HCB SERIES
Bobbin Type Inductor

RoHS Compliant
Directive 2002/95/EC
All parts are ROHS compliant

DESCRIPTION

The HCB Series is suitable for many power supply and other general purpose filtering applications.The use of non-magnetic screw will ensure mechanical stability.

FEATURES

- Radial Format
- -40ºC to 85ºC Operating Temp
- Up to 13A IDC
- 10µH to 22mH
- Low DC Resistance
- Fully Tinned Leads
- PCB Mounting Hole
- Low Temperature Dependance
- MIL-I-23053/5 Class Ⅰ&Ⅱ Sleeving
- Custom Parts Available

SELECTION GUIDE

	Inductance (±10% at 1kHz)	RDC[max]	IDC[com]	Temp rise (at IDC)	Nominal Q at f kHz		Nominal Self Resonant Frequency	Mechanical Dimensions					Footprint	
Order Code	µH	Ω	A	℃	Q	f	MHz	a	b	c	d	Φe	f	Φg
HCB10313	10	0.007	13	20	54	50	20.7	27.0	24.4	14.0	1.30	4.5*	23.9	2.6
HCB15312	15	0.009	12	25	42	50	12.7	27.0	24.4	14.0	1.30	4.5*	23.9	2.6
HCB22311	22	0.011	11	27	64	100	9.3	27.0	24.4	14.0	1.30	4.5*	23.9	2.6
HCB33393	33	0.015	9.3	25	27	50	9.1	27.0	24.4	14.0	1.30	4.5*	23.9	2.6
HCB47383	47	0.019	8.3	25	40	100	6.0	27.0	24.4	18.5	1.30	4.5*	23.9	2.6
HCB47385	47	0.021	8.5	26	33	100	6.7	26.8	24.4	14.0	1.20	4.5*	23.8	2.4
HCB68362	68	0.032	6.2	27	32	100	5.3	26.5	24.4	14.0	1.00	4.5*	23.7	2.1
HCB68373	68	0.022	7.3	27	45	100	5.3	27.0	24.4	18.5	1.30	4.5*	23.9	2.6
HCB10454	100	0.042	5.4	27	24	100	4.6	26.4	24.4	14.0	1.00	4.5*	23.6	2.0
HCB10460	100	0.033	6.0	29	37	100	3.9	26.8	24.4	18.5	1.20	4.5*	23.8	2.4
HCB10478	100	0.040	7.8	28	34	50	3.3	32.4	29.8	21.8	1.30	5.1	29.3	2.6
HCB15440	150	0.069	4.0	26	24	50	3.4	26.2	24.4	14.0	0.90	4.5*	23.5	1.8
HCB15449	150	0.051	4.9	27	34	50	2.9	26.4	24.4	18.5	1.00	4.5*	23.6	2.0
HCB15465	150	0.042	6.5	29	46	100	2.4	32.2	29.8	21.8	1.20	5.1	29.2	2.4
HCB22435	220	0.096	3.5	29	22	50	2.8	26.1	24.4	14.0	0.85	4.5*	23.5	1.7
HCB22441	220	0.073	4.1	25	33	100	2.3	26.3	24.4	18.5	1.00	4.5*	23.6	1.9
HCB22455	220	0.062	5.5	27	30	50	2.2	32.1	29.8	21.8	1.20	5.1	29.1	2.2
HCB30430	300	0.140	3.0	23	26	50	2.6	25.9	24.4	14.0	0.75	4.5*	23.4	1.5
HCB30433	300	0.100	3.5	25	37	50	2.2	26.2	24.4	18.5	0.90	4.5*	23.5	1.8
HCB30450	300	0.080	5.0	29	28	50	1.7	31.8	29.8	21.8	1.00	5.1	29.0	2.0
HCB33428	330	0.150	2.8	24	22	50	2.5	25.9	24.4	14.0	0.75	4.5*	23.4	2.5
HCB33433	330	0.107	3.3	25	29	50	2.0	26.2	24.4	18.5	0.90	4.5*	23.5	1.8
HCB33445	330	0.091	4.5	29	25	50	1.6	31.8	29.8	21.8	1.00	5.1	29.0	2.0
HCB47423	470	0.222	2.3	28	34	50	2.0	25.7	24.4	14.0	0.65	4.5*	23.3	1.3
HCB47427	470	0.149	2.7	24	25	50	1.6	26.1	24.4	18.5	0.85	4.5*	23.5	1.7
HCB47440	470	0.125	4.0	29	24	50	1.4	31.7	29.8	21.8	1.00	5.1	29.0	1.9
HCB68420	680	0.276	2.0	25	23	50	1.6	25.7	24.4	14.0	0.65	4.5*	23.3	1.3
HCB68422	680	0.226	2.2	28	28	50	1.3	25.9	24.4	18.5	0.75	4.5*	23.4	1.5
HCB68431	680	0.173	3.1	27	60	10	1.0	31.6	29.8	21.8	0.90	5.1	29.8	1.8
HCB10516	1.0mH	0.419	1.6	24	30	50	1.4	25.6	24.4	14.0	0.60	4.5*	23.2	1.2
HCB10517	1.0mH	0.336	1.7	26	35	50	1.2	25.7	24.4	18.5	0.65	4.5*	23.3	1.3
HCB10524	1.0mH	0.277	2.4	28	33	50	1.0	31.4	29.8	21.8	0.80	5.1	28.8	1.5

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Order Code	μH	Ω	A	℃	Q	f	MHz	a	b	c	d	Φe	f	Φg
HCB15513	1.5mH	0.630	1.3	27	34	50	1.0	25.5	24.4	14.0	0.50	4.5*	23.1	1.0
HCB15514	1.5mH	0.518	1.4	26	47	50	0.8	25.6	24.4	18.5	0.60	4.5*	23.2	1.2
HCB15517	1.5mH	0.374	1.7	26	28	50	0.7	31.3	29.8	21.8	0.75	5.1	28.8	1.5
HCB22509	2.2mH	0.916	0.9	25	43	50	0.9	25.3	24.4	14.0	0.50	4.5*	23.1	0.9
HCB22512	2.2mH	0.649	1.2	25	33	50	0.7	25.6	24.4	18.5	0.60	4.5*	23.2	1.2
HCB22514	2.2mH	0.622	1.4	27	33	50	0.6	31.1	29.8	21.8	0.65	5.1	28.7	1.3
HCB33507	3.3mH	1.428	0.7	22	45	50	0.8	25.2	24.4	14.0	0.40	4.5*	23.0	0.8
HCB33510	3.3mH	1.992	1.0	26	20	50	0.7	25.5	24.4	28.5	0.55	4.5*	23.1	1.0
HCB33512	3.3mH	0.861	1.2	26	20	50	0.5	31.0	29.8	21.8	0.60	5.1	26.8	1.2
HCB47506	4.7mH	2.200	0.6	27	60	50	0.6	25.2	24.4	14.0	0.40	4.5*	23.0	0.7
HCB47508	4.7mH	1.436	0.8	26	65	50	0.5	25.3	24.4	18.5	0.50	4.5*	23.1	0.9
HCB47509	4.7mH	1.250	0.9	28	57	10	0.5	30.9	29.8	21.8	0.55	5.1	28.5	1.0
HCB68505	6.8mH	2.810	0.5	24	50	50	0.5	25.2	24.4	14.0	0.40	4.5*	23.0	0.7
HCB68507	6.8mH	2.214	0.7	25	47	50	0.4	25.2	24.4	18.5	0.43	4.5*	23.0	0.8
HCB68508	6.8mH	1.884	0.8	26	30	50	0.4	30.7	29.8	21.8	0.50	5.1	28.5	0.9
HCB10604	10mH	4.340	0.4	22	51	50	0.4	25.1	24.4	14.0	0.35	4.5*	22.9	0.6
HCB10605	10mH	3.394	0.5	24	48	50	0.3	25.2	24.4	18.5	0.40	4.5*	23.0	0.7
HCB10606	10mH	2.294	0.6	25	48	50	0.2	30.9	29.8	21.8	0.55	5.1	28.5	1.0
HCB15604	15mH	4.912	0.4	25	61	10	0.2	25.1	24.4	18.5	0.34	4.5*	22.9	0.6
HCB15605	15mH	3.740	0.5	21	55	10	0.2	30.6	29.8	21.8	0.40	5.1	28.4	0.8
HCB22604	22mH	6.926	0.4	26	30	50	0.2	30.5	29.8	21.8	0.35	5.1	28.3	0.6

*The drilled hole for these devices have a 6.10Φx2.40 countersink

TYPICAL CORE CHARACTERISTICS

Inductance Temperature Coefficient	Resistance Temperature Coefficient	Curie Temperature Tc	Saturation Flux B_{SAT}
215ppm	4100ppm	130°C	240mT

ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to 85°C
Storage temperature range	-55°C to125°C

MECHANICAL DIMENSIONS