 91 - 92



typical  
application as  
transformer  
for HF input  
or output

mounting  
example

p.c.b. to  
keep  
togheter the  
ferrites

### EXAMPLES OF POWER HF - VHF TRANSFORMERS

We inform our kind customers that are available silver plated unipolar wires with teflon insulation useful to build inductances and transformers on toroids,  
see end of section J "cables".

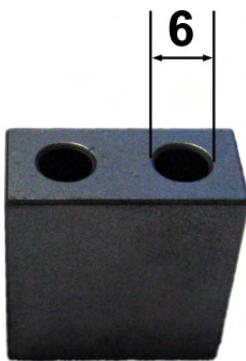
## Skilled and unusual process for to build HF power transformer

Following the instructions below it is possible to build a very good HF power transformers without using difficult to find brass or copper pipes . This technique is suitable for almost any toroid hole size. The instructions can be used for high or medium power RF transformers using single or binocular ferrites. In particular this method is useful for 1:4, 1:9, 1:16 etc... transformers where the 1 side uses the technique show and the 4, 9, 16 etc side is made using further turns inserted into the inside of the shield .

**RG213 - 214 ecc...**



Save from RG213, 214 etc... coaxial cable 10 cm of its shield, can be used also RG58, 59, 142 etc.. for ferrites with small holes.



Fot these 2 ferrites (see picture), even if they have a very different size holes, we used the same shield saved from RG213 because the size of the shield is not critical.



Insert the shield into the ferrite and into the shield insert any round object to prevent the shield from deforming .



Use an awl to widen the holes at the ends of the shield, to insert any further cables if needed. When finished, as you can see in the picture , insert the teflon wire into the shield for the second winding completing the transformer.