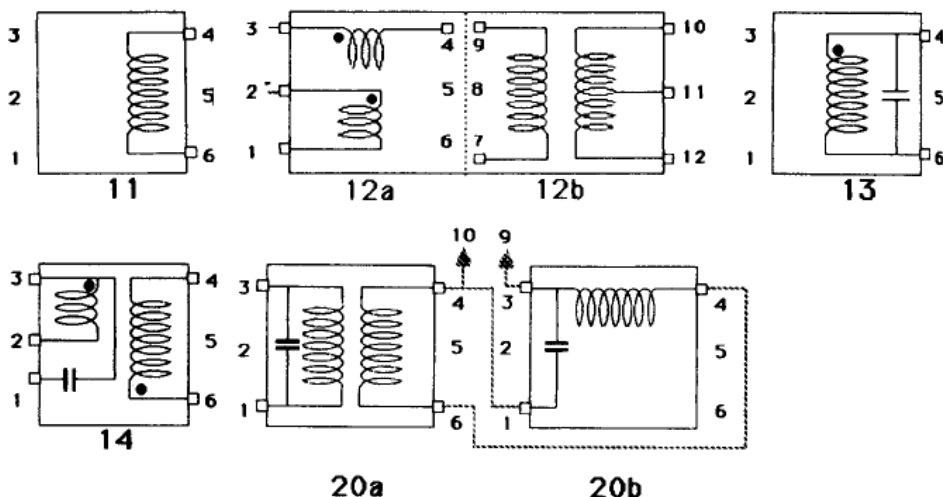


### FM detector system using the 12HF plus HA11225

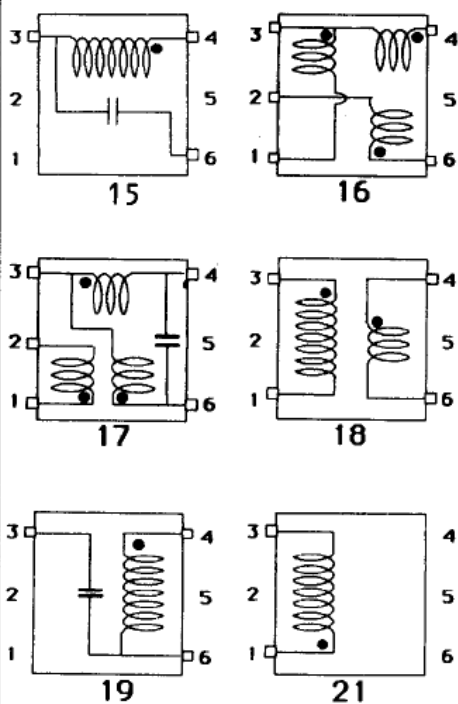
TYPE	STOCK NO.	PRICE
12HF Q228CCM-1037D	35-01037	£2.12

● = start of winding.

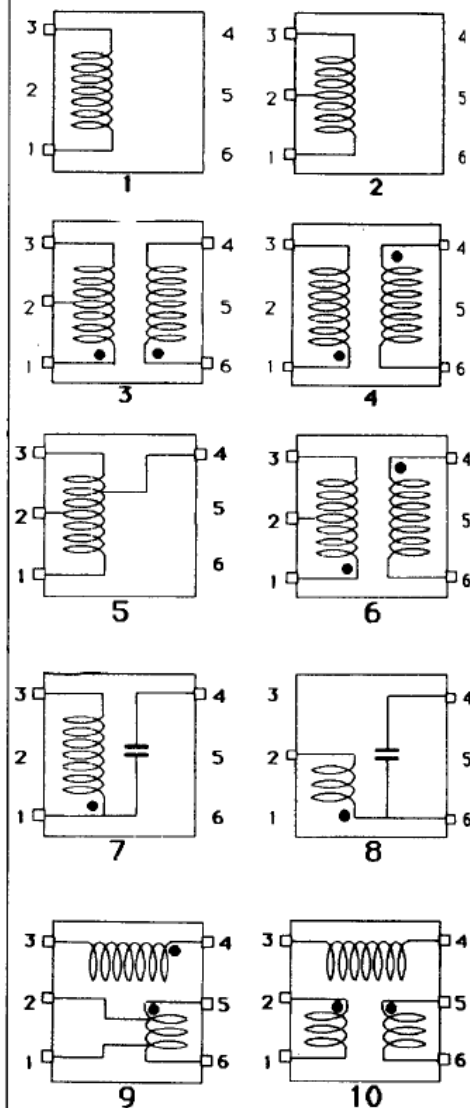


**TKACS34342/3**  
**connections to 3089 family**

● = start of winding.

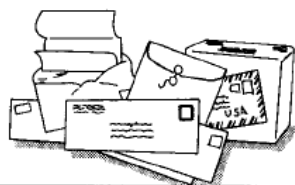


● = start of winding.



use the form at the back of the catalogue  
and send to:

**Park Lane, Broxbourne, Herts EN10 7NQ**



**FAX**  
**0992 471314**

# COIL DATA

TYPE	STYLE	USE	COLOUR	Q	L/C①	1-2②	2-3②	1-3②	4-6②	OTHERS②	BASE	COMMENT
<b>10K DATA</b>												
KANK3333R	10K SW1	RF	violet	60	45uH	14	41	55	4		6	SW1 RF/Antenna coil
KANK3334R	10K SW2	RF	yellow	85	5.5uH	7	11	18	3		6	SW2 RF/Antenna\
KANK3335R	10K SW3	RF	pink	85	1.2uH	4	4	8	2		6	SW3 RF/Antenna
KXNK3767EK	10K SW3	RF	pink	80	1.2uH	2	6	8	5		6	SW3 RF Hi-Z
KANK3426R	10K SW1	Osc	white	65	38uH	3	48	51	4		6	SW1 osc
KANK3337R	10K SW2	Osc	green	50	5uH	2	25	27	3		6	SW2 osc
KANK3428R	10K SW3	Osc	blue	60	1.1uH	2	10	12	3		6	SW3 osc
KXNK3766EK	10K SW3	Osc	blue	80	1.1uH	2	6	8	5		6	SW3 osc hi-Z
KACS4520A	10K 10.7	FM IF	red	100	50pF	8	7	15	1		6	1st IF, low Z link
KASCK3892A	10K 10.7	FM IF	red	80	82pF	7	7	14	2		6	FM IF, filter match
KASCK3893A	10K 10.7	FM IF	red	80	82pF	7	7	14	3		6	FM IF
KASCK3894A	10K 10.7	FM IF	red	80	82pF	7	7	14	4		6	FM IF
KACS1506A	10K 10.7	FM IF	black	100	51pF	3	12	15	2		6	FM IF, Hi-lo/Z in
KAC6184A	10K 10.7	FM IF	black	65	82pF	10	3	13	3		6	FM IF, Hi-Lo/Z in
KAC6400A	10K 10.7	FM IF	orange	80	47pF	4	12	16	2		6	FM IF
KACSK586HM	10K 10.7	Det	pink	100	82pF			12			1	FM quadrature coil
TKACS34342	10K 10.7	Det	black	70	51pF			15			20a	Double quad with
TKACS34343	10K 10.7	Det	black	70	51pF						20b	Double quad with above
MKAN4174HM	10K 4.6MHz	Osc	black	100	4.8uH			17			1	VFO osc coil
KXNK4173A0	10K 9	Osc	brown	80	3uH			15	3		4	9MHz CIO coil
KXNSK4612BM	10K 28MHz	RF	white	45	1.7uH			11	3		4	RF/Antenna
KXNSK4172EK	10K 28	RF	black	65	1.4uH	1	8	9	3		6	RF/Antenna
TKXNS22250N	10K 28	RF	black	80	1.4uH	1	8	9	1		6	RF/Antenna
TKXCA34732CON	10K 36MHz	TV vif	white	85	27pF			9			19	TV video IF
MKANSK173HM	10K 6.0	TV	black	75	ex/560p			8			21	TV sound detect
KANSK1893HM	10K 10.7	FM	black	50	.39uH			5				
KACS934055P	10K 10.7	FM IF	white	65	68pF	7	7	14			2	FM IF
KACS9339REV	10KC 10.7	FM IF	green	65	68pF	8	7	15			2	
TKANS32696A	10K 2-4MHz	SW1	white	50	23uH	3	45	48	6		6	
TKANS32698	10K 7MHz	SW	red	76	240pF					12 1/2/1 1/2		
MXKCSK3464B	10K 27.0	RF	black	100	27pF			8	2		3	RF/Antenna coil
TKACS1612	10K											
TKXC33733BS	10K			90	100pF						13	
166NNF102464AC	10NS			15	-						18	
<b>10EZ DATA③</b>												
YRCS11098AC	10E 468kHz	AM IF	orange	90	180pF	140	25	165	4		6	1st IF, low Z coupling
YRCS12374AC	10E 468kHz	AM IF	yellow	90	180pF	127	38	165	6		6	2nd IF
YHCS11100AC	10E 468kHz	AM IF	black	140	180pF	104	36	140	20		6	3rd IF/detector
YHCS1A589R	10E 468kHz	AM IF	blue	150	180pF	15	125	140	6		6	hi Q 2nd IF
YHC1A590R	10E 468kHz	AM IF	white	150	180pF	80	60	140	15		6	hi Q IF
YMCS2A740A	10E 468kHz	AM IF	brown	90	180pF			158			7	series tuned trap
YHCS17103D	10E 468kHz	AM IF	white	140	180pF					2/6:149	8	series tuned trap
YLE4A888EK	10E 468kHz	Am IF	black	70	430pF	55	55	110	15		6	balanced AM detectors
YRCS18576AQ	10E	Osc	green	120	100uH			59	36		4	for varicap tuning
YMRS80046N	10E	Osc	blue	70	158uH	2	79	81	9		6	300pF tuning
YMRS16726Z	10E	Osc	red	130	158uH	2				3/4:83	10	5/6:9.3 wdg type
YWOS6A356E	10E	Osc	blue	70	158uH	2	64	66	7		6	low int C
RWR331208	10EZ	Osc	red	70	330uH	2	92	94	8		6	also MW RF
RW06A6408N	10EZ	Osc	red	80	360uH	95	3	98	12		6	also MW RF
RW06A7752EK	10EZ	Osc	green	80	630uH	9	114	123	13		6	LW, RDF band osc
YXNS30450E	10E	LF	blue	80	2mH				270		11	LPF, LF osc
YXRS17065	10E 796kHz		red	80	180uH	3	77	80	12		6	
YHES17105R2	10E 455kHz		black	140	200pF	68	68	136	68		6	
RMC41997	10EZ 455kHz		blue	110	180pF			19	164		16	MFL matching trans
RMC41996	10EZ 455kHz		red	110	180pF			43	164		16	MFL matching trans
154FN8A6438EK	10EZ SW1	RF	violet	100	45uH	10	30	40	8		6	SW1 RF Hi-Z
154FN8A6439EK	10EZ SW2	RF	yellow	110	5.5uH	4	10	14	6		6	SW2 Rf Hi-Z
154AN7A6440E	10EZ SW1	Osc	white	90	38uH	10	31	41	9		6	SW1 osc Hi-Z
154AN7A6441E	10EZ SW2	Osc	green	70	5uH	4	11	15	7		6	SW2 osc Hi-Z.
94AES30465	10E 10.7	FM IF	brown	75	120pF	6	3	9	1		6	FM IF
94AES30455	10E 10.7	FM IF	pink	75	none	6	3	9	1		3	FM IF no cap
94ACS10516PJQ	10E 10.7	FM	pink	80	32pF		18		5		14	FM ratio detector
94FCS10517	10E 10.7	FM	blue	80	51pF	1			13	3-4-6:6 1/2	17	FM ratio detector
161XNA207UK	10SE											

① internal inductance or capacitance where internal capacitor is included. ② turns between pins - see base drawings.

③ Many of the 10E style coils are being replaced by 10EZ equivalents. During the changeover period directly equivalent types may be supplied.

SALES LINE

0992 448899

FOR ALL ENQUIRIES

0992 441306

# COIL DATA (continued)

TYPE	STYLE	USE	COLOUR	Q	L/C①	1-2②	2-3②	1-3②	4-6②	OTHER②	BASE	COMMENT
10PA & 12VXA DATA												
719VXA8032	12VXA	LF	black	45	80mH					2070	1	LF, AF, filters
CAN1898HM	10PA	LF	orange	50	7mH			396			1	MPX tuning/filter coil
CAN1980BX	10PA	LF	yellow	50	7mH	40		396		1/4:198 <sup>1/2</sup>	5	MPX tuning/filter
CAN1979A	10PA	LF	white	50	11.75mH	257	257	514	257		3	MPX tuning/filter
CAN1896HM	10PA	LF	black	85	22mH	695					1	MPX tuning/AF filters
CLNS30568Z	10PA	LF	black	70	23mH			640			1	MPX, AF filter
CLNS30569Z	10PA	LF	black	100	36mH			780			1	MPX, AF filter
CAN1A350EK	10PA	LW	red	100	3.5mH	27	234	261	27		6	LW RF, Antenna coil
707VXA042YUK	12VX			25	ex. 33n						9	
707VXA043YUK	12VX			25	-						9	
10WA, 10WF DATA												
WFDC1115P/S	10WA	AM IF	pink	80	180pF	107				3/4:45	12a	AM double tuned
			blue	80	180pF	3				5/6:5	12b	
WRHC1A516/7	10WA 455K	NBFM	pink/blue	100		(see diagram)				158		455/470 ratio detector
7mm COIL DATA③												
199ACSA7337BBCHK 7PA				100	10pF						15	
126ANSA5305	7PA	LF	yellow	55	7mH	39	349			14:195	5	7mm version CAN1980BX
126ANA5306	7PA	LF	orange	55	12mH	257	257	514	136		3	7mm version CAN1979A
85FC4402EJ	7E 10.7MHz	FM IF	blue	100	100pF	6	6	12	1		3	1 turn link IF
119AC30099R	7P 10.7MHz	FM IF	orange	90	82pF	8	2	10	4		6	hi-Z secondary
7MCS2198DC	7P 458kHz	AM IF	black	110	180pF	104	36	140	20		6	7mm YHCS11100AC
7MCS2199DC	7P 468kHz	AM IF	white	110	180pF	80	60	140	15		6	7mm YHCS1A590R
7MCS2194AA	7P 468kHz	AM IF	brown	110	180pF			140			7	7mm YMCS2A740A
7MCS4718N	7P 455kHz	AM IF	black	115	180pF	69	77	146	14		6	2k filter matching in
7MCS4876N	7P 455kHz	AM IF	black	115	180pF	130	16	146	14		6	2k filter matching out
LMC4100A	7E 455kHz	AM IF	yellow	105	150pF						6	1st IF for RC RXs
LPC4200A	7E 455kHz	AM IF	yellow	60	150pF	164	41	205	4		6	1st IF for RC RXs
LPC4201A	7E 455kHz	AM IF	white	60	150pF	143	62	205	4		6	2nd IF
LMC4202A	7E 455kHz	AM IF	black	60	150pF	134	74	208	42		6	3rd IF/detect for RC
LLC4827	7E 455kHz	AM IF	yellow	70	150pF	126	79	205	10		6	2nd IF
7B0A5866HM	7P		red	80	220uH			78			1	adjustable choke
7B0A5868HM	7P		white	90	100uH			53			1	adjustable choke
7B0A5869HM	7P		violet	60	68uH			53			1	adjustable choke
119ANA5871HM	7P		yellow	80	47uH			48			1	adjustable choke
119ANA5870HM	7P		orange	80	33uH			39			1	adjustable choke
119ANA5872HM	7P		green	80	22uH			32			1	adjustable choke
119ANA5873HM	7P		pink	80	15uH			25			1	adjustable choke
119ANA5874HM	7P		red	80	8.2uH			19			1	adjustable choke
113CNK1369HM	7KN		blue	50	5.6uH			22			1	adjustable choke
113CNK1370HM	7KN		white	80	2.7uH			15			1	adjustable choke
199CCA127EK	7KC 27.0	RF	black	70	47pF	4	4	8	1		6	RF/antenna coil
113CN2K159DZ	7KN 27.0	RF	black	90	ext 55p			8	2		4	RF/antenna coil
113KN2K241DC	7KN 27.0	RF	black	80	ext 27p	7	2	9	2		3	RF/antenna coil
113CN2K509ADZ	7KN 27.0	RF	black	80	ext 56p	1	1	2	8		3	RF/antenna coil
113KN2K1026HM	7KN 28	RF	black	45	1.7uH			14			1	RF/trap
7XEA4090EK	7P 455kHz	AM IF	black	100	430pF	20	80	100	21		6	AM IF
199KCA314N	7KC 35.0	RF	black	50	47pF	4	3	7	1		6	35MHz RC
5mm COIL DATA												
5MMCO124N	5M 455kHz	AM IF	black	110	180pF	139	50	189	24		6	5m version LLC4828
5MMCO273N	5M 455kHz	AM IF	black	125	180pF	144	75	189	9		6	5m version LLC4827
5SL0184R	5S 455kHz	AM IF	black	77	180pF	137	43	180	27		6	5S version YHCS11100
5SPC0210Z	5S	FM IF	black	95	47pF			15			1	5S version KACSK586
215N0839X	5S	RF IF	black	77	14uH			31	1		4	interstage coupling
215PN0842Z	5S		black	75	9uH			25			1	osc (choke element)
215PN0838X	5S		black	85	30uH			46	3		4	interstage matching
215PN0850Z	5S		black	85	8uH			22			1	osc/choke
5SVNR0837X	5S		black	70	122uH			89	2		4	matching etc.
5SVNR0840Z	5S		black	65	32uH			44			1	osc/choke
215PN0841HF	5S		black	90	30uH		45				2	osc/choke
215PN0874N	5S		black	50	1.4uH	2	7	9	4		3	10.7MHz matching etc.
215PN0875N	5S		black	60	1.7uH	4	6	10	2		3	10.7MHz IF matching etc.
215PN0876N	5S		black	65	5.2uH	11	7	18	3		3	matching/filters etc.
210SN291Z	5A	VHF	black	58	0.3uH			7			1	30-80MHz tuning etc.
210SN171R	5A	VHF	black	55	13pF	3	2	5	2		3	100MHz tuning
210SN172R	5A	VHF	black	58	16pF	4	2	6	1		3	100MHz tuning
210SN173R	5A	VHF	black	55	12pF	4	3	7	1		3	80MHz tuning

① internal inductance or capacitance where internal capacitor included. ② turns between pins - see base drawings.

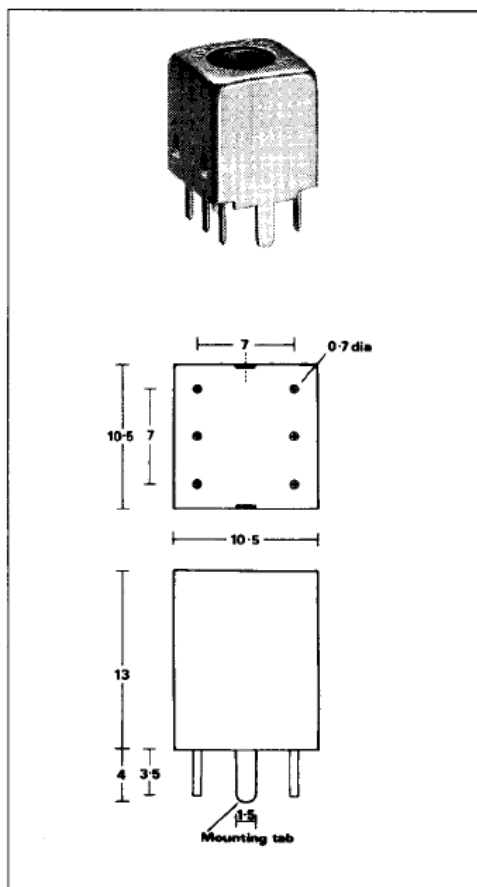
③ Many of the 7E style coils are being replaced by 7P equivalents. During the changeover period directly equivalent types may be supplied.

**DIRECT SALES LINE**  
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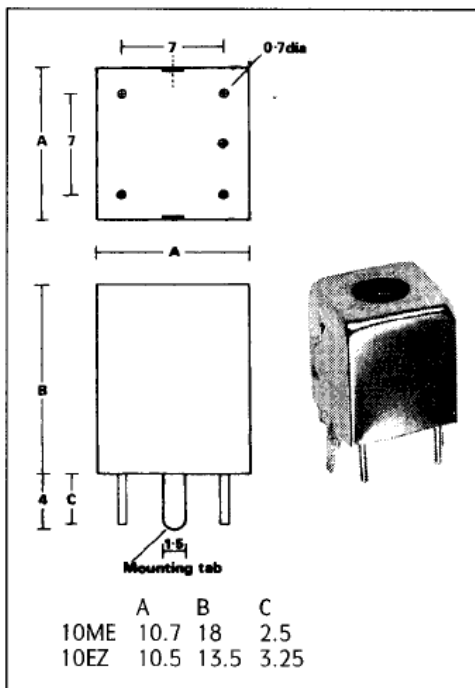
## 10K COILS



The most widely used coil in applications above 5MHz and below 70MHz. They use a spiral winding for low self capacitance and high Q, and a threaded slug adjuster. The range includes a number of 10.7MHz intermediate frequency transformers (which generally cover 9MHz as well), and IF transformers to match most types of ceramic and crystal filters. The adjustment range is some 30% of the nominal value.

TYPE	STOCK NO.	PRICE
KANK3333R	35-33330	£0.47
KANK3334R	35-33340	£0.47
KANK3335R	35-33350	£0.47
KXNK3767EK	35-37670	£0.52
KANK3426R	35-34260	£0.52
KANK3337R	35-33370	£0.52
KANK3428R	35-34280	£0.52
KXNK3766EK	35-37660	£0.52
KACS4520A	35-45200	£0.52
KASCK3892A	35-38920	£0.52
KACSK3893A	35-38930	£0.52
KACSK3894A	35-38940	£0.52
KACS1506A	35-15060	£0.52
KAC6184A	35-61840	£0.52
KAC6400A	35-64000	£0.52
KACSK586HM	35-05860	£0.52
TKACS34342	35-43420	£0.52
TKACS34343	35-43430	£0.52
MKANK4174HM	35-41740	£0.52
KXNK4173A0	35-41730	£0.52
KXNSK4612BM	35-46120	£0.52
KXNSK4172EK	35-41720	£0.52
TKXNS22250N	35-22500	£0.52
TKXCA34732CON	35-47320	£0.52
MKANSK1731HM	35-17310	£0.52
KANSK1893HM	35-18930	£0.52
KACS934055P	35-34050	£0.52
KACS9339REV	35-93390	£0.52
TKANS32696A	35-26960	£0.52
TKANS32698	35-26980	£0.52
MXXCSK3464B	35-34640	£0.52
TKACS1612	35-16120	£0.52
TKXC3373BS	35-33733	£0.52
166NNF10264AC	35-10264	£0.71

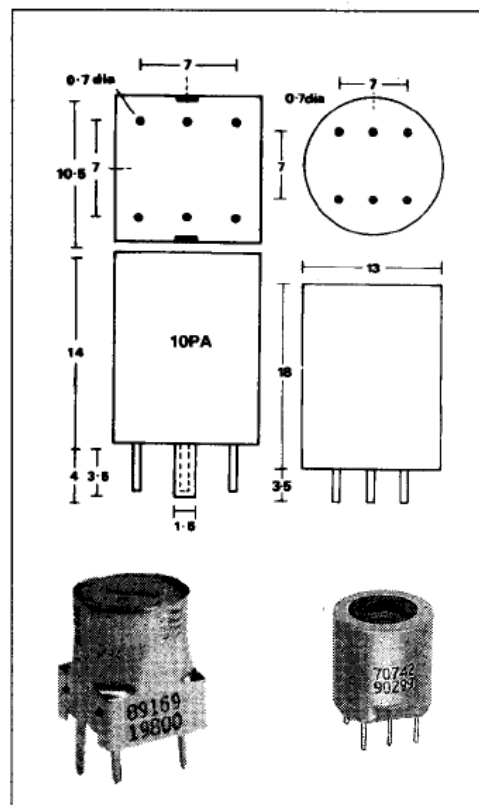
## 10EZ COILS



The 10EZ is probably the most widely used of all coils, with applications that range from around 200kHz to 20MHz. Coils that are nominally designed for 455kHz IF systems are easily tuned to 470kHz (and vice versa) although the Q may vary slightly causing the calculated impedance to be changes. The coil consists of a ferrite central bobbin with a threaded cup core held in an outer frame fixed to pin base. The adjustment range is approx.  $\pm 30-20\%$  of the nominal value.

TYPE	STOCK NO.	PRICE
YRCS11098AC	35-10980	£0.52
YRC12374AC	35-23740	£0.52
YHCS11100AC	35-11000	£0.52
YHCS1A589R	35-05890	£0.52
YHCS1A590R	35-05900	£0.52
YMCS2A740A	35-07400	£0.52
YHCS17103D	35-71030	£0.52
YLE4A888EK	35-08880	£0.52
YRCS18576AQ	35-85760	£0.52
YMRS80046N	35-00460	£0.52
YMRS16726Z	35-67260	£0.52
YW0S6A356E	35-03560	£0.52
RWR331208	35-12080	£0.52
RW06A6408N	35-64080	£0.52
RW06A7752EK	35-07750	£0.52
YXNS30450E	35-04500	£0.52
YXRS17065	35-70650	£0.52
YHES17105R2	35-71050	£0.52
RMC41997	35-19970	£0.52
RMC41996	35-19960	£0.52
154FN8A6438EK	35-64380	£0.52
154FN8A6439EK	35-64390	£0.52
154AN7A6440E	35-64400	£0.52
154AN7A6441E	35-64410	£0.52
94AES30465	35-04650	£0.52
94AES30455	35-04660	£0.52
94ACS10516PJO	35-05160	£0.52
94FCS10517	35-10517	£0.52
161XNA0277UK	35-16127	£0.71

## 10PA/12VXA COILS

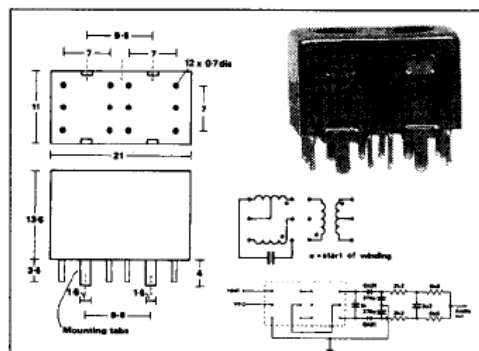


Designed primarily for low frequency filter applications, but also suited to RF and intermediate frequency use where the high saturation level of this style may be useful in achieving extended dynamic range.

The majority of these coils are derived from designs used in multiplex stereo systems. They are now widely used in ultrasonic transducer systems. The adjustment range of these styles is particularly wide, eg the CLN30569Z coil will tune to beyond 50mH.

TYPE	STOCK NO.	PRICE
719VXA8032	35-80230	£1.16
CAN1898HM	35-18980	£0.82
CAN1980BX	35-19800	£0.82
CAN1979A	35-19790	£0.82
CAN1896HM	35-18960	£0.82
CLNS30568Z	35-05680	£0.82
CLNS30569Z	35-05690	£0.82
CAN1A350EK	35-03500	£0.74
707VXA042YUK	35-70742	£0.94
707VXA043YUK	35-70743	£0.94

## 10WA, 10WF COILS



A double 10mm format using mutual inductive coupling and/or link coupling to provide the desired coupling factor.

TYPE	STOCK NO.	PRICE
WFDC1115P/S	35-11155	£1.58
WRHC1A516/7	35-51675	£1.58

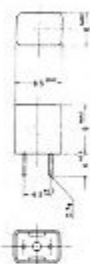
## Telephone Sales



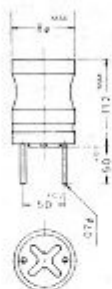
**0992 448899**



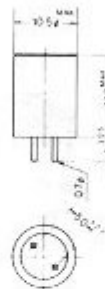
The Ambit range of low cost, ex-stock inductors includes a comprehensive range covering from 1uH to 120mH. A complete range in E24 series is available to special order, where a minimum order of 500 per value is requested. Sample quantities will be made available for pre-production purposes. Chokes listed here are held in quantity stocks, for immediate delivery. We anticipate that this selection should fill the majority of choke applications likely to arise.



7BA



8RB



10RB

All dimensions shown in millimetres

TOKO Type	Inductance	Qu at Freq:	RΩ	I DC max.	Self resonant freq.
7BA 8RB 10RB Other		MHz		mA	MHz
144LY- 187LY-					
1R0	1uH	30 7.96	1.0	30	360
1R5	1.5uH	30 7.96	1.0	30	230
2R2	2.2uH	30 7.96	1.0	30	150
3R3	3.3uH	30 7.96	1.0	30	100
4R7	4.7uH	30 7.96	1.5	30	80
6R8	6.8uH	30 7.96	1.5	30	60
8R2	8.2uH	30 7.96	1.5	30	50
100	10uH	30 7.96	2.0	30	37
150	15uH	30 2.52	2.0	30	29
180	18uH	30 2.52	2.0	30	25
220	22uH	30 2.52	2.0	30	21
330	33uH	30 2.52	2.5	30	17
470	47uH	30 2.52	3.0	30	11.5
680	68uH	30 2.52	3.0	30	10
101	100uH	30 2.52	4.0	30	8
101	100uH	80 .796	2.0	200	
151	150uH	80 .796	2.0	200	
221	220uH	30 .796	6.0	30	5.5
221	220uH	80 .796	3.0	200	
331	330uH	30 .796	6.0	30	4.5
331	330uH	80 .796	4.0	200	
471	470uH	30 .796	9.0	30	4.0
471	470uH	80 .796	4.0	200	
681	680uH	80 .796	4.0	200	
751	750uH	30 .796	12.0	30	3.5
102	1mH	30 .796	14.0	30	3.0
102	1mH	90 .252	6.0	150	
152	1.5mH	90 .252	9.0	150	
222	2.2mH	90 .252	13.0	100	
472	4.7mH	90 .252	18.0	50	
682	6.8mH	100 .1	7.5	35	
103	10mH	100 .0796	40	40	
153	15mH	100 .0796	60	40	
223	22mH	100 .0796	80	30	
333	33mH	100 .0796	80	30	
333	33mH	100 .050	20	17	
433	43mH	50 .050	100	20	.195
513	51mH	100 .050	49	12	
104	100mH	100 .050	63	9	
124	120mH	100 .050	75	8	

Notes: The rated DC current is not necessarily an indication of the fusing value of DC current, but it is the DC current that affects the stated inductance by more than 20%.  
The above Qs are minimum values, the resistances quoted are maximum values.

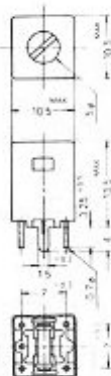
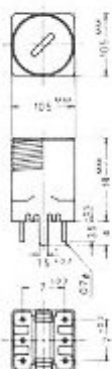
#### Numbering system:

The chokes are stamped with the value, and tolerance, in the following form:

(144 H Y) 120 J (7BA indicated by prefix 144. Not stamped on choke)  
H indicates ferrite type  
Y indicates 5mm pin spacing  
First two figures give value Third figure gives multiplier ie 10<sup>0</sup>  
Final letter indicates tolerance J:5%, K:10%, M:20%. (All stock types 10% or better. Most are in fact 5% - 'J' types.)

[Many types of capacitor also employ a similar code - thus a ceramic plate capacitor marked '102' = 1nF]

We offer the world's largest range of signal inductors from TOKO. The types described here are selected from the vast range available, to represent the standard types commonly employed in the range 10kHz to 100MHz. Custom windings are available for orders of 1000 pieces or over, and if a suitable style is not shown here - please ask for further details.

**10E & 10EZ****10P & 10PA**

These are the most commonly used style of coil. The 10E has a single bobbin winding, with cup core adjustment held in the base; the 10EZ is essentially identical, except that the cup core is held in plastic molding in the can. The 10E, 10EZ and 10P can be supplied with a single internal capacitor for IF applications. Up to three independent windings are possible, with a maximum pinout of 6.

The 10P and 10PA are available up to 36mH maximum inductance; the 10E is available with a maximum inductance of 2mH. Ferrites for Qs up to 180 are available, together with grades suitable for LF, MF, HF.

**7P (7E)**

The 7P, like the 10P in the larger format, is a single bobbin winding, with cup core adjustment held in the outer shielding can of the assembly. The 7E is essentially a scaled version of the 10E. Both the 7P and 7E are widely used in high density layouts for LF, MF, HF applications. A single internal capacitor may be included for IF applications, up to a maximum value of 180pF. Due to the miniaturized construction, the available Q of both types is generally some 10-20% lower than their 10mm format counterparts.

The overall dimensions of the 7P and 7E are identical.

The maximum inductance for the 7P style is 20mH, and 1mH for 7E.

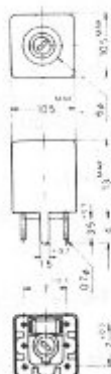
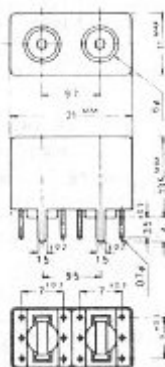
Winding options as per 10E series.

7E not shown

**7K (Sim. appearance to 7E)**

7K is an increasingly popular style used in custom applications for communications, radio control, and TV IFs. The basic area of operation is in the region 10MHz to 100MHz, with a maximum inductance of 10uH.

The construction differs from the 7P/7E, since the 7K uses a spiral former, with fixed cup core, and adjustable slug core, permitting fine adjustment, and excellent stability.

**10K****Double 10K (10WF) also double 10E (10WA)**

The 10K, and double 10K, are the standard choice for high stability FM and TV IFs. The construction is similar to the 7K: a spiral former, with fixed cup core, and adjustable slug. The maximum inductance for the single 10K is 50uH, with ferrites suitable for use from 2MHz to 100MHz. The double form is available with a maximum inductance of 25uH. In identical dimensions, a double 10E - the 10WA - is also available with a maximum inductance of 2mH per winding.

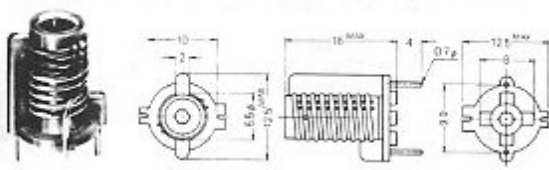


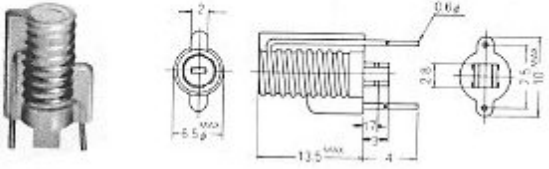


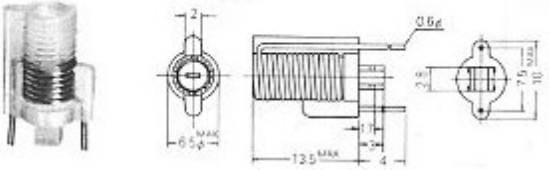


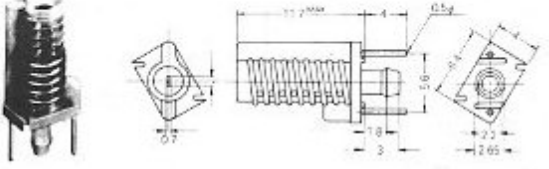


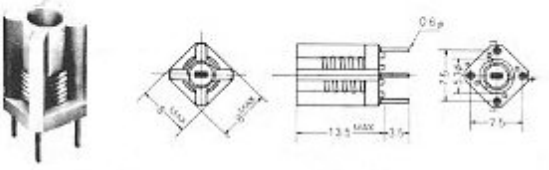


## Signal coils

## LF MPX/Dolby coils, LW, MW, SW RF, antenna &amp; osc. FM/AM IFs

This compilation lists all the 'shelf standard types'. Other windings and configurations are available to special order, with a minimum order of 1000 pieces per item. A minimum order of 100 is occasionally possible at extra cost.

	Type no.	Use	Colour	Q	Int. CpF (or L)	Turns					Base No.
						1-2	2-3	1-3	4-6	other	
<b>10PA</b> for mpx	CAN1898HM	mpx	orange	50	7mH			396			1
	CAN1980BX	mpx	yellow	50	7mH	40		396			5
	CAN1979A	mpx	white	50	11.75mH	257	257	514	257	1-4:198½	3
	CAN1896HM	mpx	black	85	22mH	695					1
<b>10ME</b> Directly equiv. to above 10P	87BN134HM2	mpx	orange	55	7mH			349			1
	87BN135BX2	mpx	yellow	55	7mH	35	314	349	174		5
	87BN133ATO2	mpx	white	55	11.8mH	226	226	452	226		3
	87BN132HM2	mpx	black	100	22mH			618			1
	87BN1326HM	mpx	black	100	3.5mH	75					1
<b>10PA</b> misc	CAN1A350EK	LWrf	red	100	3.5mH	27	234	261	27		6
	CLNS30568Z	dolby	black	70	23mH			640			1
	CLNS30569Z	dolby	black	100	36mH			780			1
<b>10E/10EZ</b> for 455-470 kHz and MW/LW	YRCS11098AC2	1st amif	orange	90	180pF	140	25	165	4		6
	YRCS12374AC2	2nd if	yellow	90	180pF	127	38	165	6		6
	YRCS11100AC2	3rd if	black	140	180pF	104	36	140	20		6
	YHCS1A589R	am if	blue	150	180pF	15	125	140	6		6
	YHCS1A590R	am if	white	150	180pF	80	60	140	15		6
	YMCS2A740AAE	trap	brown	90	180pF			158			7
	YHCS17103DG	trap	white	140	180pF					2-6:149	8
	YMCS17104GO	if osc	yellow	110	180pF	98	67	165			2
	YHCS17105R2	3rd if	black	140	150pF*	68	68	136	68		6
	YXNS6A139	lw pad	green	80	940uH					1-4:185	9
	YXNS6A140HM	lw pad	red	80	120uH			64			1
	YXRS18576AQ	mw osc	green	120	100uH			59	36		4
	YMRS80046N	mw osc	blue	70	158uH	2	79	81	9		6
	YMRS16726ZMS	mw osc	red	130	158uH	2	[3-4:83]			[5-6:9]	10
	YXRS17065	mw osc	red	80	180uH	3	77	80	12		6
	RWR331208N	mw rf	red	70	330uH	2	92	94	8		6
	RWO6A6408	mw rf	red	80	360uH	95	3	98	12		6
	YXNS30450NK	mpx	blue	80	2mH				270		11
<b>10WA</b> double tuned	WFDC11115P	am if	pink	80	200pF	107				3-4:45	12
	WFDC11115S	am if	blue	80	200pF					[8-7:5, 8-6:152, 5-9:3]	

\*1 To obtain a double tuned IF stage, couple pin2 of the 589 to pin 6 of the 590 via 120pF. Input across pins 1&3 on the 590, output across pins 4&6 of the 590. Remember to ground pin 4 of the 590, and pin 1 of the 589.

Type	Form	Dimensions (mm)	Tuning Method	Range MHz 1 10 100	L Range	Qu (typ.)	Tap & Sec. coil
S18					0.03 $\mu$ H ~ 0.4 $\mu$ H	100 ~ 200 at 58MHz 160 ~ 220 at 100MHz	Pri.; 1 tap; Sec.; None
MC115					0.03 $\mu$ H ~ 0.20 $\mu$ H	50 ~ 160 at 58MHz 110 ~ 180 at 100MHz	No tap & no Sec.
MC116					0.03 $\mu$ H ~ 0.48 $\mu$ H	50 ~ 140 at 58MHz 110 ~ 140 at 100MHz	No tap & no Sec.
MC108					0.03 $\mu$ H ~ 0.17 $\mu$ H	130 ~ 190 at 100MHz	Single Winding only; no tap
MC111					0.03 $\mu$ H ~ 0.50 $\mu$ H	50 ~ 140 at 58MHz 110 ~ 140 at 100MHz	Single Winding, 2 taps possible; Sec. Available

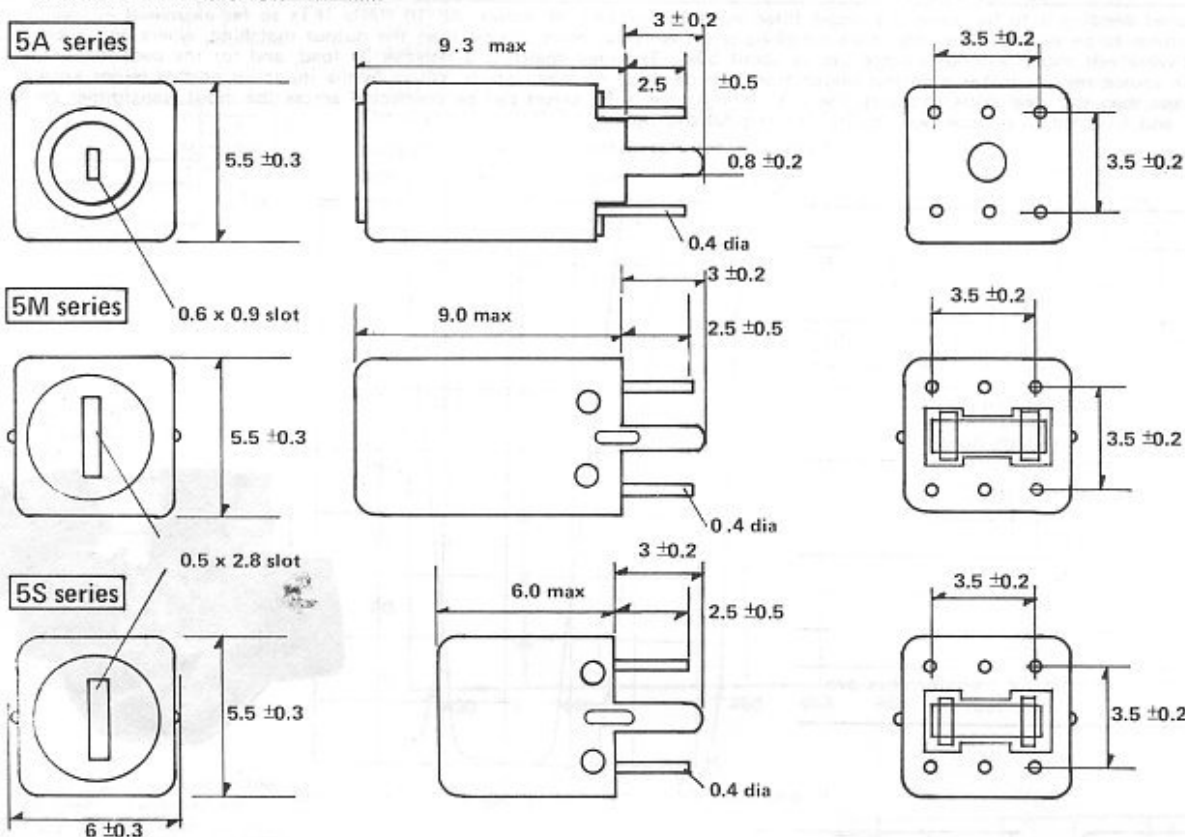
A full range of the S18 series coils is held in stock, and these are listed below. Of the other types, sample and small quantities are available from stock in styles, MC115, MC116 and MC111. An additional publication, entitled 'Molded coils for VHF' is available at 15p, and lists all standard types of these and others, together with full electrical and mechanical detail. Trimmers for the hexagonal ferrite cores, and slot types are available in molded nylon from stock.

Core Material	Ordering Code No.	Colour Code	Centre Frequency MHz	Tuning Range Capacitor pF	L (Ref) $\mu$ H	Qu. Min.	Turns	TOKO PART NUMBER
ALUMINIUM	301AN-0100	White	100	85 (3%)	0.03	100	1½	M-20160
	-0200	Red	100	51 (3%)	0.05	100	2½	M-20002
	-0300	Orange	100	32.7 (3%)	0.064	85	3½	M-20003
	-0400	Yellow	100	31 (3%)	0.082	75	4½	M-20006
	-0500	Green	100	25 (3%)	0.098	95	5½	M-20158
	-0600	Blue	100	21 (1.5%)	0.12	90	6½	M-20004
	-0700	Violet	100	17.8 (1.5%)	0.141	90	7½	M-20007
	-0800	White	100	15 (1.5%)	0.168	90	8½	M-20156
FERRITE 30-60 MHz	301KN-0100	White	44	210 (6%)	0.06	120	1½	M-20162
	-0200	Red	54	107 (6%)	0.08	68	2½	M-20161
	-0300	Orange	58	60 (6%)	0.12	150	3½	M-25025
	-0400	Yellow	75	27.7 (3%)	0.16	100	4½	M-20066
	-0500	Green	65	27 (3%)	0.27	100	5½	M-20067
	-0600	Blue	58	26 (1.5%)	0.27	100	6½	M-20068
	-0700	Violet	58	21.8 (3%)	0.34	180	7½	M-20159
	-0800	White	58	19 (1.5%)	0.40	155	8½	M-25232



A COMPLETELY NEW RANGE OF SUB-MINIATURE TUNEABLE COILS FOR IF, RF and oscillator

ALL DIMENSIONS SHOWN IN MM



## TOKO's new miniature coils series, in 5mm format

This series supercedes the previous range of 5E coils, and offers many distinct advantages:

- ♦ A complete range from 100kHz to 175MHz
- ♦ 5A and 5M types may incorporate tuning capacitors if required
- ♦ Large adjustment aperture, with redesigned core support system to minimize breakages in alignment
- ♦ Improved packing density

### The 5A - for 30 -175MHz

These miniature shielded coils are well suited to all types of VHF application, up to a maximum inductance of 0.3uH. The 5A is recommended for many types of communication application, including oscillators, multipliers and rejectors - however, the relatively lower 'Q' of such a compact design may make one TOKO's larger format coils better in RF and mixer applications.

In many paging applications and remote control systems at VHF, the 5A is the smallest tuneable inductor you can obtain in the world - where necessary or advantageous, the 5A is available without a screening can for improved circuit Q.

### The 5M - for 100kHz to 15MHz

The 5M series are approximately the same size as the 5A types - and in the same dimensions, an internal capacitor of up to 1500pF may be accommodated. The 5M types are well suited AM and FM IF applications, RF and oscillator stages. Despite its diminutive appearance, the 5M possesses an environmental specification that enables its use in professional and communications equipment destined for use in vigorous climatic conditions.

### The 5S - for 100kHz to 15MHz

The 5S range cover basically the same applications as the 5M - except with approx. 30% less height. The smaller overall size means that Q is slightly lower, and the maximum inductance available slightly lower - but for miniature radio equipment, there is no better suited component. Using the KV1210 varicap tuning diode - a complete AM/FM radio can be constructed using TDA1083 ICs, that is less than 9mm thick overall.

## GENERAL INFORMATION

The introduction of the 5A, 5M and 5S coils realizes new standards in miniature RF/IF transformer design. The original 5mm series - TOKO's famous 5E range - is now discontinued, and types originally designed for 5E are being provided in 5S or 5M styles. Sample types of the three ranges are being held for customer evaluation - mainly based on the existing 5E range, and versions that have been scaled down from popular 10mm and 7mm styles.

All three types fit into the same basic PC pattern.

# Design Data for the 5A, 5M and 5S

Type	Prefix	Frequency range	Inductance range	Adjustment range	Qu±20% at MHz	Temperature coeff.: ppm/°C
5A		30 - 175MHz	0.03 to 0.3uH	Lo±6%	70-100 @ 100	(-10 to +60) 0 - 150
5M	5MMC	0.2 - 1.0MHz	20 to 1000uH	Fo±2%	110 @ .455	0±150
	5MMN			Lo±4%		870±150
	5MNR	0.5 - 3.0MHz	20 to 560 uH	Lo±6%	90 @ 1.4	0±150
	5MAC	2.0 - 15MHz	1.0 to 30 uH	Fo±2%	100 @ 10.7	0±60
	5MAN	2.0 - 15MHz	1.0 to 30uH	Lo±4%	100 @ 10.7	220±60
	5MFC	2.0 - 15MHz	1.0 to 15 uH	Fo±2%	110 @ 10.7	0±60
5S	5SLN	0.2 - 1.0MHz	20 to 680uH	Lo±4%	70 @ .455	750±250
	5SLC			Fo±2%		0±250
	5SNR	0.5 - 3.0MHz	20 to 360uH	Lo±6%	70 @ 1.4	0±150
	5SPC	2.0 - 15MHz	1.0 to 28 uH	Fo±2%	70 @ 10.7	0±120
	5SPN			Lo±4%		220±120
	5SFC	2.0 - 15MHz	1.0 to 15 uH	Fo±2%	70 @ 10.7	0±120
5S	5SFN			Lo±4%		220±120

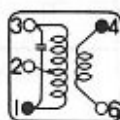
## Internal Capacitors - 5M and 5S types only

The following internal capacitors are available for either 5M or 5S coils

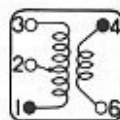
18, 22, 27, 33, 39, 47 pF T.C. - 220 ppm/°C  
180, 1500 pF T.C. -750 ppm/°C

## Base connections

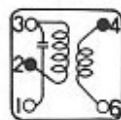
For 5M and 5S types, the internal capacitor may only be fitted between pins 1-3, 4-6, 3-6, 1-4  
These base connections are in accordance with standard practise in 7 and 10mm series coils



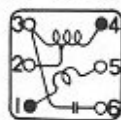
N(1)



N(2)



M



L

● Black dot indicates start of winding.

## When ordering:

Please specify by:

- coil type
- inductance, or centre frequency if IFT
- capacitor value if IFT
- operational frequency range
- Q required
- temperature range (coefficient)
- base connections from above table
- if you require a type scaled from any other TOKO range, please specify original part number
- please try to use coils from the list of standard parts which is published and updated from time to time

## General Application Information

Do not use ferrous tools for adjustment of cores, the high density of the coil structure makes the effect of ferrous trimming tools particularly severe. Locate all coils away from magnetic fields, such as high density speaker magnets etc.  
For best RF performance, always use the largest possible format of coil permissible in a given design brief.

TOKO (UK) Ltd., Ward Royal Parade, Alma Road, Windsor, Berkshire.

Distributed and stocked by Ambit International, 2 Gresham Road, Brentwood, Essex. CM14 4HN tel (0277) 227050

## TOKO coil additions

Style	Type no	Colour	Q	Int CpF	Turns:	1-2	2-3	1-3	4-6	other	Base type (see part one of cat) & notes
10KC	MKXCSK3464BM	black	100	27				8	2		3 - 27MHz HiQ RF coil for RC etc
10E	YWOS6A356EK	blue	70+	156uH nom		2	64	66	7		6 - low self capacity MW osc coil
10EZ	RWO6A775EK	green	80+	630uH nom		9	114	123	13		6 - LW and RDF band oscillator coil
10EZ	154FN8A6438EK	violet	100+	45uH		10	30	40	8		6 - SW1 RF / ANT, HiZ, HiQ
10EZ	154FN8A6439EK	yellow	110+	5.5uH		4	10	14	6		6 - SW2 RF / ANT, HiZ, HiQ
10K	KXNK3767EK	black	80+	1.2uH		2	6	8	5		6 - SW3 RF / ANT, HiZ, HiQ
10EZ	154AN7A6440EK	white	90+	38uH		10	31	41	9		6 - SW1 OSC HiZ
10EZ	154AN7A6441EK	green	70+	5uH		4	11	15	7		6 - SW2 OSC HiZ
10K	KXNK3766EK	blue	80+	1.1uH		2	6	8	5		6 - SW3 OSC HiZ

208BLR3152N - a 19/38kHz mono mpX pilot tone filter (smaller sized version of 190BLR3152N)

208BLR3155N - a 26/38kHz mono filter for pilot cancel stereo decoder applications

## 5S coils:

					1-2	2-3	1-3	4-6	Q
5SNR-0188N	from RWR331208	for MW antenna/rf and osc applications.			13	127	140	52	57+
5SNR-0187N	from YMR80046N	for MW/LW osc applications			2	93	95	14	75+
5SNR-0332N	from YWOS6A356EK	for MW/LW osc applications			2	92	94	10	70+
5SPN-0186N	from 94AES-30466N	for 10.7/9MHz IF filter matching etc			7	3	10	2	67+
5SPC-0185A	from KALS4520A	for 10.7/9MHz IF and filter matching			7	8	15	1	78+
5SPC-0210Z	from KALSK586HM	for 10.7MHz quadrature detection					15		95+
5SLC-0184AC	from YHCS11100AC2	for 455-470kHz IF and detector applications			137	43	180	27	77+
5SLC-0333R	from YRCS12374AC2	for 455-470kHz IF applications			142	43	185	7	80+
5SLC-0190N	from YLE4A888EK	for 455-470 IF and detector applications			58	58	116	16	85+
5SLC-0331R	from YHCS1A590R	for 455-470kHz IF/detector and filter matching			104	76	180	20	80+