



signal
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HCTI Series – High Current Torroidal Inductors Series

24 different introductory SKUs

Signal Transformer, a bel group, is a global leader in design and manufacturing of Linear Transformers, High Frequency Magnetics and SMD Power Inductors. Our products provide solutions to power conversion applications across all industries.

High Current Torroidal Inductor – 24 SKUs



24 Different Models

Built to Meet UL 5085-1

Product Features:

- *Vertical PC Mounting For Optimization of Board Layout.*
- *Wide Range of Inductance and Current Ratings.*
- *Self-Shielding For Low Magnetic Flux Radiation.*
- *Distributed Air Gap For High Energy Storage.*
- *High Current Carrying Capability.*
- *High Efficiency Through Reduced Core Loss.*
- *Lower operating temperature compared to traditional laminated inductors*
- *RoHS Compliant.*
- *Low Cost.*

Where are these parts used?

- *DC to DC power supplies*
- *Inductor in SMPS*
- *EMI/RFI Filtering applications*
- *Output chokes for DC to DC Convertors*
- *Energy Storage*
- *Consumer Products*
- *Energy Management*
- *Audio Visual applications*
- *Household Appliances*
- *Electronic Laboratory Equipment*
- *Commercial LED conversions*
- *Portable communications equipment*
- *Heavy Industrial applications*

NPI – HCTI Data Sheet & Specifications

High Current Toroidal Inductors Vertical PCB Mounting

Key Features

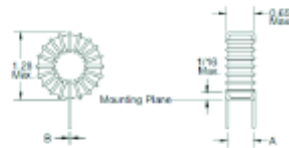
- Vertical PC Mounting for Board Layout Optimization.
- Wide Range Of Inductance and Current ratings.
- Distributed Air Gap For High Energy Storage.
- High Efficiency Reduced Core Loss.
- Self-Shielding For Low Magnetic Radiation.
- High Current-Carrying Capability.

Applications

- SMPS Energy Storage Inductors.
- EMI/RFI Filtering Inductors.
- DC-DC Converter Chokes.

Notes

- (1) Dimensions are in Inches.
- (2) Current causing 30°C max temperature rise.
- (3) Operating Temperature Range of -55 to +105°C.
- (4) Leads tinned to within 1/16 of an inch above mounting plane.
- (5) Lead Length of 0.50 Inches



Electro-Mechanical Characteristics

Part Number	L (uH) ±15% @ 1KHz	L(uH) ±15% @ I-rated	DC Resistance Ω MAX	I-rated DC Current Amps ±1	Dimension A (inches) Nominal	Dimension B (inches) Nominal
HCTI-10-20.0	10	6.7	0.005	20.0	0.56	0.066
HCTI-12-19.1	12	7.8	0.005	19.1	0.56	0.066
HCTI-15-18.0	15	9.5	0.005	18.0	0.56	0.066
HCTI-18-17.2	18	11.1	0.005	17.2	0.56	0.066
HCTI-23-16.4	23	13.2	0.007	16.4	0.56	0.066
HCTI-27-15.6	27	15.7	0.008	15.6	0.56	0.066
HCTI-33-11.7	33	21.3	0.013	11.7	0.53	0.053
HCTI-39-11.2	39	24.7	0.014	11.2	0.53	0.053
HCTI-47-10.7	47	29.0	0.016	10.7	0.53	0.053
HCTI-55-10.2	55	33.7	0.017	10.2	0.53	0.053
HCTI-68-7.7	68	45.2	0.030	7.70	0.52	0.042
HCTI-100-7.0	100	63.1	0.037	7.00	0.52	0.042
HCTI-120-6.7	120	73.9	0.040	6.70	0.52	0.042
HCTI-150-5.0	150	101.4	0.071	5.00	0.51	0.034
HCTI-180-4.8	180	118.9	0.078	4.80	0.51	0.034
HCTI-220-5.8	220	123.8	0.054	5.80	0.56	0.042
HCTI-270-5.5	270	147.3	0.060	5.50	0.56	0.042
HCTI-330-5.2	330	174.1	0.067	5.20	0.56	0.042
HCTI-390-5.0	390	203.2	0.073	5.00	0.56	0.042
HCTI-470-3.8	470	271.4	0.130	3.80	0.54	0.034
HCTI-590-3.6	590	314.8	0.140	3.60	0.54	0.034
HCTI-680-3.4	680	370.7	0.150	3.40	0.54	0.034
HCTI-820-2.6	820	509.9	0.270	2.60	0.53	0.027
HCTI-1000-2.4	1000	593.5	0.300	2.40	0.53	0.027

Custom versions available upon request.

STANDARD SPECIFICATIONS

- 1/2" Min Lead Tinned 1/16" Above Mounting Plane
- 55 C to 105 C Operating Temperature
- Rated Current Range 2.2A dc- 20A dc
- Inductance range 6.7 to 593 uH
- Self Shielding & High Current
- 1.28" Maximum Height
- 0.65" Maximum Width
- Distributed Air Gap



500 Bayview Avenue
Inwood, NY 11066 USA
sales@graintransformer.com
techhelp@graintransformer.com

Tel +1 516.239.5777
Fax +1 516.239.7208
Toll Free +1 888.239.5777
signaltransformer.com

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Thank you

We appreciate your time and attention

