Suntan®

1608W-2012W-3308W-3316W-3340W-5022W-UNSHIELDED POWER INDUCTOR-SMT TYPE

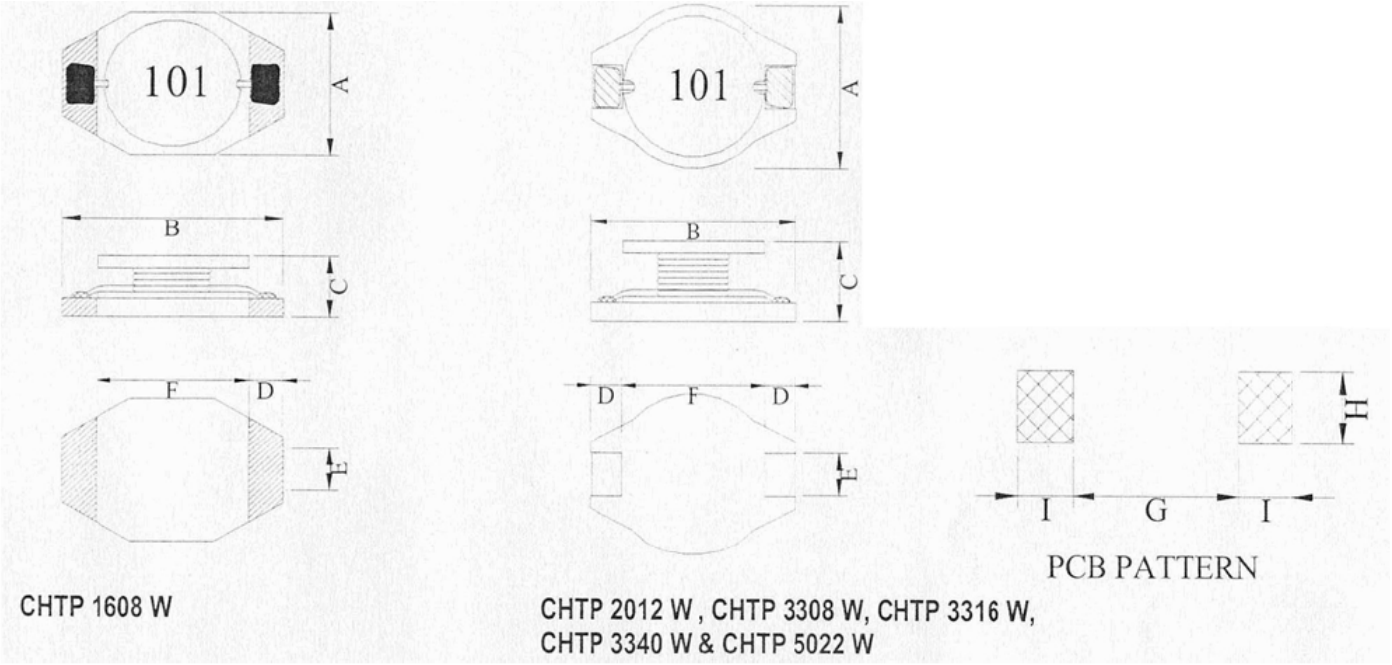
TSD CHTP-W

FEATURES

- Low profile very effective in space-conscious applications
- Low resistance and high energy storage

APPLICATIONS

Excellent as DC-DC Converter used in notebooks computers, PDA, and mobile handphones. Step-up or step-down converters, flash memory programmers.



MATERIALS CONSTRUCTION

a. Core: Ferrite DR core
b. Base: Ceramic
c. Wire: Enamelled copper wire
d. Terminal: Gold plating
e. Adhesive: Epoxy resin

MATERIALS CONSTRUCTION

a. Core: Ferrite DR core
b. Base: LCP E4008
c. Wire: Enamelled copper wire
d. Terminal: Tinned copper plate
e. Adhesive: Epoxy resin

Dimension in m/m

Series	A	B	C	D	E	F	G (Ref)	H (Ref)	I (Ref)
TSD CHTP1608W	4.45Max	6.60Max	2.92Max	1.02±0.2	1.27±0.2	4.32±0.3	4.06	3.56	1.40
TSD CHTP2012W	8.00±0.2	10.50±0.2	5.00±0.3	2.10±0.2	2.00±0.2	6.00±0.3	5.70	2.20	2.40
TSD CHTP3308W	10.0±0.2	12.70±0.2	3.00±0.3	2.40±0.2	2.20±0.2	7.60±0.3	7.30	2.80	3.00
TSD CHTP3316W	10.0±0.2	12.70±0.2	5.00±0.3	2.40±0.2	2.20±0.2	7.60±0.3	7.30	2.80	3.00
TSD CHTP3340W	10.0±0.2	12.70±0.2	11.0±0.5	2.40±0.2	2.20±0.2	7.60±0.3	7.30	2.80	3.00
TSD CHTP5022W	15.0±0.3	18.40±0.3	7.00±0.5	2.40±0.2	2.20±0.2	13.30±0.3	12.70	2.80	3.00

SPECIFICATIONS

OPERATING TEMPERATURE	-40℃ ~ +125℃
STORAGE TEMPERATURE	-25℃ ~ +125℃
RESISTANCE TO SOLDER HEAT	260℃ for 10 seconds
| rms	Based on temperature rise
| sat based on L/L0A	Based on ΔL/L0A

TAPE AND REEL PACKAGING

Type	Pieces per reel	Plastic reel size
TSD CHTP1608W	2,500	13”
TSD CHTP2012W	1,000	13”
TSD CHTP3308W	1,000	13”
TSD CHTP3316W	500	13”
TSD CHTP3340W	225	13”

1608W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP1608W-1R0M	1.0±20%	0.1V/100K	130.0	0.05	2.90	2.90
TSD-CHTP1608W-1R5M	1.5±20%	0.1V/100K	115.0	0.05	2.80	2.60
TSD-CHTP1608W-2R2M	2.2±20%	0.1V/100K	90.0	0.07	2.40	2.30
TSD-CHTP1608W-3R3M	3.3±20%	0.1V/100K	70.0	0.08	2.00	2.00
TSD-CHTP1608W-4R7M	4.7±20%	0.1V/100K	50.0	0.09	1.50	1.50
TSD-CHTP1608W-6R8M	6.8±20%	0.1V/100K	45.0	0.13	1.40	1.20
TSD-CHTP1608W-100M	10±20%	0.1V/100K	35.0	0.16	1.10	1.10
TSD-CHTP1608W-150M	15±20%	0.1V/100K	30.0	0.23	1.00	0.90
TSD-CHTP1608W-220M	22±20%	0.1V/100K	20.0	0.27	0.80	0.70
TSD-CHTP1608W-330M	33±20%	0.1V/100K	15.0	0.51	0.60	0.58
TSD-CHTP1608W-470M	47±20%	0.1V/100K	14.0	0.64	0.50	0.50
TSD-CHTP1608W-680M	68±20%	0.1V/100K	11.0	0.86	0.40	0.50
TSD-CHTP1608W-101M	100±20%	0.1V/100K	9.0	1.27	0.30	0.31
TSD-CHTP1608W-151M	150±20%	0.1V/100K	6.0	2.00	0.25	0.27
TSD-CHTP1608W-221M	220±20%	0.1V/100K	5.5	3.11	0.20	0.22
TSD-CHTP1608W-331M	330±20%	0.1V/100K	5.0	3.80	0.16	0.18
TSD-CHTP1608W-471M	470±20%	0.1V/100K	4.0	5.06	0.15	0.16
TSD-CHTP1608W-681M	680±20%	0.1V/100K	3.0	9.20	0.12	0.14
TSD-CHTP1608W-102M	1000±20%	0.1V/100K	2.0	13.80	0.07	0.10

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

2012W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP2012W-3R3M	3.3±20%	0.1V/100K	50.0	0.030	3.70	7.0
TSD-CHTP2012W-4R7M	4.7±20%	0.1V/100K	40.0	0.018	3.30	6.0
TSD-CHTP2012W-6R8M	6.8±20%	0.1V/100K	30.0	0.050	2.70	5.0
TSD-CHTP2012W-100M	10±20%	0.1V/100K	23.0	0.060	2.30	4.0
TSD-CHTP2012W-150M	15±20%	0.1V/100K	20.0	0.080	2.10	3.0
TSD-CHTP2012W-220M	22±20%	0.1V/100K	16.0	0.130	1.60	2.5
TSD-CHTP2012W-330M	33±20%	0.1V/100K	12.0	0.180	1.30	2.0
TSD-CHTP2012W-470M	47±20%	0.1V/100K	11.0	0.260	1.10	1.8
TSD-CHTP2012W-680M	68±20%	0.1V/100K	9.0	0.350	1.00	1.5
TSD-CHTP2012W-101M	100±20%	0.1V/100K	7.0	0.580	0.70	1.0
TSD-CHTP2012W-151M	150±20%	0.1V/100K	5.0	0.750	0.60	0.9
TSD-CHTP2012W-221M	220±20%	0.1V/100K	4.0	1.050	0.50	0.8
TSD-CHTP2012W-331M	330±20%	0.1V/100K	3.5	1.600	0.45	0.6

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

3308W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP3308W-100M	10±20%	0.1V/100K	35.0	0.11	2.00	2.40
TSD-CHTP3308W-150M	15±20%	0.1V/100K	33.0	0.15	1.50	2.00
TSD-CHTP3308W-220M	22±20%	0.1V/100K	25.0	0.23	1.30	1.60
TSD-CHTP3308W-330M	33±20%	0.1V/100K	19.0	0.30	1.10	1.40
TSD-CHTP3308W-470M	47±20%	0.1V/100K	14.0	0.39	0.80	1.00
TSD-CHTP3308W-680M	68±20%	0.1V/100K	12.0	0.66	0.70	0.90
TSD-CHTP3308W-101M	100±20%	0.1V/100K	10.0	0.34	0.60	0.70
TSD-CHTP3308W-151M	150±20%	0.1V/100K	3.0	1.20	0.50	0.60
TSD-CHTP3308W-221M	220±20%	0.1V/100K	6.0	1.90	0.40	0.50
TSD-CHTP3308W-331M	330±20%	0.1V/100K	5.0	2.70	0.30	0.40
TSD-CHTP3308W-471M	470±20%	0.1V/100K	4.0	4.00	0.20	0.20
TSD-CHTP3308W-681M	680±20%	0.1V/100K	3.0	5.30	0.10	0.20
TSD-CHTP3308W-102M	1000±20%	0.1V/100K	2.5	3.40	0.05	0.10

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

3316W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP3316W-1R0M	1.0±20%	0.1V/100K	150.0	0.009	6.8	9.0
TSD-CHTP3316W-1R5M	1.5±20%	0.1V/100K	100.0	0.010	6.4	8.0
TSD-CHTP3316W-2R2M	2.2±20%	0.1V/100K	85.0	0.012	6.1	7.0
TSD-CHTP3316W-3R3M	3.3±20%	0.1V/100K	60.0	0.015	5.4	5.8
TSD-CHTP3316W-4R7M	4.7±20%	0.1V/100K	45.0	0.018	4.8	5.2
TSD-CHTP3316W-6R8M	6.8±20%	0.1V/100K	35.0	0.027	4.4	4.3
TSD-CHTP3316W-100M	10±20%	0.1V/100K	25.0	0.038	3.9	3.4
TSD-CHTP3316W-150M	15±20%	0.1V/100K	20.0	0.046	3.1	3.0
TSD-CHTP3316W-220M	22±20%	0.1V/100K	18.0	0.085	2.7	2.5
TSD-CHTP3316W-330M	33±20%	0.1V/100K	14.0	0.100	2.1	2.0
TSD-CHTP3316W-470M	47±20%	0.1V/100K	11.0	0.140	1.8	1.8
TSD-CHTP3316W-680M	68±20%	0.1V/100K	10.0	0.200	1.5	1.4
TSD-CHTP3316W-101M	100±20%	0.1V/100K	7.0	0.280	1.3	1.1
TSD-CHTP3316W-151M	150±20%	0.1V/100K	6.5	0.400	1.0	0.9
TSD-CHTP3316W-221M	220±20%	0.1V/100K	5.0	0.610	0.8	0.8
TSD-CHTP3316W-331M	330±20%	0.1V/100K	4.0	1.020	0.6	0.6
TSD-CHTP3316W-471M	470±20%	0.1V/100K	3.0	1.270	0.5	0.5
TSD-CHTP3316W-681M	680±20%	0.1V/100K	2.5	2.020	0.4	0.4
TSD-CHTP3316W-102M	1000±20%	0.1V/100K	2.0	3.000	0.3	0.3

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

3340W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP3340W-100M	10±20%	0.1V/100K	23.0	0.040	3.50	7.0
TSD-CHTP3340W-150M	15±20%	0.1V/100K	14.0	0.050	3.20	5.8
TSD-CHTP3340W-220M	22±20%	0.1V/100K	8.5	0.066	2.90	4.8
TSD-CHTP3340W-330M	33±20%	0.1V/100K	7.0	0.080	2.35	3.8
TSD-CHTP3340W-470M	47±20%	0.1V/100K	6.5	0.110	2.10	3.4
TSD-CHTP3340W-680M	68±20%	0.1V/100K	4.5	0.170	1.90	2.7
TSD-CHTP3340W-101M	100±20%	0.1V/100K	4.0	0.220	1.55	2.2
TSD-CHTP3340W-151M	150±20%	0.1V/100K	3.0	0.340	1.35	1.9
TSD-CHTP3340W-221M	220±20%	0.1V/100K	2.5	0.440	1.00	1.5
TSD-CHTP3340W-331M	330±20%	0.1V/100K	2.3	0.700	0.90	1.3
TSD-CHTP3340W-471M	470±20%	0.1V/100K	2.0	0.950	0.75	1.0
TSD-CHTP3340W-681M	680±20%	0.1V/100K	1.5	1.200	0.55	0.9
TSD-CHTP3340W-102M	1000±20%	0.1V/100K	1.3	2.000	0.50	0.7

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

5022W-UNSHIELDED POWER INDUCTOR-SMT TYPE

TSD CHTP-W

◆ ELECTRICAL SPECIFICATIONS

Part Number	Inductance (uH)	Testing Freq (Hz)	SRF Freq (Hz)	DCR (Ω) Max	⎪ rms (A)	⎪ sat (A)
TSD-CHTP5022W-1R0M	1.0±20%	0.1V/100K	140	0.009	8.60	20.0
TSD-CHTP5022W-1R5M	1.5±20%	0.1V/100K	110	0.012	7.50	18.0
TSD-CHTP5022W-2R2M	2.2±20%	0.1V/100K	75	0.014	7.10	16.0
TSD-CHTP5022W-3R3M	3.3±20%	0.1V/100K	70	0..018	6.20	14.0
TSD-CHTP5022W-5R6M	5.6±20%	0.1V/100K	45	0.020	5.30	12.0
TSD-CHTP5022W-100M	10±20%	0.1V/100K	21	0.031	4.30	10.0
TSD-CHTP5022W-150M	15±20%	0.1V/100K	16	0.036	4.00	8.0
TSD-CHTP5022W-220M	22±20%	0.1V/100K	13	0.047	3.50	7.0
TSD-CHTP5022W-330M	33±20%	0.1V/100K	11	0.066	3.00	5.5
TSD-CHTP5022W-470M	47±20%	0.1V/100K	9.0	0.086	2.60	4.5
TSD-CHTP5022W-630M	68±20%	0.1V/100K	6.5	0.130	2.30	3.5
TSD-CHTP5022W-101M	100±20%	0.1V/100K	5.7	0.190	1.80	3.0
TSD-CHTP5022W-151M	150±20%	0.1V/100K	4.5	0.250	1.50	2.6
TSD-CHTP5022W-221M	220±20%	0.1V/100K	3.7	0.380	1.20	2.4
TSD-CHTP5022W-331M	330±20%	0.1V/100K	3.0	0.560	1.00	1.9
TSD-CHTP5022W-471M	470±20%	0.1V/100K	2.7	0.850	0.82	1.4
TSD-CHTP5022W-681M	680±20%	0.1V/100K	2.2	1.100	0.72	1.2
TSD-CHTP5022W-102M	1000±20%	0.1V/100K	2.0	1.300	0.56	1.0

Other non standard inductance value are available to meet your exact requirements

Note:

1. Inductance measured by LCR Meter HP 4294/4291
2. DCR measured by Milliohm meter CH 502AC
3. SRF measured by Network analyzer HP 4294/HP4291
4. SRF is for reference only.
5. Δ Temperature = 15℃ Typicat at ⎪ rms
6. Δ L/L0A = 10% Typical at ⎪ sat

Note: Specification are subject to change without notice. For more detail and update, please visit our website.