■Drum Mn-Zn Core Surface Mount Unshielded Power Inductors CHTPW Series (DR 錳鋅鐵芯表面接著型開磁式功率電感------CHTPW 系列)

●Features(特徵):

1.Low profile very effective in space-conscious applications.(高度扁薄，適用於有空間顧慮的應用。)

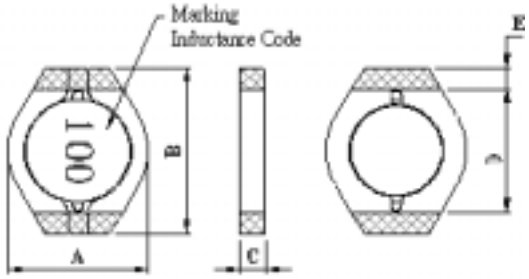
2.Low resistance and high energy storage.(低電阻及高能量儲存。)

●Applications應用):

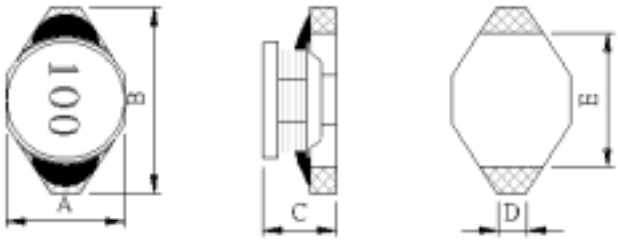
Excellent as DC-DC Converter used in notebooks computers, PDA and mobile hand-phones. Step-down converters, flash memory.
適用於筆記型電腦、個人數位助理及行動電話中的直流一直流整流器，增壓或降壓整流器及快閃記憶體。

●Shape & Dimensions(外觀呎吋):

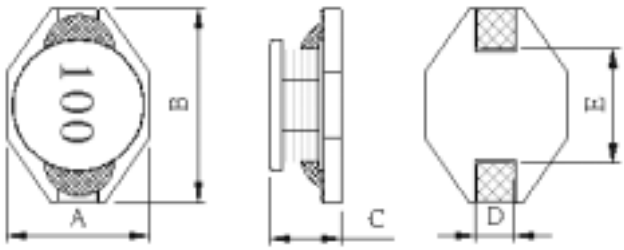
CHTPW1704 & CHTPW2506 Series:



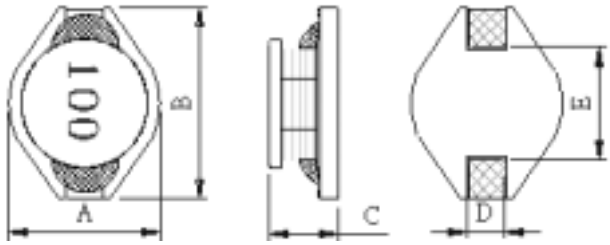
CHTPW1608 Series:



CHTPW3308/3316/3340 Series:



CHTPW5022 Series:



Series Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
CHTPW1704	5.50 Max	6.60 Max	1.15 Max	4.90±0.15	0.75±0.30
CHTPW2506	7.87 Max	9.14 Max	1.65 Max	7.4 ±0.15	0.87±0.30
CHTPW1608	4.45 Max	6.60 Max	2.92 Max	1.27±0.15	4.32±0.15
CHTPW3308	9.40 Max	12.95 Max	3.00 Max	2.54±0.20	7.62±0.20
CHTPW3316	9.40 Max	12.95 Max	5.21 Max	2.54±0.20	7.62±0.20
CHTPW3340	9.40 Max	12.95 Max	11.43 Max	2.54±0.20	7.62±0.20
CHTPW5022	15.24 Max	18.54 Max	7.51 Max	2.54±0.20	12.7±0.20

●Note(注解):

1, Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc at 4284A (HP) LCR meter or equivalent.
2, Isat: DC current at which the inductance drops 10% (typ) from its value without current.
3, Irms: Average current for 15°C temperature rise from 25°C ambient.
4, Operating temperature range -40°C to +85°C.
5, Electrical specifications at 25°C.

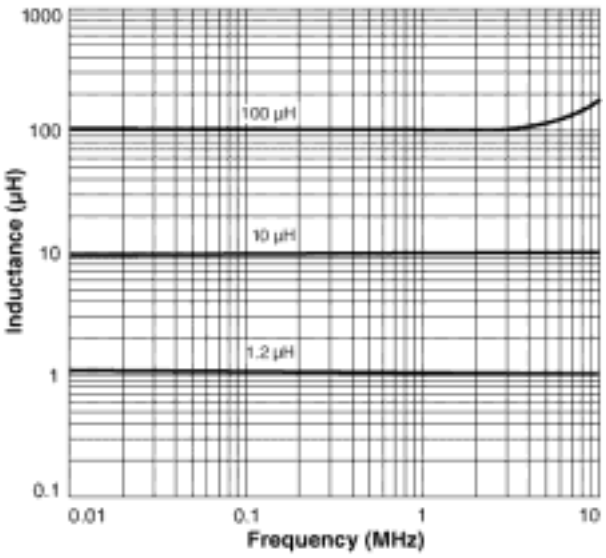
●Specification(規格):

◆CHTPW1704 Series:

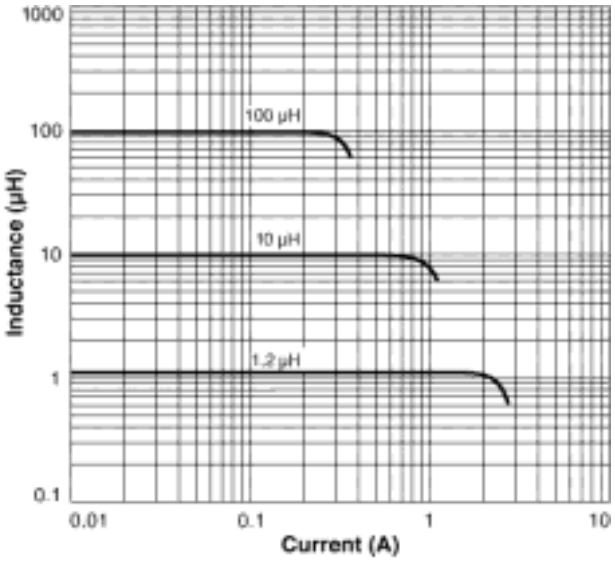
1, World's thinnest power inductor - only 1 mm high!
2, Handles up to 2.1 Amps.
3, Ceramic cover provides the best possible surface for pick and place handling.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW1704-1R2M	1.2±20%	0.08	190	2.10	1.70
CHTPW1704-1R5M	1.5±20%	0.10	140	1.90	1.50
CHTPW1704-2R2M	2.2±20%	0.12	115	1.60	1.40
CHTPW1704-3R3M	3.3±20%	0.16	90	1.30	1.20
CHTPW1704-4R7M	4.7±20%	0.20	88	1.10	1.10
CHTPW1704-6R8M	6.8±20%	0.32	66	0.90	0.85
CHTPW1704-100M	10±20%	0.41	55	0.08	0.75
CHTPW1704-150M	15±20%	0.55	42	0.65	0.60
CHTPW1704-220M	22±20%	0.85	38	0.50	0.52
CHTPW1704-330M	33±20%	1.30	29	0.40	0.42
CHTPW1704-470M	47±20%	1.80	22	0.35	0.36
CHTPW1704-680M	68±20%	2.50	18	0.30	0.30
CHTPW1704-101M	100±20%	3.50	14	0.25	0.26
CHTPW1704-151M	150±20%	5.00	12	0.18	0.21
CHTPW1704-221M	220±20%	7.00	10	0.16	0.18
CHTPW1704-331M	330±20%	15.00	8	0.13	0.13

◆Inductance vs. Frequency



◆Inductance vs. Current

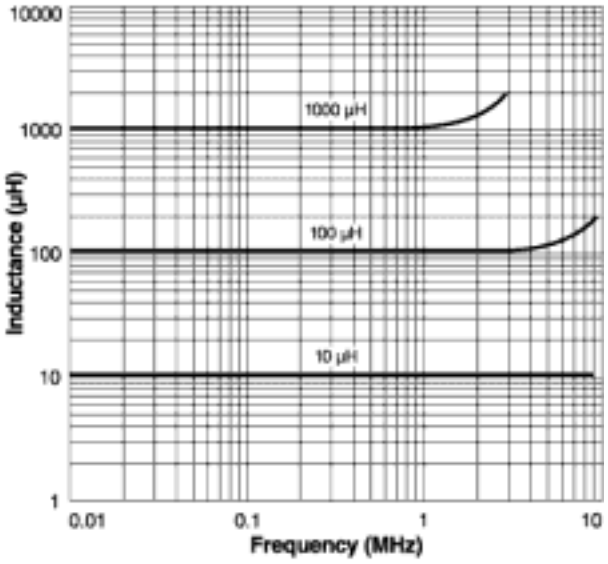


◆CHTPW2506 Series:

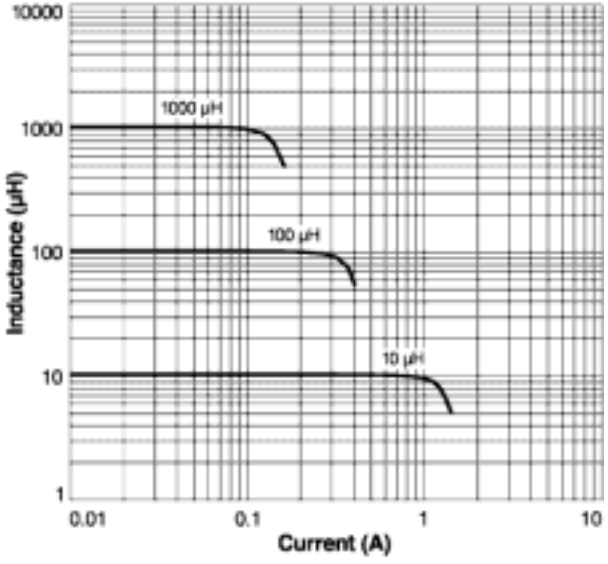
1, Handles up to 1.9 Amps.
2, On-board version is 1,65 mm high.
3, Ceramic cover provides best possible surface for pick and place operations.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW2506-4R7M	4.7±20%	0.145	90	1.60	1.90
CHTPW2506-6R8M	6.8±20%	0.165	75	1.30	1.70
CHTPW2506-100M	10±20%	0.240	60	1.00	1.50
CHTPW2506-150M	15±20%	0.300	45	0.90	1.30
CHTPW2506-220M	22±20%	0.420	35	0.70	1.00
CHTPW2506-330M	33±20%	0.550	30	0.60	0.90
CHTPW2506-470M	47±20%	0.765	22	0.50	0.70
CHTPW2506-680M	68±20%	1.10	20	0.40	0.60
CHTPW2506-101M	100±20%	1.60	15	0.30	0.50
CHTPW2506-151M	150±20%	2.50	12	0.25	0.40
CHTPW2506-221M	220±20%	3.65	10	0.22	0.32
CHTPW2506-331M	330±20%	4.65	8.0	0.18	0.28
CHTPW2506-105M	470±20%	6.75	6.5	0.14	0.24
CHTPW2506-681M	680±20%	9.15	5.5	0.12	0.20
CHTPW2506-102M	1000±20%	14.20	4.5	0.10	0.16

◆Inductance vs. Frequency



◆Inductance vs. Current

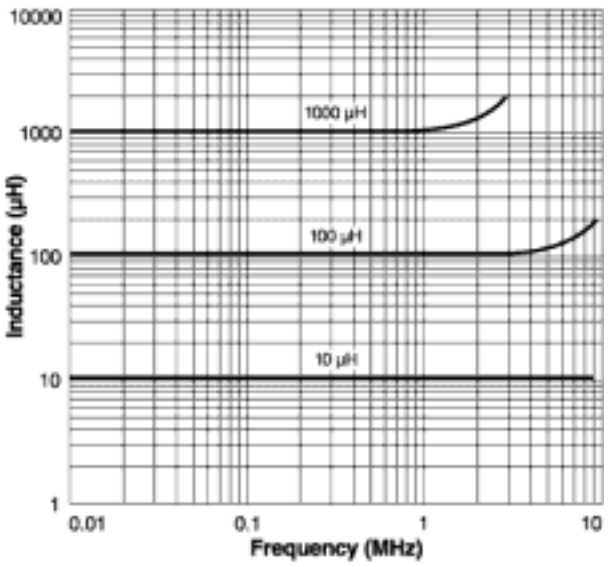


◆CHTPW1608 Series:

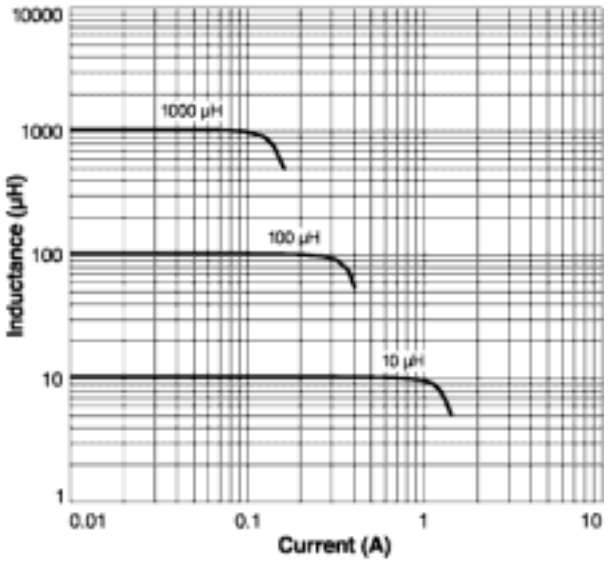
1, Designed for smallest possible size, lowest cost and highest performance.
2, High energy storage and very low resistance.
3, Flat top for reliable surface mounting.
4, Robust temperature deflection prevents damage during solder reflow.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW1608-1R0M	1.0±20%	0.05	130	2.90	2.90
CHTPW1608-1R5M	1.5±20%	0.05	115	2.60	2.80
CHTPW1608-2R2M	2.2±20%	0.07	90	2.30	2.40
CHTPW1608-3R3M	3.3±20%	0.08	70	2.00	2.00
CHTPW1608-4R7M	4.7±20%	0.09	50	1.50	1.50
CHTPW1608-6R8M	6.8±20%	0.13	45	1.20	1.40
CHTPW1608-100M	10±20%	0.16	35	1.10	1.10
CHTPW1608-150M	15±20%	0.23	30	0.90	1.20
CHTPW1608-220M	22±20%	0.37	20	0.70	0.80
CHTPW1608-330M	33±20%	0.51	15	0.58	0.60
CHTPW1608-470M	47±20%	0.64	14	0.50	0.50
CHTPW1608-680M	68±20%	0.86	11	0.40	0.40
CHTPW1608-101M	100±20%	1.27	9	0.31	0.30
CHTPW1608-151M	150±20%	2.00	6	0.27	0.25
CHTPW1608-221M	220±20%	3.1	5.5	0.22	0.20
CHTPW1608-331M	330±20%	3.80	5	0.18	0.16
CHTPW1608-471M	470±20%	5.06	4	0.16	0.15
CHTPW1608-681M	680±20%	9.20	3	0.14	0.12
CHTPW1608-102M	1000±20%	13.80	2	0.10	0.07

◆Inductance vs. Frequency



◆Inductance vs. Current

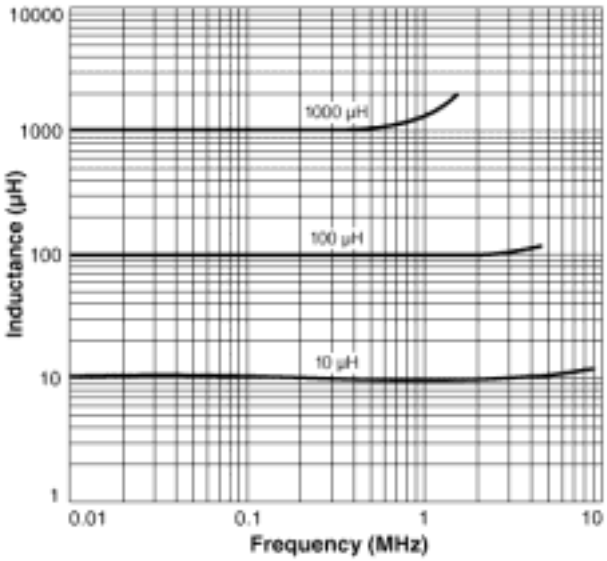


◆CHTPW3308 Series:

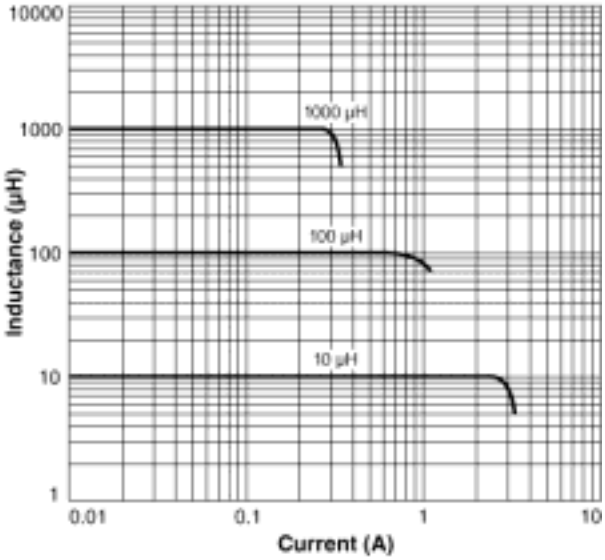
1, Very low profile - less than 0.118" (3.0 mm) high!
2, High energy storage and very low resistance.
3, Flat top for reliable surface mounting.
4, Robust temperature deflection prevents damage during solder reflow.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW3308-100M	10±20%	0.085	35	2.40	2.00
CHTPW3308-150M	15±20%	0.12	33	2.00	1.50
CHTPW3308-220M	22±20%	0.18	25	1.60	1.30
CHTPW3308-330M	33±20%	0.25	19	1.40	1.10
CHTPW3308-470M	47±20%	0.32	14	1.00	0.80
CHTPW3308-680M	68±20%	0.54	12	0.90	0.70
CHTPW3308-101M	100±20%	0.69	10	0.70	0.60
CHTPW3308-151M	150±20%	0.94	8	0.60	0.50
CHTPW3308-221M	220±20%	1.60	6	0.50	0.40
CHTPW3308-331M	330±20%	2.15	5	0.40	0.30
CHTPW3308-471M	470±20%	3.30	4	0.30	0.20
CHTPW3308-681M	680±20%	4.40	3	0.20	0.10
CHTPW3308-102M	1000±20%	7.00	2.5	0.10	0.05

◆Inductance vs. Frequency



◆Inductance vs. Current

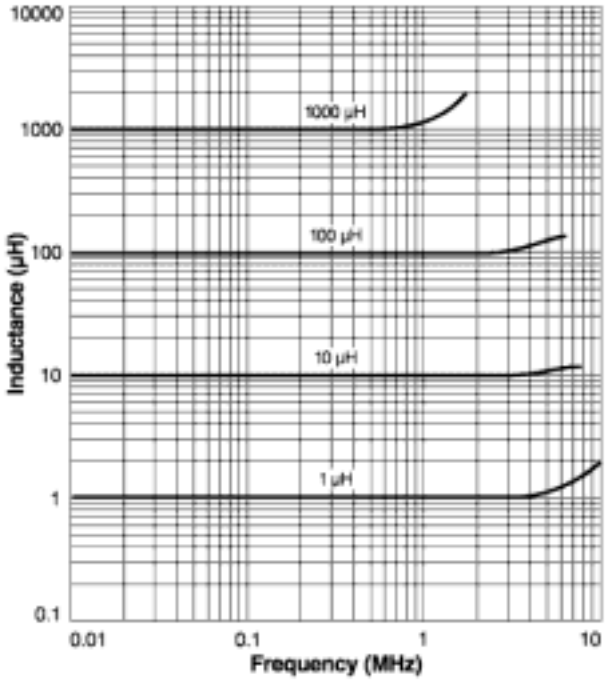


◆CHTPW3316 Series:

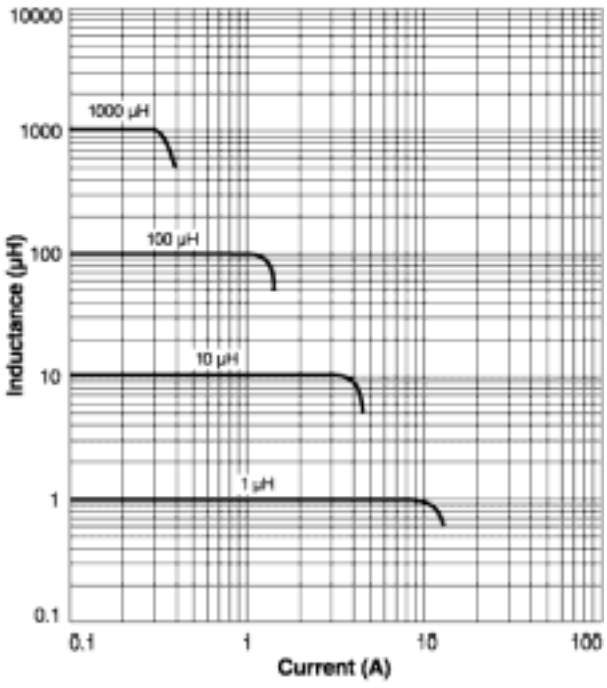
1, Designed for smallest possible size, lowest cost and highest performance.
2, High energy storage and very low resistance.
3, Flat top for reliable surface mounting.
4, Robust temperature deflection prevents damage during solder reflow.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW3316-1R0M	1.0±20%	0.009	100	9.0	6.8
CHTPW3316-1R5M	1.5±20%	0.010	90	8.0	6.4
CHTPW3316-2R2M	2.2±20%	0.012	80	7.0	6.1
CHTPW3316-3R3M	3.3±20%	0.015	65	6.4	5.4
CHTPW3316-4R7M	4.7±20%	0.018	45	5.4	4.8
CHTPW3316-6R8M	6.8±20%	0.027	38	4.6	4.4
CHTPW3316-100M	10±20%	0.038	30	3.8	3.9
CHTPW3316-150M	15±20%	0.046	27	3.0	3.1
CHTPW3316-220M	22±20%	0.085	19	2.6	2.7
CHTPW3316-330M	33±20%	0.10	15	2.0	2.1
CHTPW3316-470M	47±20%	0.14	12	1.6	1.8
CHTPW3316-680M	68±20%	0.20	10	1.4	1.5
CHTPW3316-101M	100±20%	0.28	9	1.2	1.3
CHTPW3316-151M	150±20%	0.40	6	1.0	1.0
CHTPW3316-221M	220±20%	0.61	5	0.8	0.8
CHTPW3316-331M	330±20%	1.02	4.5	0.6	0.6
CHTPW3316-471M	470±20%	1.27	3.5	0.5	0.5
CHTPW3316-681M	680±20%	2.02	2.5	0.4	0.4
CHTPW3316-102M	1000±20%	3.00	2.0	0.3	0.3

◆Inductance vs. Frequency



◆Inductance vs. Current

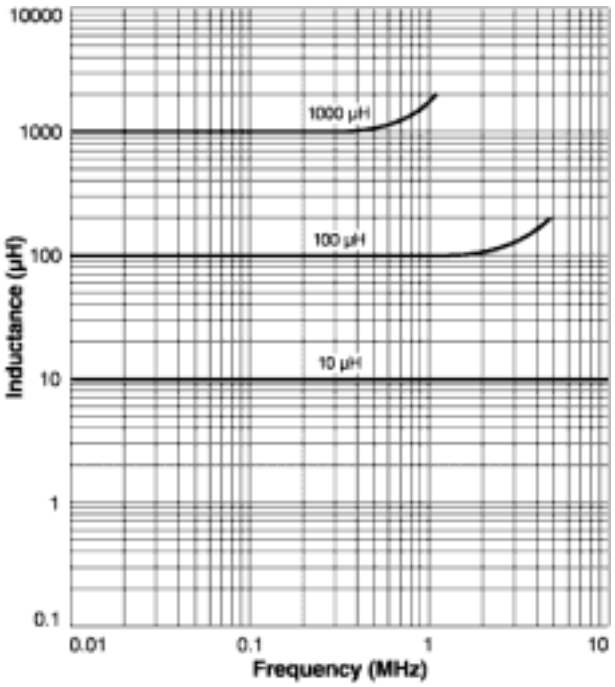


◆CHTPW3340 Series:

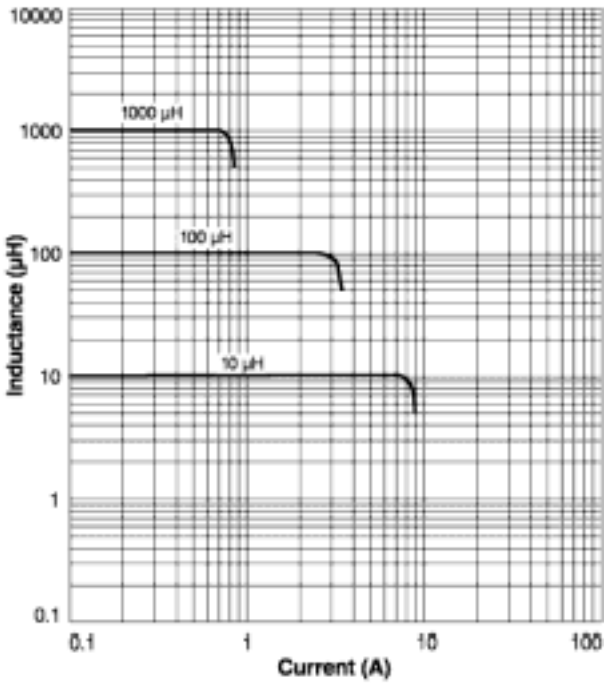
1, Excellent current carrying capabilities in a small footprint – only 0.510" x 0.370".
2, Up to 3.5 Arms with an 8 Amps saturation current.
3, Flat top for reliable surface mounting.
4, Robust temperature deflection prevents damage during solder reflow.

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW3340-100M	10±20%	0.040	22	8.0	3.5
CHTPW3340-150M	15±20%	0.050	18	7.0	3.0
CHTPW3340-220M	22±20%	0.066	11	5.5	2.5
CHTPW3340-330M	33±20%	0.080	9	4.0	2.0
CHTPW3340-470M	47±20%	0.1	8	3.8	1.6
CHTPW3340-680M	68±20%	0.170	7	3.0	1.2
CHTPW3340-101M	100±20%	0.220	5	2.5	1.2
CHTPW3340-151M	150±20%	0.340	4	2.0	0.9
CHTPW3340-221M	220±20%	0.440	3.5	1.6	0.7
CHTPW3340-331M	330±20%	0.70	2.5	1.2	0.6
CHTPW3340-471M	470±20%	0.95	2.0	1.0	0.3
CHTPW3340-681M	680±20%	1.20	2.0	1.0	0.2
CHTPW3340-102M	1000±20%	2.00	1.5	0.8	0.1

◆Inductance vs. Frequency



◆Inductance vs. Current

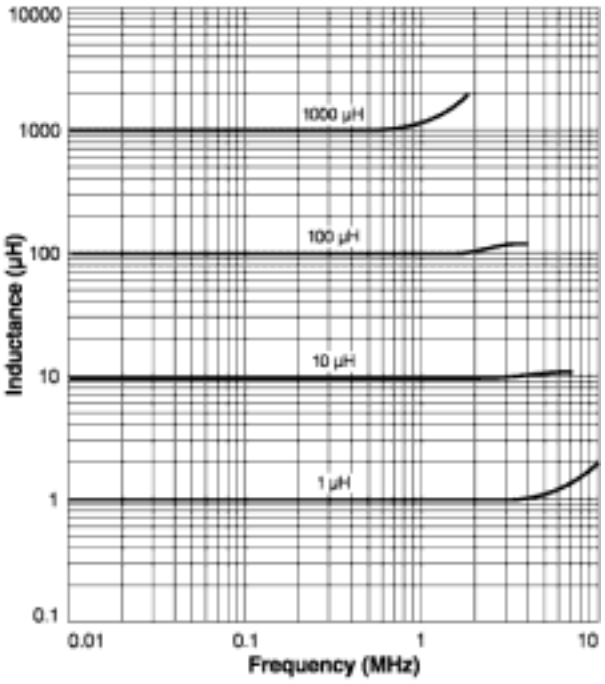


◆CHTPW5022 Series:

1, Very high current rating - up to 8.6 Arms, 20 A saturating current!
2, Flat top for reliable surface mounting
3, Robust temperature deflection prevents damage during solder reflow

Part Number	Inductance (μH)	DC Resistance (Ω) Max	SRF Typ. (MHz)	Isat (A)	Irms (A)
CHTPW5022-1R0M	1.0±20%	0.009	80	20	8.6
CHTPW5022-2R2M	2.2±20%	0.014	80	16	7.1
CHTPW5022-3R3M	3.3±20%	0.018	60	14	6.2
CHTPW5022-5R6M	5.6±20%	0.020	40	12	5.3
CHTPW5022-100M	10±20%	0.031	30	10	4.3
CHTPW5022-150M	15±20%	0.036	22	8	4.0
CHTPW5022-220M	22±20%	0.047	20	7	3.5
CHTPW5022-330M	33±20%	0.066	15	5.5	3.0
CHTPW5022-470M	47±20%	0.086	9	4.5	2.6
CHTPW5022-680M	68±20%	0.13	8	3.5	2.3
CHTPW5022-101M	100±20%	0.19	7	3.0	1.8
CHTPW5022-151M	150±20%	0.25	6	2.6	1.5
CHTPW5022-221M	220±20%	0.38	5	2.4	1.2
CHTPW5022-331M	330±20%	0.56	4	1.9	1.0
CHTPW5022-471M	470±20%	0.85	3	1.4	0.82
CHTPW5022-681M	680±20%	1.10	2.5	1.2	0.72
CHTPW5022-102M	1000±20%	1.80	2.0	1.0	0.56

◆Inductance vs. Frequency



◆Inductance vs. Current