



SMD Unshielded Power Inductors - HDB Series

FEATURES

- * RoHS, Halogen Free and REACH Compliance
- * Unshielded power inductor
- * Various package size and wide inductance range. HDB family is designed for low resistance and high current purpose

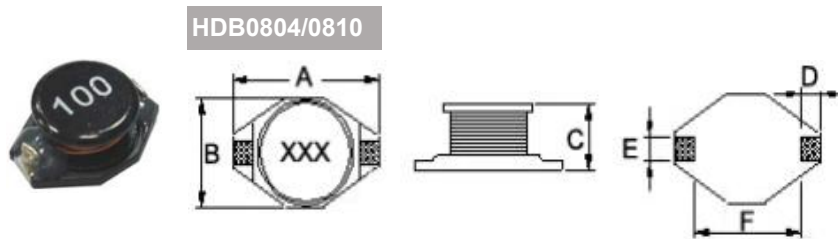
ORDERING CODE(标志示例)

HDB □□□□ - □□□ □

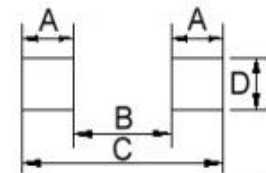
(1) (2) (3) (4)

- (1) HDB 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

Shape and Dimensions



Recommended Pattern



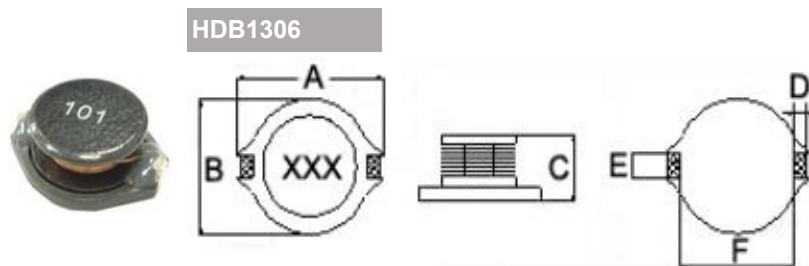
Dimensions in mm

TYPE	A	B	C	D	E	F
HDB0804	12.95 ⁺⁰	9.40 ⁺⁰	5.21 ⁺⁰	2.54	2.54	7.62
HDB0810	12.95 ⁺⁰	9.40 ⁺⁰	11.43 ⁺⁰	2.54	2.54	7.62

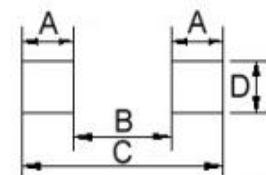
Dimensions in mm

TYPE	A	B	C	D
HDB0804	2.92	7.37	13.21	2.79
HDB0810	2.92	7.37	13.21	2.79

Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E	F
HDB1306	18.54 ⁺⁰	15.24 ⁺⁰	7.11 ⁺⁰	2.54	2.54	12.70

Dimensions in mm

TYPE	A	B	C	D
HDB1306	2.92	12.45	18.29	2.79



SMD Unshielded Power Inductors - HDB_HC Series

FEATURES

- * RoHS, Halogen Free and REACH Compliance
- * Unshielded power inductor
- * Various package size and wide inductance range. HDB-HC family is designed for low resistance and high current purpose



ORDERING CODE(标志示例)

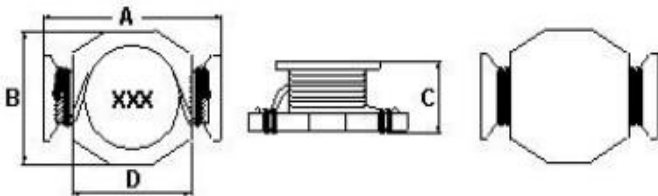
HDB □□□□ - □□□ □

(1) (2) (3) (4)

- (1) HDB 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

Shape and Dimensions

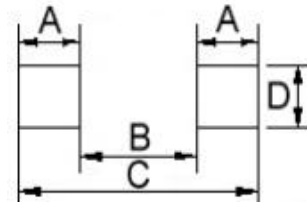
HDB0503HC



Dimensions in mm

TYPE	A	B	C	D
HDB0503HC	8.89 ⁺⁰	6.10 ⁺⁰	5.00 ⁺⁰	5.84

Recommended Pattern

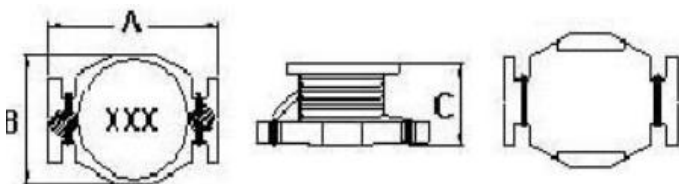


Dimensions in mm

TYPE	A	B	C	D
HDB0503HC	1.91	4.06	8.89	5.08

Shape and Dimensions

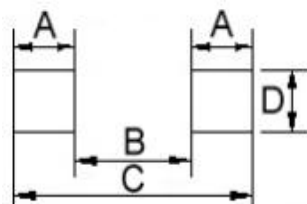
HDB0804HC



Dimensions in mm

TYPE	A	B	C
HDB0804HC	13.21 ⁺⁰	9.91 ⁺⁰	6.35 ⁺⁰

Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
HDB0804HC	1.52	8.64	11.68	4.06



SMD Shielded Power Inductors - HDB0804 Series

HDB0804 series Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	SRF (MHz)Typ.	RDC (Ω)max	Isat (A)	Irms (A)	Marking
HDB0804T-1R0M	1.0	20	100KHz,0.1V	100	0.009	9.00	6.80	1R0
HDB0804T-1R5M	1.5	20	100KHz,0.1V	90	0.010	8.00	6.40	1R5
HDB0804T-2R2M	2.2	20	100KHz,0.1V	80	0.012	7.00	6.10	2R2
HDB0804T-3R3M	3.3	20	100KHz,0.1V	65	0.015	6.40	5.40	3R3
HDB0804T-4R7M	4.7	20	100KHz,0.1V	45	0.018	5.40	4.80	4R7
HDB0804T-6R8M	6.8	20	100KHz,0.1V	38	0.027	4.60	4.40	6R8
HDB0804T-100M	10	20	100KHz,0.1V	30	0.038	3.80	3.90	100
HDB0804T-120M	12	20	100KHz,0.1V	27	0.043	3.50	3.60	120
HDB0804T-150M	15	20	100KHz,0.1V	27	0.046	3.00	3.10	150
HDB0804T-220M	22	20	100KHz,0.1V	19	0.085	2.60	2.70	220
HDB0804T-330M	33	20	100KHz,0.1V	15	0.100	2.00	2.10	330
HDB0804T-470M	47	20	100KHz,0.1V	12	0.140	1.60	1.80	470
HDB0804T-680M	68	20	100KHz,0.1V	10	0.200	1.40	1.50	680
HDB0804T-101M	100	20	100KHz,0.1V	9	0.260	1.20	1.30	101
HDB0804T-151M	150	20	100KHz,0.1V	6	0.400	1.00	1.00	151
HDB0804T-221M	220	20	100KHz,0.1V	5	0.610	0.80	0.80	221
HDB0804T-331M	330	20	100KHz,0.1V	4.5	1.020	0.60	0.60	331
HDB0804T-471M	470	20	100KHz,0.1V	3.5	1.270	0.50	0.50	471
HDB0804T-681M	680	20	100KHz,0.1V	2.5	2.020	0.40	0.40	681
HDB0804T-102M	1000	20	100KHz,0.1V	2.0	3.000	0.30	0.30	102
HDB0804T-152M	1500	20	100KHz,0.1V	1.4	4.500	0.25	0.20	152

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range — 40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 15°C temperature rise from 25°C ambient with current



SMD Shielded Power Inductors - HDB0810 Series

HDB0810 series Electrical Characteristics

Part No.	Inductance (μ H)	Tolerance (\pm %)	Test Freq.	SRF (MHz)Typ.	RDC (Ω)max	Isat (A)	Irms (A)	Marking
HDB0810T-3R3M	3.3	20	100KHz,0.1V	30	0.025	10.00	4.00	3R3
HDB0810T-4R7M	4.7	20	100KHz,0.1V	25	0.033	8.00	3.50	4R7
HDB0810T-100M	10	20	100KHz,0.1V	22	0.033	8.00	3.50	100
HDB0810T-150M	15	20	100KHz,0.1V	18	0.042	7.00	3.00	150
HDB0810T-220M	22	20	100KHz,0.1V	11	0.054	5.50	2.50	220
HDB0810T-330M	33	20	100KHz,0.1V	9	0.08	4.00	2.00	330
HDB0810T-470M	47	20	100KHz,0.1V	8	0.10	3.80	1.60	470
HDB0810T-680M	68	20	100KHz,0.1V	7	0.17	3.00	1.20	680
HDB0810T-101M	100	20	100KHz,0.1V	5	0.22	2.50	1.20	101
HDB0810T-151M	150	20	100KHz,0.1V	4	0.34	2.00	0.90	151
HDB0810T-221M	220	20	100KHz,0.1V	3.5	0.44	1.60	0.70	221
HDB0810T-271M	270	20	100KHz,0.1V	2.5	0.60	1.40	0.60	271
HDB0810T-331M	330	20	100KHz,0.1V	2.5	0.70	1.20	0.60	331
HDB0810T-471M	470	20	100KHz,0.1V	2	0.95	1.00	0.30	471
HDB0810T-681M	680	20	100KHz,0.1V	2	1.20	1.00	0.20	681
HDB0810T-102M	1000	20	100KHz,0.1V	1.5	2.00	0.80	0.10	102

Note: When ordering, please specify tolerance code. Tolerance: M \pm 20%

- Operating temperature range – 40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 15°C temperature rise from 25°C ambient with current



SMD Shielded Power Inductors - HBD1306 Series

HBD1306 series Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	SRF (MHz)Typ.	RDC (Ω)max	Isat (A)	Irms (A)	Marking
HDB1306T-1R0M	1.0	20	100KHz,0.1V	80	0.013	20.00	8.60	1R0
HDB1306T-2R2M	2.2	20	100KHz,0.1V	80	0.016	16.00	7.10	2R2
HDB1306T-3R3M	3.3	20	100KHz,0.1V	60	0.018	14.00	6.20	3R3
HDB1306T-4R7M	4.7	20	100KHz,0.1V	45	0.025	13.00	5.50	4R7
HDB1306T-5R6M	5.6	20	100KHz,0.1V	40	0.025	12.00	5.30	5R6
HDB1306T-6R8M	6.8	20	100KHz,0.1V	30	0.025	10.00	5.00	6R8
HDB1306T-100M	10	20	100KHz,0.1V	30	0.037	10.00	4.30	100
HDB1306T-150M	15	20	100KHz,0.1V	22	0.041	8.00	4.00	150
HDB1306T-180M	18	20	100KHz,0.1V	20	0.045	7.50	3.70	180
HDB1306T-220M	22	20	100KHz,0.1V	20	0.054	7.00	3.50	220
HDB1306T-330M	33	20	100KHz,0.1V	15	0.076	5.50	3.00	330
HDB1306T-470M	47	20	100KHz,0.1V	9	0.100	4.50	2.60	470
HDB1306T-680M	68	20	100KHz,0.1V	8	0.15	3.50	2.30	680
HDB1306T-101M	100	20	100KHz,0.1V	7	0.22	3.00	1.80	101
HDB1306T-151M	150	20	100KHz,0.1V	6	0.29	2.60	1.50	151
HDB1306T-221M	220	20	100KHz,0.1V	5	0.44	2.40	1.20	221
HDB1306T-331M	330	20	100KHz,0.1V	4	0.64	1.90	1.00	331
HDB1306T-471M	470	20	100KHz,0.1V	3	0.98	1.40	0.82	471
HDB1306T-681M	680	20	100KHz,0.1V	2.5	1.38	1.20	0.72	681
HDB1306T-102M	1000	20	100KHz,0.1V	2	2.07	1.00	0.56	102

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range -40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current
- I rms for a 15°C temperature rise from 25°C ambient with current



SMD Shielded Power Inductors - HDB0503HC Series

HDB0503HC series Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	SRF (MHz)Typ.	RDC (Ω)max	Isat (A)	Irms (A)	Marking
HDB0503HC-R33M	0.33	20	100KHz,0.25V	330	0.007	8.20	7.00	R33
HDB0503HC-R56M	0.56	20	100KHz,0.25V	200	0.010	7.70	6.00	R56
HDB0503HC-1R0M	1.0	20	100KHz,0.25V	140	0.017	5.30	4.40	1R0
HDB0503HC-1R2M	1.2	20	100KHz,0.25V	140	0.017	5.30	4.40	1R2
HDB0503HC-1R6M	1.6	20	100KHz,0.25V	100	0.022	4.50	4.00	1R6
HDB0503HC-2R2M	2.2	20	100KHz,0.25V	100	0.035	3.50	3.10	2R2
HDB0503HC-4R7M	4.7	20	100KHz,0.25V	50	0.054	2.60	2.20	4R7
HDB0503HC-6R8M	6.8	20	100KHz,0.25V	45	0.070	2.00	1.80	6R8
HDB0503HC-100M	10	20	100KHz,0.25V	40	0.111	1.90	1.50	100
HDB0503HC-150M	15	20	100KHz,0.25V	30	0.170	1.50	1.20	150
HDB0503HC-220M	22	20	100KHz,0.25V	25	0.250	1.20	1.00	220
HDB0503HC-270M	27	20	100KHz,0.25V	20	0.320	1.00	0.85	270
HDB0503HC-330M	33	20	100KHz,0.25V	20	0.370	0.99	0.82	330
HDB0503HC-470M	47	20	100KHz,0.25V	15	0.470	0.87	0.72	470

Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- Operating temperature range — 40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current



SMD Shielded Power Inductors - HDB0804HC Series

HDB0804HC series Electrical Characteristics

Part No.	Inductance (μ H)	Tolerance (\pm %)	Test Freq.	SRF (MHz)Typ.	RDC (Ω)max	Isat (A)	Irms (A)	Marking
HDB0804HC-R33M	0.33	20	100KHz,0.1V	300	0.002	20.00	16.00	R33
HDB0804HC-R68M	0.68	20	100KHz,0.1V	200	0.005	13.00	12.00	R68
HDB0804HC-1R0M	1.0	20	100KHz,0.1V	100	0.006	11.00	10.00	1R0
HDB0804HC-1R5M	1.5	20	100KHz,0.1V	90	0.008	9.00	9.00	1R5
HDB0804HC-2R2M	2.2	20	100KHz,0.1V	90	0.011	7.80	7.40	2R2
HDB0804HC-2R7M	2.7	20	100KHz,0.1V	65	0.012	7.00	6.60	2R7
HDB0804HC-3R3M	3.3	20	100KHz,0.1V	65	0.014	6.40	5.90	3R3
HDB0804HC-4R7M	4.7	20	100KHz,0.1V	45	0.018	5.40	4.80	4R7
HDB0804HC-6R8M	6.8	20	100KHz,0.1V	35	0.035	3.60	5.00	6R8
HDB0804HC-100M	10	20	100KHz,0.1V	26	0.040	3.30	4.30	100
HDB0804HC-150M	15	20	100KHz,0.1V	21	0.060	2.40	3.50	150
HDB0804HC-220M	22	20	100KHz,0.1V	17	0.080	2.00	2.80	220
HDB0804HC-330M	33	20	100KHz,0.1V	14	0.150	1.70	2.10	330
HDB0804HC-470M	47	20	100KHz,0.1V	12	0.280	1.40	1.70	470
HDB0804HC-680M	68	20	100KHz,0.1V	9	0.300	1.20	1.50	680
HDB0804HC-101M	100	20	100KHz,0.1V	7	0.400	0.95	1.20	101

Note: When ordering, please specify tolerance code. Tolerance: M= \pm 20%

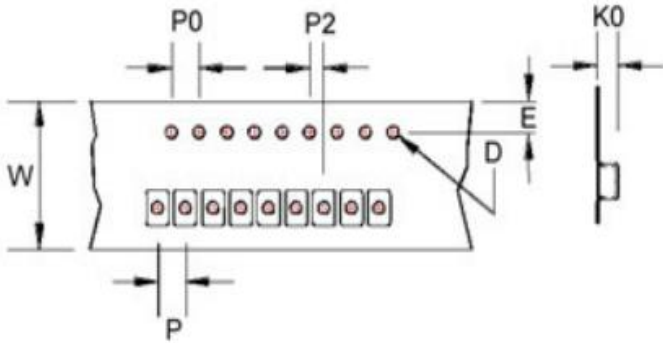
- Operating temperature range — 40°C ~ 125°C (Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- I rms for a 40°C temperature rise from 25°C ambient with current



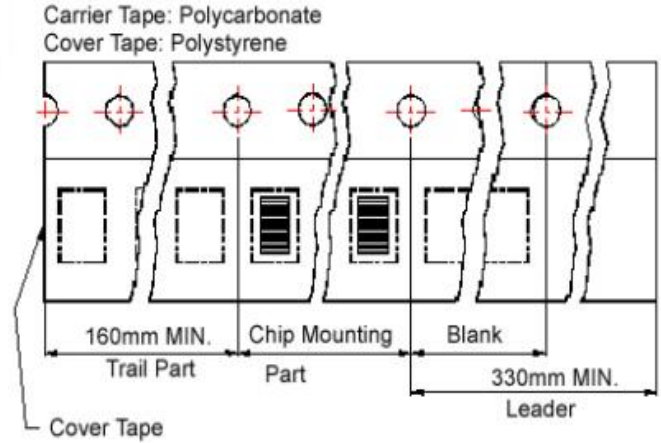
SMD Unshielded Power Inductors - HDB Series

Packaging Specifications

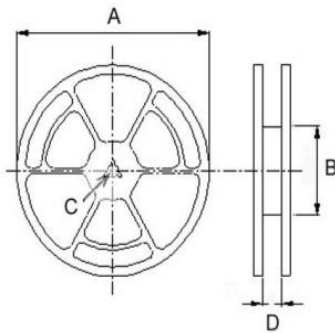
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

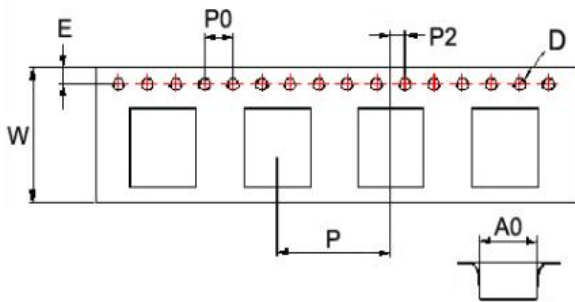
TYPE								Reel Dimensions				Quantity PCS/REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	
HDB0804	5.40	1.55	1.75	24	16	4	2	330	100	13	24.4	750
HDB0810	11.50	1.55	1.75	24	20	4	2	330	100	13	24.4	225
HDB1306	7.50	1.55	1.75	32	20	4	2	330	100	13	33.4	350



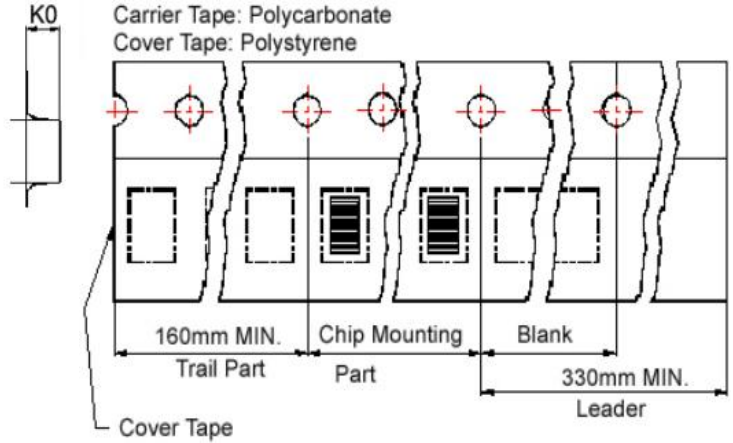
SMD Unshielded Power Inductors - HDB-HC Series

Packaging Specifications

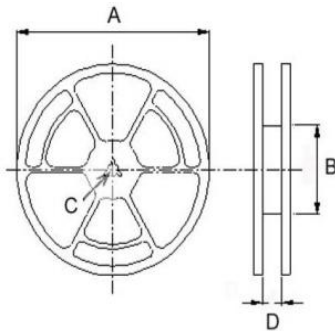
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE								Reel Dimensions				Quantity PCS/REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	
HDB0503HC	5.30	1.55	1.75	16	12	4	2	330	100	13	16	1000
HDB0804HC	6.10	1.55	1.75	24	16	4	2	330	100	13	24.2	700