

# HTTI Series

## High Current High Temperature Toroidal Inductors

HTTI Series of High Current High Temperature Toroidal Inductors are vertical PCB THT mounted magnetics with a broad inductance and current range. HTTI parts employ a specific low core loss material with good DC saturation characteristics that is not subject to thermal aging making them suitable for operation at high temperature.



### General Features

- Vertical PCB THT mounting for board layout optimization
- High temperature rating of up to 200 °C
- Distributed air gap for high energy storage
- Increased efficiency with reduced core & copper loss
- Self-shielding for minimum magnetic radiation
- High current carrying capability

### Specifications

- Inductance Range: 10  $\mu$ H to 1000  $\mu$ H
- Max. DC Resistance: 0.012  $\Omega$  to 0.430  $\Omega$
- I-rated DC Current: 1.6 A to 9.9 A
- Operating Temperature Range: -55°C to +200°C
- Leads tinned to within 1/16 of an inch above mounting plane
- Lead length: 0.50 in

### Applications

- High temperature operating environment
- EMI/RFI filtering
- DC-DC converter
- Output chokes

### Markets

- Telecom
- Medical
- Commercial
- Industrial
- Security

## PRODUCT IDENTIFICATION

**HTTI - 33 - 6.1**

**Type / Product Series**

HTTI = High Current High Temperature Toroidal Inductors

**I-rated DC Current**

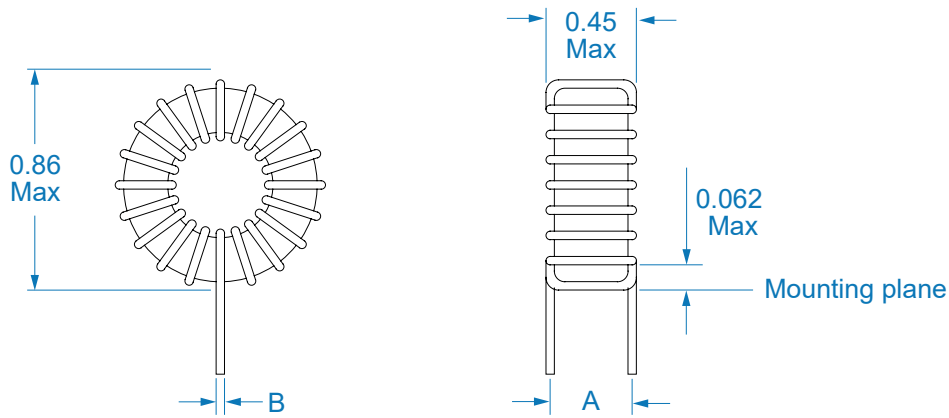
6.1 = 6.1 A

**Inductance**

33 = 33  $\mu$ H

## MECHANICAL SPECIFICATIONS

Dimensions are in inches.



**Custom versions available upon request.**



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## ELECTRO-MECHANICAL SPECIFICATIONS

Part Number	L ± 15% @ 1 kHz (μH)	L ± 15% @ I-rated (μH)	DC Resistance Max. (Ω)	I-rated DC Current <sup>1</sup> (A)	Dimension Nominal A (in)	Dimension Nominal B (in)
HTTI-10-9.9	10	7.6	0.012	9.9	0.33	0.042
HTTI-12-9.6	12	9.0	0.013	9.6	0.33	0.042
HTTI-15-9.2	15	11.0	0.014	9.2	0.33	0.042
HTTI-18-8.6	18	13.0	0.016	8.6	0.33	0.042
HTTI-22-6.7	22	16.6	0.026	6.7	0.32	0.034
HTTI-27-6.4	27	20.1	0.028	6.4	0.32	0.034
HTTI-33-6.1	33	24.0	0.031	6.1	0.35	0.034
HTTI-39-5.9	39	28.0	0.033	5.9	0.35	0.034
HTTI-47-5.6	47	33.1	0.036	5.6	0.35	0.034
HTTI-56-5.3	56	38.5	0.040	5.3	0.35	0.034
HTTI-68-5.1	68	46.0	0.044	5.1	0.35	0.034
HTTI-82-4.8	82	54.0	0.049	4.8	0.35	0.034
HTTI-100-4.6	100	64.1	0.053	4.6	0.35	0.034
HTTI-120-3.5	120	84.4	0.094	3.5	0.34	0.027
HTTI-150-3.3	150	102.8	0.110	3.3	0.34	0.027
HTTI-180-3.1	180	120.7	0.120	3.1	0.34	0.027
HTTI-220-3.0	220	144.2	0.130	3.0	0.35	0.027
HTTI-270-2.8	270	172.6	0.140	2.8	0.35	0.027
HTTI-330-2.7	330	206.0	0.160	2.7	0.35	0.027
HTTI-390-2.1	390	266.7	0.270	2.1	0.33	0.022
HTTI-470-2.0	470	314.4	0.290	2.0	0.35	0.022
HTTI-560-1.9	560	366.9	0.320	1.9	0.35	0.022
HTTI-680-1.8	680	435.1	0.350	1.8	0.35	0.022
HTTI-820-1.7	820	512.0	0.390	1.7	0.37	0.022
HTTI-1000-1.6	1000	608.1	0.430	1.6	0.37	0.022

<sup>1</sup> The current causing 50°C max. temperature rise.

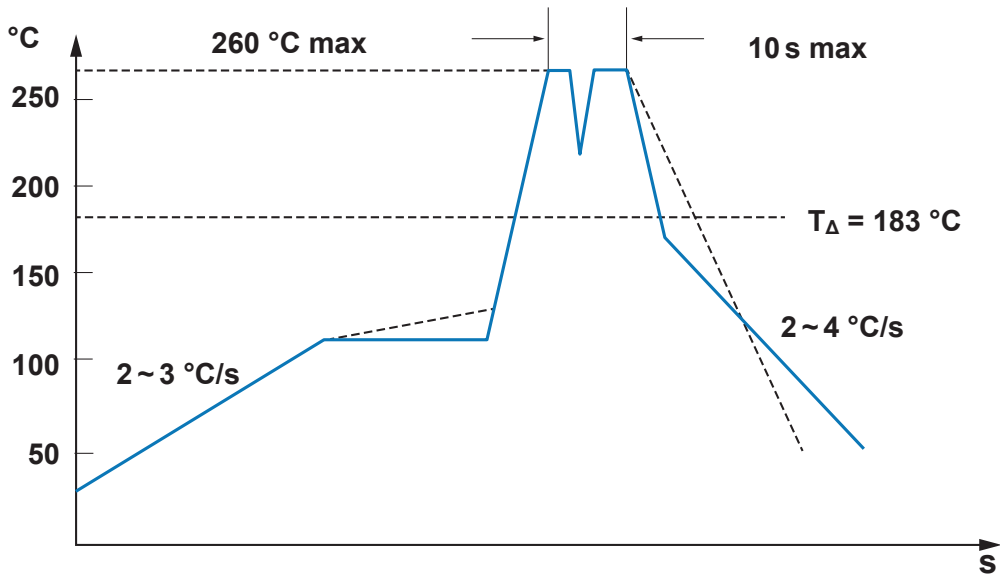
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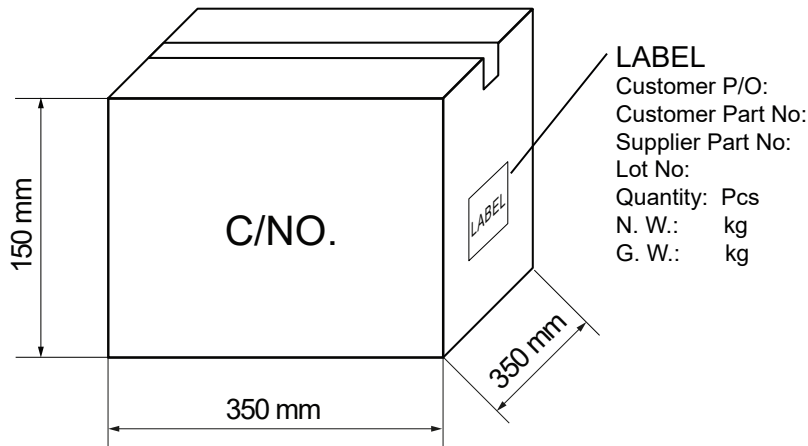
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## RECOMMENDED WAVE SOLDERING CONDITIONS



- Note**  
 Product soldering processing conditions and set methods may vary due to differences between various manufactures and their equipment. Adjustments are to be made accordingly.

## PACKAGING SPECIFICATIONS



Series	Packaging Quantity (pcs)		
	per Tray	Trays per Carton	Total Quantity per Carton
HTTI	70	7	490

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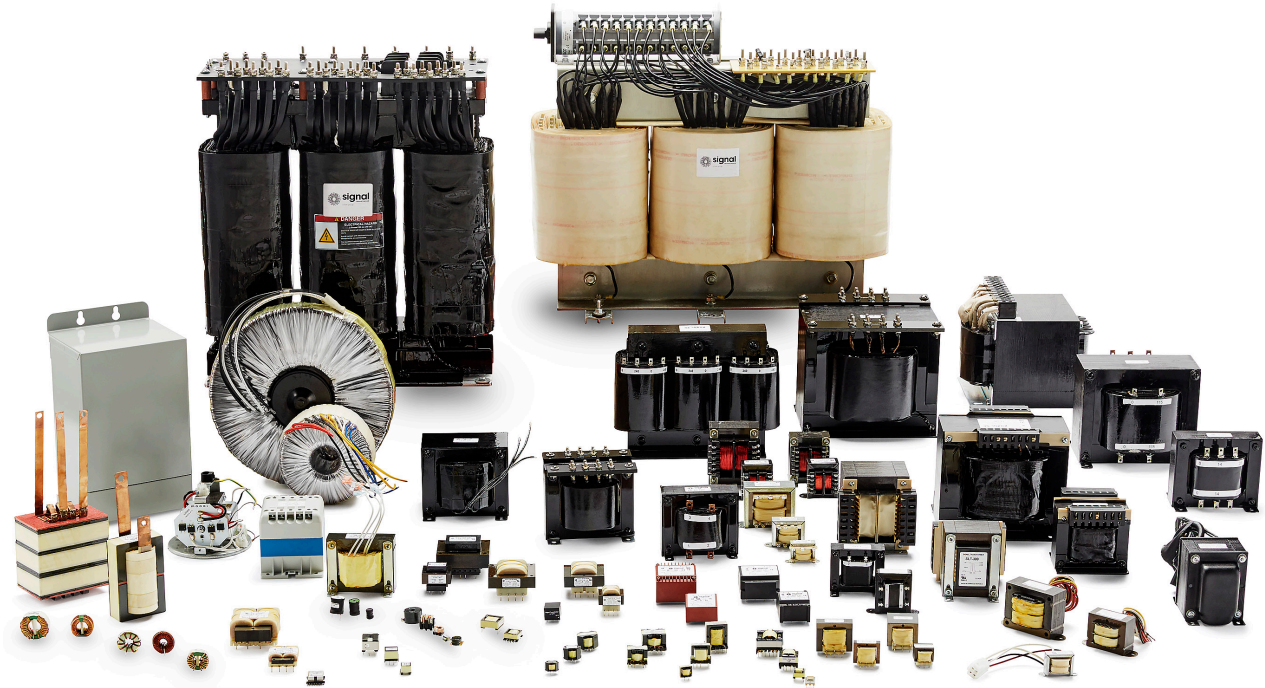
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## About Signal Transformer

Signal Transformer is known as the world's leader of wire wound magnetic solutions since 1959. With over 50 years of experience manufacturing transformers, chokes, inductors and custom or modified standard products. Signal offers not only the most comprehensive line of certified standard power conversion products, with our vast engineering, manufacturing and regulatory resources; Signal Transformer excels in the design and manufacturer of cost effective, specialized platforms.



**For more information,  
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