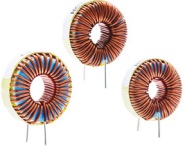
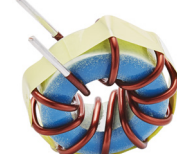
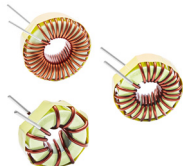
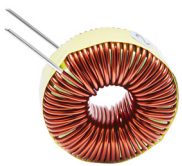


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## High Current Toroidal Inductors At-A-Glance

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magnetic solutions

24 Different Models

Broad Inductance and Current Ranges

Vertical Mount With Self Leads

Horizontal Mount Versions Available

Custom Inductance Models Available



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**INDUSTRIAL**  
 Material Handling  
 Process Control  
 Robotics  
 Elevators  
 Power Controllers  
 Power Supplies  
 Vending Machines

24 Different Models, Vertical Mount With Self Leads, Broad Inductance and Current Range, Scalable to Horizontal Mount, 2 or 4 or Pin Headers can be added, Custom Inductance Models Available

**Specifications**

- Operating Temperature Range: -55 °C to 105 °C, 30 °C Max T Rise
- Inductance Range: 10 µH - 1000 µH @ 0 ADC
- Rated Current Range: 2.4 A to 20.0 A
- Class B Insulation
- RoHS and REACH Compliant

**Lead or Termination**

- 1/2" Minimum Self Lead Length
- Tinned to 1/16" above Mounting Plane

**Dimensions**

- 1.28" Maximum Height
- 0.65" Maximum Width

**Where Used**

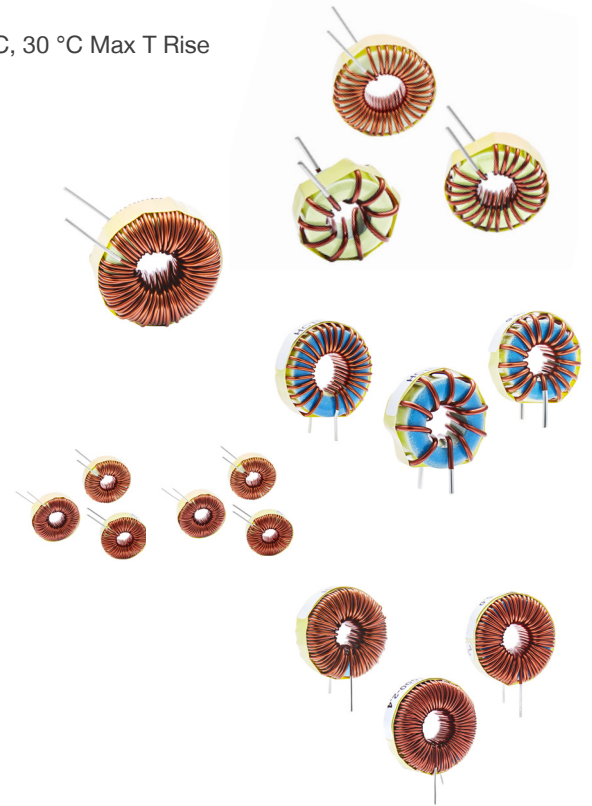
- Consumer Products
- PC Boards for Controls and Power Supplies
- Various Industrial and Medical Applications

**How Used in Circuitry**

- EMI/RFI Filter
- Energy Storage Device, Choke Inductor

**Features**

- High Efficiency through Reduced Core Loss
- Low Magnetic Radiation from Self Shielding
- High Energy Storage with Distributed Air Gaps



**Specifications Table**

SIGNAL PART #	L (uh) = ± 15% @ 1 kHz	IDC (A)	L (uh) ± 15% @ I rated	DCR Ohm Max
HCTI-10-20.0	10	20.0	6.7	0.005
HCTI-12-19.1	12	19.1	7.8	0.005
HCTI-15-18.0	15	18.0	9.5	0.006
HCTI-18-17.2	18	17.2	11.1	0.006
HCTI-22-16.4	22	16.4	13.2	0.007
HCTI-27-15.6	27	15.6	15.7	0.008
HCTI-33-11.7	33	11.7	21.3	0.013
HCTI-39-11.2	39	11.2	24.7	0.014
HCTI-47-10.7	47	10.7	29.0	0.016
HCTI-56-10.2	56	10.2	33.7	0.017
HCTI-68-7.7	68	7.7	45.2	0.030
HCTI-100-7.0	100	7.0	63.1	0.037
HCTI-120-6.7	120	6.7	73.9	0.040
HCTI-150-5.0	150	5.0	101.4	0.071
HCTI-180-4.8	180	4.8	118.9	0.078
HCTI-220-5.8	220	5.8	123.8	0.054
HCTI-270-5.5	270	5.5	147.2	0.060
HCTI-330-5.2	330	5.2	174.1	0.067
HCTI-390-5.0	390	5.0	200.2	0.072
HCTI-470-3.8	470	3.8	271.4	0.130
HCTI-560-3.6	560	3.6	314.8	0.140
HCTI-680-3.4	680	3.4	370.7	0.150
HCTI-820-2.6	820	2.6	500.9	0.270
HCTI-1000-2.4	1000	2.4	593.6	0.300



# HCTI Series

## High Current Toroidal Inductors

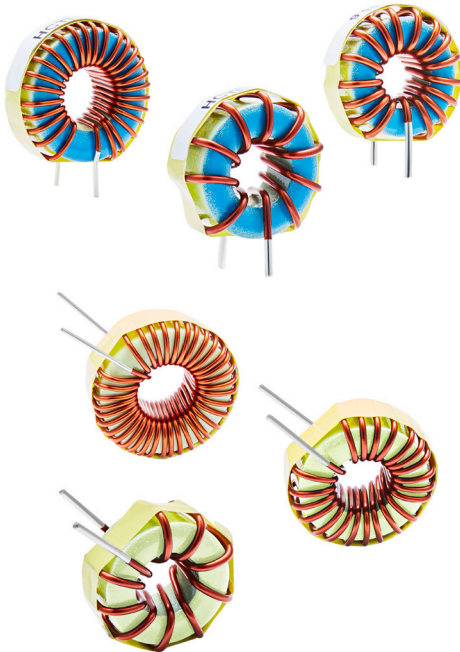
High Current Toroidal Inductors (HCTI) are vertical PCB mounted, high-frequency magnetics with a broad inductance and current range. Although offered as standard catalog items within this range, versions can be designed for custom inductances, with 2 or 4 pin headers, or horizontal mount.

### General Specifications

- 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

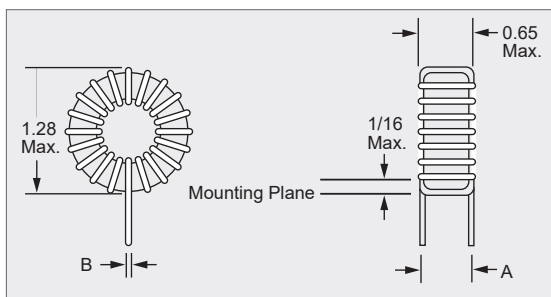
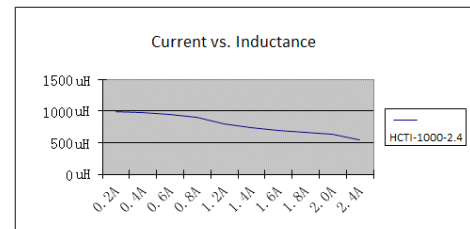
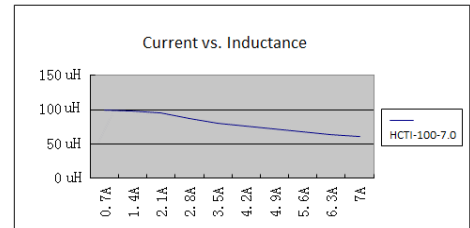
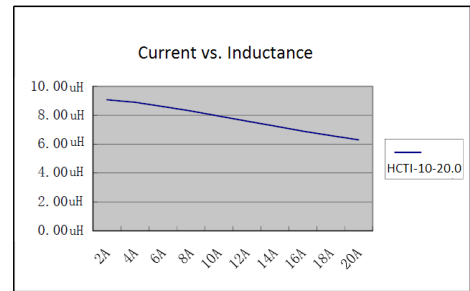
### Applications

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



## Part Number Selection & Mechanical Specifications

Part Number	L (u H) ±15% @ 1KHz	L(u H) ±15% @ I-rated	DC Resistance Ω MAX	I-rated DC Current Amps (2)	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	0.006	18.0	0.56	0.066
HCTI-18-17.2	18	11.1	0.006	17.2	0.56	0.066
HCTI-22-16.4	22	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-56-10.2	56	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	147.2	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	200.2	0.072	5.00	0.56	0.042
HCTI-470-3.8	470	271.4	0.130	3.80	0.54	0.034
HCTI-560-3.6	560	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	500.9	0.270	2.60	0.53	0.027
HCTI-1000-2.4	1000	593.6	0.300	2.40	0.53	0.027



### 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



**Custom versions available upon request.**



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