



## SMD Unshielded Power Inductors - HCD Series

### FEATURES

- \* RoHS, Halogen Free and REACH Compliance
- \* Unshielded power inductor
- \* Various package size and wide inductance range

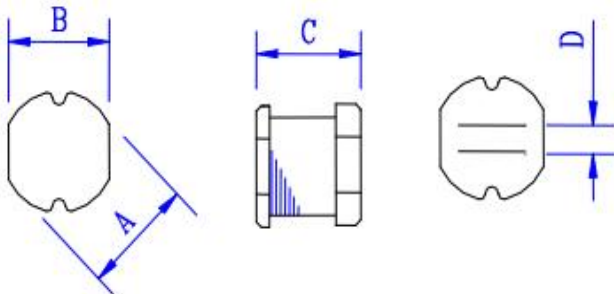


### ORDERING CODE(标志示例)

**HCD**    □□□□    -    □□□□    □  
(1)            (2)                            (3)            (4)

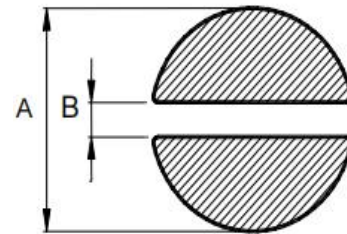
- (1) HCD 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

#### Shape and Dimensions



Dimensions in mm

#### Recommended Pattern



PAD LAYOUT

Dimensions in mm

TYPE	A	B	C	D
HCD03015	3.3±0.3	3.0±0.3	1.5±0.3	1.0Typ.
HCD03021	3.3±0.3	3.0±0.3	2.1±0.3	1.0Typ.
HCD0403	4.5±0.3	4.0±0.3	3.2±0.3	1.2Typ.
HCD0502	5.8±0.3	5.2±0.3	2.5±0.3	2.0Typ.
HCD0503	5.8±0.3	5.2±0.3	3.0±0.3	2.0Typ.
HCD0504	5.8±0.3	5.2±0.3	4.5±0.4	1.3Typ.
HCD0703	7.8±0.3	7.0±0.3	3.5±0.3	2.1Typ.
HCD0705	7.8±0.3	7.0±0.3	5.0±0.3	2.1Typ.
HCD1004	10.0±0.3	9.0±0.3	4.0±0.5	2.1Typ.
HCD1005	10.0±0.4	9.0±0.4	5.4±0.4	2.1Typ.
HCD1006	10.0±0.4	9.0±0.4	6.5±0.4	2.1Typ.

TYPE	A	B
HCD03015	4.5	1.0
HCD03021	4.5	1.0
HCD0403	5.5	1.2
HCD0502	6.8	2.0
HCD0503	6.8	2.0
HCD0504	6.8	1.3
HCD0703	6.8	2.1
HCD0705	6.8	2.1
HCD1004	11	2.1
HCD1005	11	2.1
HCD1006	11	2.1



## SMD Shielded Power Inductors - HCD03015 Series

### HCD03015 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD03015T-2R2□	2.2	20	1MHz,1V	0.13	0.79	CC
HCD03015T-3R3□	3.3	20	1MHz,1V	0.143	0.73	DD
HCD03015T-4R7□	4.7	20	1MHz,1V	0.195	0.65	EH
HCD03015T-5R6□	5.6	20	1MHz,1V	0.195	0.60	FG
HCD03015T-6R8□	6.8	20	1MHz,1V	0.26	0.77	GI
HCD03015T-100□	10	20	1MHz,1V	0.39	0.45	KA
HCD03015T-150□	15	20	1MHz,1V	0.754	0.30	MA
HCD03015T-220□	22	10,20	1MHz,1V	0.923	0.25	LA
HCD03015T-330□	33	20	1MHz,1V	1.43	0.20	NA
HCD03015T-390□	39	20	1MHz,1V	1.69	0.17	PA
HCD03015T-470□	47	20	1MHz,1V	1.69	0.17	OA
HCD03015T-680□	68	20	1MHz,1V	2.86	0.13	VA
HCD03015T-101□	100	20	1MHz,1V	1.55	0.10	KB
HCD03015T-221□	220	20	1MHz,1V	10.92	0.07	LB

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD03021 Series

### HCD03021 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD03021T-R82□	0.82	30	7.96MHz,1V	0.06	2.20	AX
HCD03021T-1R0□	1	20	7.96MHz,1V	0.07	2.08	BA
HCD03021T-1R2□	1.2	20	7.96MHz,1V	0.08	2.00	BC
HCD03021T-1R4□	1.4	20	7.96MHz,1V	0.09	1.86	BE
HCD03021T-1R5□	1.5	20	7.96MHz,1V	0.11	1.80	BF
HCD03021T-1R8□	1.8	20	7.96MHz,1V	0.11	1.80	BI
HCD03021T-2R2□	2.2	20	7.96MHz,1V	0.13	1.39	CC
HCD03021T-2R7□	2.7	20	7.96MHz,1V	0.14	1.32	CH
HCD03021T-3R3□	3.3	10,20	7.96MHz,1V	0.17	1.25	DD
HCD03021T-3R9□	3.9	20	7.96MHz,1V	0.19	1.20	DJ
HCD03021T-4R7□	4.7	20	7.96MHz,1V	0.21	1.13	EH
HCD03021T-5R6□	5.6	20	7.96MHz,1V	0.22	0.91	FG
HCD03021T-6R8□	6.8	20	7.96MHz,1V	0.25	0.85	GI
HCD03021T-7R0□	7	20	7.96MHz,1V	0.28	0.82	HA
HCD03021T-8R2□	8.2	20	7.96MHz,1V	0.28	0.82	IC
HCD03021T-100□	10	10,20	2.52MHz,1V	0.32	0.74	KA
HCD03021T-120□	12	20	2.52MHz,1V	0.35	0.64	QA
HCD03021T-150□	15	20	2.52MHz,1V	0.40	0.60	MA
HCD03021T-180□	18	20	2.52MHz,1V	0.48	0.54	RA
HCD03021T-220□	22	10,20	2.52MHz,1V	0.58	0.50	LA
HCD03021T-270□	27	20	2.52MHz,1V	0.65	0.43	SA
HCD03021T-330□	33	20	2.52MHz,1V	0.80	0.40	NA
HCD03021T-390□	39	20	2.52MHz,1V	0.90	0.37	PA
HCD03021T-470□	47	20	2.52MHz,1V	1.19	0.36	OA
HCD03021T-500□	50	20	2.52MHz,1V	1.22	0.33	TA
HCD03021T-560□	56	20	2.52MHz,1V	1.27	0.31	UA
HCD03021T-680□	68	10,20	2.52MHz,1V	1.73	0.30	VA
HCD03021T-750□	75	20	2.52MHz,1V	1.90	0.29	WA

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20% , T= $\pm$ 30%

- Operating temperature range—40℃~105℃(Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD03021 Series

### HCD03021 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD03021T-82□	82	10,20	2.52MHz,1V	1.99	0.28	XA
HCD03021T-101□	100	20	1KHz,1V	2.52	0.25	KB
HCD03021T-121□	120	10,20	1KHz,1V	2.90	0.20	QB
HCD03021T-151□	150	20	1KHz,1V	3.36	0.19	MB
HCD03021T-181□	180	20	1KHz,1V	5.10	0.17	RB
HCD03021T-221□	220	10,20	1KHz,1V	5.80	0.16	LB
HCD03021T-271□	270	10,20	1KHz,1V	7.80	0.14	SB

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20% , T= $\pm$ 30%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0403 Series

### HCD0403 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0403T-R15□	0.15	30	7.96MHz,1V	0.0085	7.50	R15
HCD0403T-1R0□	1.0	10,20	7.96MHz,1V	0.033	3.80	1R0
HCD0403T-1R2□	1.2	20	7.96MHz,1V	0.035	3.50	1R2
HCD0403T-1R4□	1.4	20	7.96MHz,1V	0.038	3.30	1R4
HCD0403T-1R8□	1.8	10,20	7.96MHz,1V	0.042	2.91	1R8
HCD0403T-2R2□	2.2	10,20	7.96MHz,1V	0.047	2.60	2R2
HCD0403T-2R7□	2.7	20	7.96MHz,1V	0.052	2.43	2R7
HCD0403T-3R3□	3.3	10,20	7.96MHz,1V	0.058	2.15	3R3
HCD0403T-3R9□	3.9	20	7.96MHz,1V	0.076	1.98	3R9
HCD0403T-4R7□	4.7	10,20	7.96MHz,1V	0.094	1.70	4R7
HCD0403T-5R6□	5.6	10,20	7.96MHz,1V	0.101	1.60	5R6
HCD0403T-6R2□	6.2	20	7.96MHz,1V	0.11	1.50	6R2
HCD0403T-6R8□	6.8	10,20	7.96MHz,1V	0.117	1.41	6R8
HCD0403T-8R2□	8.2	10,20	7.96MHz,1V	0.132	1.26	8R2
HCD0403T-100□	10	10,20	2.52MHz,1V	0.182	1.15	100
HCD0403T-120□	12	20	2.52MHz,1V	0.21	1.05	120
HCD0403T-150□	15	10,20	2.52MHz,1V	0.235	0.92	150
HCD0403T-180□	18	20	2.52MHz,1V	0.338	0.84	180
HCD0403T-220□	22	10,20	2.52MHz,1V	0.378	0.76	220
HCD0403T-270□	27	10,20	2.52MHz,1V	0.522	0.71	270
HCD0403T-330□	33	10,20	2.52MHz,1V	0.54	0.64	330
HCD0403T-390□	39	10,20	2.52MHz,1V	0.587	0.59	390
HCD0403T-470□	47	10,20	2.52MHz,1V	0.844	0.54	470
HCD0403T-560□	56	10,20	2.52MHz,1V	0.937	0.50	560
HCD0403T-680□	68	10,20	2.52MHz,1V	1.117	0.46	680
HCD0403T-101□	100	10,20	1KHz,1V	2.00	0.40	101
HCD0403T-121□	120	10,20	1KHz,1V	1.80	0.38	121
HCD0403T-151□	150	10,20	1KHz,1V	2.80	0.30	151
HCD0403T-181□	180	10,20	1KHz,1V	3.20	0.25	181

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10%, M= $\pm$ 20%, T= $\pm$ 30%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0502 Series

### HCD0502 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0502T-1R0□	1	20	7.96MHz,1V	0.03	4.50	1R0
HCD0502T-1R4□	1.4	20	7.96MHz,1V	0.04	4.00	1R4
HCD0502T-1R8□	1.8	20	7.96MHz,1V	0.05	3.30	1R8
HCD0502T-2R2□	2.2	20	7.96MHz,1V	0.06	2.94	2R2
HCD0502T-2R7□	2.7	20	7.96MHz,1V	0.07	2.50	2R7
HCD0502T-3R3□	3.3	20	7.96MHz,1V	0.08	2.35	3R3
HCD0502T-3R9□	3.9	20	7.96MHz,1V	0.09	2.20	3R9
HCD0502T-4R7□	4.7	10,20	7.96MHz,1V	0.14	2.00	4R7
HCD0502T-5R6□	5.6	20	7.96MHz,1V	0.15	1.80	5R6
HCD0502T-6R8□	6.8	20	7.96MHz,1V	0.16	1.70	6R8
HCD0502T-8R2□	8.2	20	7.96MHz,1V	0.17	1.40	8R2
HCD0502T-100□	10	10,20	2.52MHz,1V	0.18	1.20	100
HCD0502T-120□	12	20	2.52MHz,1V	0.2	1.18	120
HCD0502T-150□	15	20	2.52MHz,1V	0.22	1.15	150
HCD0502T-180□	18	20	2.52MHz,1V	0.25	1.10	180
HCD0502T-220□	22	10,20	2.52MHz,1V	0.35	1.00	220
HCD0502T-270□	27	20	2.52MHz,1V	0.45	0.86	270
HCD0502T-330□	33	10,20	2.52MHz,1V	0.56	0.76	330
HCD0502T-390□	39	10,20	2.52MHz,1V	0.69	0.75	390
HCD0502T-470□	47	10,20	2.52MHz,1V	0.72	0.73	470
HCD0502T-560□	56	10,20	2.52MHz,1V	0.84	0.55	560
HCD0502T-680□	68	10,20	2.52MHz,1V	0.90	0.52	680
HCD0502T-820□	82	10,20	2.52MHz,1V	1.20	0.50	820
HCD0502T-101□	100	10,20	1KHz,1V	1.30	0.40	101
HCD0502T-121□	120	10,20	1KHz,1V	1.38	0.36	121
HCD0502T-151□	150	10,20	1KHz,1V	1.81	0.30	151
HCD0502T-181□	180	10,20	1KHz,1V	1.95	0.26	181
HCD0502T-221□	220	10,20	1KHz,1V	3.00	0.25	221

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0502 Series

### HCD0502 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0502T-271□	270	10,20	1KHz,1V	3.20	0.21	271
HCD0502T-331□	330	10,20	1KHz,1V	3.82	0.18	331
HCD0502T-391□	390	10,20	1KHz,1V	4.68	0.16	391
HCD0502T-471□	470	10,20	1KHz,1V	5.10	0.15	471
HCD0502T-561□	560	10,20	1KHz,1V	8.50	0.14	561
HCD0502T-681□	680	10,20	1KHz,1V	10	0.13	681
HCD0502T-821□	820	10,20	1KHz,1V	12	0.07	821
HCD0502T-102□	1000	10,20	1KHz,1V	18	0.05	102

**Note:** When ordering, please specify tolerance code. Tolerance: **K=±10%** , **M=±20%**

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0503 Series

### HCD0503 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0503T-1R0□	1.0	20	7.96MHz,1V	0.03	4.50	1R0
HCD0503T-1R2□	1.2	20	7.96MHz,1V	0.03	4.20	1R2
HCD0503T-1R5□	1.5	20	7.96MHz,1V	0.03	4.10	1R5
HCD0503T-1R8□	1.8	10,20	7.96MHz,1V	0.03	3.70	1R8
HCD0503T-2R0□	2.0	20	7.96MHz,1V	0.03	3.60	2R0
HCD0503T-2R2□	2.2	20	7.96MHz,1V	0.03	3.50	2R2
HCD0503T-2R7□	2.7	20	7.96MHz,1V	0.04	3.20	2R7
HCD0503T-3R3□	3.3	10,20	7.96MHz,1V	0.05	2.80	3R3
HCD0503T-3R9□	3.9	20	7.96MHz,1V	0.06	2.60	3R9
HCD0503T-4R7□	4.7	10,20	7.96MHz,1V	0.07	2.50	4R7
HCD0503T-5R6□	5.6	20	7.96MHz,1V	0.08	2.40	5R6
HCD0503T-6R8□	6.8	20	2.52MHz,1V	0.09	2.20	6R8
HCD0503T-8R2□	8.2	20	2.52MHz,1V	0.10	2.00	8R2
HCD0503T-100□	10	10,20	2.52MHz,1V	0.12	1.80	100
HCD0503T-120□	12	10,20	2.52MHz,1V	0.13	1.75	120
HCD0503T-150□	15	10,20	2.52MHz,1V	0.15	1.70	150
HCD0503T-180□	18	10,20	2.52MHz,1V	0.22	1.60	180
HCD0503T-220□	22	10,20	2.52MHz,1V	0.22	1.50	220
HCD0503T-270□	27	20	2.52MHz,1V	0.26	1.40	270
HCD0503T-330□	33	10,20	2.52MHz,1V	0.33	1.10	330
HCD0503T-390□	39	10,20	2.52MHz,1V	0.42	1.00	390
HCD0503T-470□	47	10,20	2.52MHz,1V	0.50	0.90	470
HCD0503T-560□	56	10,20	2.52MHz,1V	0.55	0.85	560
HCD0503T-680□	68	10,20	2.52MHz,1V	0.65	0.80	680
HCD0503T-820□	82	10,20	2.52MHz,1V	0.80	0.65	820
HCD0503T-101□	100	10,20	1KHz,1V	0.90	0.60	101
HCD0503T-121□	120	10,20	1KHz,1V	1.00	0.58	121
HCD0503T-151□	150	10,20	1KHz,1V	1.30	0.43	151

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current





## SMD Shielded Power Inductors - HCD0503 Series

### HCD0503 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0503T-181□	180	10,20	1KHz,1V	1.50	0.41	181
HCD0503T-221□	220	10,20	1KHz,1V	2.00	0.38	221
HCD0503T-271□	270	10,20	1KHz,1V	2.50	0.35	271
HCD0503T-331□	330	10,20	1KHz,1V	3.20	0.28	331
HCD0503T-391□	390	10,20	1KHz,1V	3.50	0.26	391
HCD0503T-471□	470	10,20	1KHz,1V	4.20	0.20	471
HCD0503T-561□	560	10,20	1KHz,1V	4.50	0.19	561
HCD0503T-681□	680	10,20	1KHz,1V	6.50	0.18	681
HCD0503T-821□	820	10,20	1KHz,1V	7.50	0.15	821
HCD0503T-102□	1000	10,20	1KHz,1V	8.00	0.13	102

**Note:** When ordering, please specify tolerance code. Tolerance: **K=±10%** , **M=±20%**

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0504 Series

### HCD0504 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0504T-1R8□	1.8	20	7.96MHz,1V	0.02	3.50	1R8
HCD0504T-2R2□	2.2	20	7.96MHz,1V	0.023	3.20	2R2
HCD0504T-3R3□	3.3	10,20	7.96MHz,1V	0.0314	2.59	3R3
HCD0504T-3R5□	3.5	20	7.96MHz,1V	0.03	2.40	3R5
HCD0504T-4R7□	4.7	10,20	7.96MHz,1V	0.0372	2.30	4R7
HCD0504T-6R8□	6.8	20	7.96MHz,1V	0.057	1.80	6R8
HCD0504T-8R2□	8.2	20	7.96MHz,1V	0.0594	1.70	8R2
HCD0504T-100□	10	10,20	2.52MHz,1V	0.10	1.44	100
HCD0504T-120□	12	20	2.52MHz,1V	0.12	1.40	120
HCD0504T-150□	15	10,20	2.52MHz,1V	0.14	1.30	150
HCD0504T-180□	18	20	2.52MHz,1V	0.15	1.23	180
HCD0504T-220□	22	20	2.52MHz,1V	0.18	1.11	220
HCD0504T-270□	27	20	2.52MHz,1V	0.20	0.97	270
HCD0504T-330□	33	10,20	2.52MHz,1V	0.23	0.88	330
HCD0504T-390□	39	10,20	2.52MHz,1V	0.32	0.80	390
HCD0504T-470□	47	10,20	2.52MHz,1V	0.37	0.72	470
HCD0504T-560□	56	10,20	2.52MHz,1V	0.42	0.68	560
HCD0504T-680□	68	10,20	2.52MHz,1V	0.46	0.61	680
HCD0504T-820□	82	10,20	2.52MHz,1V	0.60	0.58	820
HCD0504T-101□	100	10,20	1KHz,1V	0.70	0.52	101
HCD0504T-121□	120	10,20	1KHz,1V	0.93	0.48	121
HCD0504T-151□	150	10,20	1KHz,1V	1.10	0.40	151
HCD0504T-181□	180	10,20	1KHz,1V	1.38	0.38	181
HCD0504T-221□	220	10,20	1KHz,1V	1.57	0.35	221
HCD0504T-271□	270	10,20	1KHz,1V	1.85	0.29	271
HCD0504T-331□	330	10,20	1KHz,1V	2.00	0.28	331
HCD0504T-391□	390	10,20	1KHz,1V	2.60	0.26	391
HCD0504T-471□	470	10,20	1KHz,1V	3.00	0.12	471

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0504 Series

### HCD0504 series Electrical Characteristics

Part No.	Inductance ( $\mu\text{H}$ )	Tolerance ( $\pm\%$ )	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0504T-561□	560	10,20	1KHz,1V	4.19	0.10	561
HCD0504T-681□	680	10,20	1KHz,1V	4.44	0.08	681
HCD0504T-821□	820	10,20	1KHz,1V	5.12	0.05	821
HCD0504T-102□	1000	10,20	1KHz,1V	10	0.03	102

**Note:** When ordering, please specify tolerance code. Tolerance: **K=±10%** , **M=±20%**

- Operating temperature range—40°C~105°C(Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0703 Series

### HCD0703 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0703T-2R2□	2.2	20	7.96MHz,1V	0.03	3.20	2R2
HCD0703T-4R7□	4.7	20	2.52MHz,1V	0.04	1.60	4R7
HCD0703T-100□	10	20	2.52MHz,1V	0.08	1.44	100
HCD0703T-120□	12	10,20	2.52MHz,1V	0.09	1.39	120
HCD0703T-150□	15	10,20	2.52MHz,1V	0.10	1.24	150
HCD0703T-180□	18	20	2.52MHz,1V	0.11	1.12	180
HCD0703T-220□	22	20	2.52MHz,1V	0.13	1.07	220
HCD0703T-270□	27	20	2.52MHz,1V	0.15	0.94	270
HCD0703T-330□	33	10,20	2.52MHz,1V	0.17	0.85	330
HCD0703T-390□	39	10,20	2.52MHz,1V	0.22	0.74	390
HCD0703T-470□	47	10,20	2.52MHz,1V	0.25	0.68	470
HCD0703T-560□	56	10,20	2.52MHz,1V	0.28	0.64	560
HCD0703T-680□	68	10,20	2.52MHz,1V	0.33	0.59	680
HCD0703T-820□	82	10,20	2.52MHz,1V	0.41	0.54	820
HCD0703T-101□	100	10,20	1KHz,1V	0.48	0.51	101
HCD0703T-121□	120	10,20	1KHz,1V	0.54	0.49	121
HCD0703T-151□	150	10,20	1KHz,1V	0.75	0.40	151
HCD0703T-181□	180	10,20	1KHz,1V	1.02	0.36	181
HCD0703T-221□	220	10,20	1KHz,1V	1.20	0.31	221
HCD0703T-271□	270	10,20	1KHz,1V	1.31	0.29	271
HCD0703T-331□	330	10,20	1KHz,1V	1.50	0.28	331
HCD0703T-561□	560	10,20	1KHz,1V	2.50	0.14	561

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0705 Series

### HCD0705 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0705T-1R4□	1.4	20	7.96MHz,1V	0.02	3.70	1R4
HCD0705T-1R5□	1.5	20	7.96MHz,1V	0.02	3.70	1R5
HCD0705T-1R8□	1.8	20	7.96MHz,1V	0.02	3.70	1R8
HCD0705T-2R2□	2.2	20	7.96MHz,1V	0.02	3.70	2R2
HCD0705T-2R7□	2.7	20	7.96MHz,1V	0.02	3.70	2R7
HCD0705T-3R0□	3.0	20	7.96MHz,1V	0.025	3.70	3R0
HCD0705T-3R3□	3.3	20	7.96MHz,1V	0.03	3.70	3R3
HCD0705T-3R6□	3.6	20	7.96MHz,1V	0.03	3.70	3R6
HCD0705T-3R9□	3.9	20	7.96MHz,1V	0.03	3.70	3R9
HCD0705T-4R7□	4.7	10,20	7.96MHz,1V	0.04	3.50	4R7
HCD0705T-5R6□	5.6	20	7.96MHz,1V	0.04	3.30	5R6
HCD0705T-6R8□	6.8	20	7.96MHz,1V	0.04	3.10	6R8
HCD0705T-8R2□	8.2	20	7.96MHz,1V	0.05	2.70	8R2
HCD0705T-100□	10	10,20	2.52MHz,1V	0.07	2.30	100
HCD0705T-120□	12	20	2.52MHz,1V	0.08	2.00	120
HCD0705T-150□	15	10,20	2.52MHz,1V	0.09	1.80	150
HCD0705T-180□	18	20	2.52MHz,1V	0.1	1.60	180
HCD0705T-220□	22	10,20	2.52MHz,1V	0.11	1.50	220
HCD0705T-270□	27	20	2.52MHz,1V	0.12	1.30	270
HCD0705T-330□	33	10,20	2.52MHz,1V	0.13	1.20	330
HCD0705T-390□	39	10,20	2.52MHz,1V	0.16	1.10	390
HCD0705T-470□	47	10,20	2.52MHz,1V	0.18	1.10	470
HCD0705T-560□	56	10,20	2.52MHz,1V	0.24	0.94	560
HCD0705T-680□	68	10,20	2.52MHz,1V	0.28	0.85	680
HCD0705T-820□	82	10,20	2.52MHz,1V	0.37	0.78	820
HCD0705T-101□	100	10,20	1KHz,1V	0.43	0.72	101
HCD0705T-121□	120	10,20	1KHz,1V	0.47	0.66	121
HCD0705T-151□	150	10,20	1KHz,1V	0.64	0.58	151

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD0705 Series

### HCD0705 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD0705T-181□	180	10,20	1KHz,1V	0.71	0.51	181
HCD0705T-221□	220	10,20	1KHz,1V	0.96	0.49	221
HCD0705T-271□	270	10,20	1KHz,1V	1.11	0.42	271
HCD0705T-331□	330	10,20	1KHz,1V	1.26	0.40	331
HCD0705T-391□	390	10,20	1KHz,1V	1.77	0.36	391
HCD0705T-471□	470	10,20	1KHz,1V	1.96	0.34	471
HCD0705T-561□	560	10,20	1KHz,1V	2.41	0.32	561
HCD0705T-681□	680	10,20	1KHz,1V	2.50	0.29	681
HCD0705T-102□	1000	10,20	1KHz,1V	2.80	0.19	102

**Note:** When ordering, please specify tolerance code. Tolerance: **K=±10%** , **M=±20%**

- Operating temperature range—40°C ~ 105°C (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD1004 Series

### HCD1004 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD1004T-3R3□	3.3	20	7.96MHz,1V	0.022	4.50	3R3
HCD1004T-3R8□	3.8	20	7.96MHz,1V	0.022	4.20	3R8
HCD1004T-6R8□	6.8	20	7.96MHz,1V	0.04	3.00	6R8
HCD1004T-100□	10	20	2.52MHz,1V	0.05	2.38	100
HCD1004T-120□	12	20	2.52MHz,1V	0.06	2.13	120
HCD1004T-150□	15	10,20	2.52MHz,1V	0.07	1.87	150
HCD1004T-180□	18	20	2.52MHz,1V	0.08	1.73	180
HCD1004T-220□	22	10,20	2.52MHz,1V	0.09	1.60	220
HCD1004T-270□	27	20	2.52MHz,1V	0.10	1.44	270
HCD1004T-330□	33	10,20	2.52MHz,1V	0.12	1.26	330
HCD1004T-390□	39	10,20	2.52MHz,1V	0.15	1.20	390
HCD1004T-470□	47	10,20	2.52MHz,1V	0.17	1.10	470
HCD1004T-560□	56	10,20	2.52MHz,1V	0.20	1.01	560
HCD1004T-680□	68	10,20	2.52MHz,1V	0.22	0.91	680
HCD1004T-820□	82	10,20	2.52MHz,1V	0.30	0.85	820
HCD1004T-101□	100	10,20	1KHz,1V	0.34	0.74	101
HCD1004T-121□	120	10,20	1KHz,1V	0.40	0.69	121
HCD1004T-151□	150	10,20	1KHz,1V	0.54	0.61	151
HCD1004T-181□	180	10,20	1KHz,1V	0.62	0.56	181
HCD1004T-221□	220	10,20	1KHz,1V	0.72	0.53	221
HCD1004T-271□	270	10,20	1KHz,1V	0.95	0.45	271
HCD1004T-331□	330	10,20	1KHz,1V	1.10	0.42	331
HCD1004T-391□	390	10,20	1KHz,1V	1.24	0.38	391
HCD1004T-471□	470	10,20	1KHz,1V	1.53	0.35	471
HCD1004T-561□	560	10,20	1KHz,1V	1.90	0.32	561

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



## SMD Shielded Power Inductors - HCD1005 Series

### HCD1005 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD1005T-3R3□	3.3	20	7.96MHz,1V	0.038	2.80	3R3
HCD1005T-4R7□	4.7	20	7.96MHz,1V	0.04	2.60	4R7
HCD1005T-5R6□	5.6	20	7.96MHz,1V	0.037	4.50	5R6
HCD1005T-6R8□	6.8	20	7.96MHz,1V	0.037	4.33	6R8
HCD1005T-8R2□	8.2	20	7.96MHz,1V	0.05	3.50	8R2
HCD1005T-100□	10	10,20	2.52MHz,1V	0.06	2.60	100
HCD1005T-120□	12	20	2.52MHz,1V	0.07	2.45	120
HCD1005T-150□	15	10,20	2.52MHz,1V	0.08	2.27	150
HCD1005T-180□	18	20	2.52MHz,1V	0.09	2.15	180
HCD1005T-220□	22	10,20	2.52MHz,1V	0.1	1.95	220
HCD1005T-270□	27	10,20	2.52MHz,1V	0.11	1.76	270
HCD1005T-330□	33	10,20	2.52MHz,1V	0.12	1.50	330
HCD1005T-390□	39	10,20	2.52MHz,1V	0.14	1.37	390
HCD1005T-470□	47	10,20	2.52MHz,1V	0.17	1.28	470
HCD1005T-560□	56	10,20	2.52MHz,1V	0.19	1.17	560
HCD1005T-680□	68	10,20	2.52MHz,1V	0.22	1.11	680
HCD1005T-820□	82	10,20	2.52MHz,1V	0.25	1.00	820
HCD1005T-101□	100	10,20	1KHz,1V	0.35	0.97	101
HCD1005T-121□	120	10,20	1KHz,1V	0.4	0.89	121
HCD1005T-151□	150	10,20	1KHz,1V	0.47	0.78	151
HCD1005T-181□	180	10,20	1KHz,1V	0.63	0.72	181
HCD1005T-221□	220	10,20	1KHz,1V	0.73	0.66	221
HCD1005T-271□	270	10,20	1KHz,1V	0.97	0.57	271
HCD1005T-331□	330	10,20	1KHz,1V	1.15	0.52	331
HCD1005T-391□	390	10,20	1KHz,1V	1.30	0.48	391
HCD1005T-471□	470	10,20	1KHz,1V	1.48	0.42	471
HCD1005T-561□	560	10,20	1KHz,1V	1.90	0.33	561
HCD1005T-681□	680	10,20	1KHz,1V	2.25	0.28	681
HCD1005T-821□	820	10,20	1KHz,1V	2.55	0.24	821
HCD1005T-102□	1000	10,20	1KHz,1V	3.10	0.20	102

**Note:** When ordering, please specify tolerance code. Tolerance: K= $\pm$ 10% , M= $\pm$ 20%

- Operating temperature range  $-40^{\circ}\text{C} \sim 105^{\circ}\text{C}$  (Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current





## SMD Shielded Power Inductors - HCD1006 Series

### HCD1006 series Electrical Characteristics

Part No.	Inductance ( $\mu$ H)	Tolerance ( $\pm$ %)	Test Freq.	RDC ( $\Omega$ )max	Isat (A)	Marking
HCD1006T-220□	22	10,20	2.52MHz,1V	0.08	3.80	220
HCD1006T-471□	470	10,20	1KHz,1V	1.421	0.82	471
HCD1006T-102□	1000	10,20	1KHz,1V	2.90	0.60	102
HCD1006T-122□	1200	10,20	1KHz,1V	3.50	0.50	122
HCD1006T-152□	1500	10,20	1KHz,1V	3.80	0.60	152
HCD1006T-202□	2000	10,20	1KHz,1V	6.60	0.40	202
HCD1006T-222□	2200	10,20	1KHz,1V	6.00	0.40	222
HCD1006T-602□	6000	10,20	1KHz,1V	14	0.27	602
HCD1006T-822□	8200	10,20	1KHz,1V	50	0.20	822

**Note:** When ordering, please specify tolerance code. Tolerance: **K=±10%** , **M=±20%**

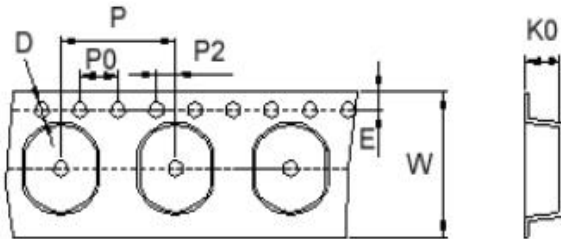
- Operating temperature range—40°C~105°C(Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current



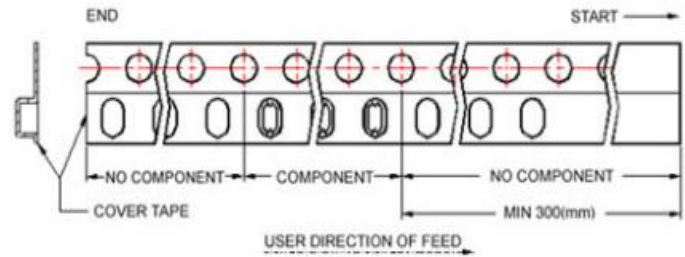
## SMD Unshielded Power Inductors - HCD Series

### Packaging Specifications

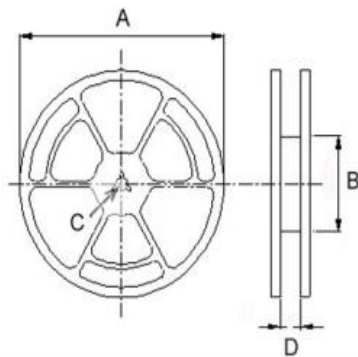
**Tape Dimensions**



**Tape Material**



**Reel Dimensions**



### Dimensions in mm

TYPE								Reel Dimensions				Quantity PCS/REEL
	K0	D	E	W	P	P0	P2	A	B	C	D	
HCD03015	1.80	1.55	1.75	12	8	4	2	330	100	13	13.4	3000
HCD03021	2.50	1.55	1.75	12	8	4	2	330	100	13	13.4	3000
HCD0403	3.55	1.55	1.75	12	8	4	2	330	100	13	13.4	2000
HCD0502	3.30	1.50	1.75	16	8	4	2	330	100	13	16	2000
HCD0503	3.30	1.50	1.75	16	8	4	2	330	10	13	16	2000
HCD0504	4.80	1.55	1.75	16	8	4	2	330	100	13	16	1500
HCD0703	3.80	1.55	1.75	16	8	4	2	330	10	13	16	1000
HCD0705	5.20	1.55	1.75	16	8	4	2	330	100	13	16	700
HCD1004	4.50	1.55	1.75	24	12	4	2	330	10	13	24.4	700
HCD1005	5.80	1.55	1.75	24	12	4	2	330	100	13	24.4	700
HCD1006	7.00	1.55	1.75	24	12	4	2	330	10	13	24.4	500