

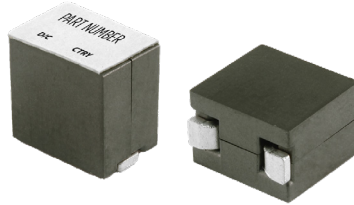


**THE DATASHEET OF  
PA4390.151HLT**



# SMT Power Inductors

Power Beads - PA4390.XXXHLT Series



- Current Rating:** Over 100A<sub>pk</sub>
- Inductance Range:** 100nH to 330nH
- Height:** 10.0mm Max
- Footprint:** 10.0mm x 7.0mm Max

## Electrical Specifications @ 25°C — Operating Temperature - 40°C to +130°C<sup>7</sup>

Part Number	Inductance <sup>1</sup> @ 0A <sub>DC</sub> (nH +/- 15%)	Inductance <sup>2</sup> @ I <sub>rated</sub> (nH TYP)	I <sub>rated</sub> <sup>3</sup> (ADC)	DCR <sup>4</sup> (mΩ nominal)	Saturation Current <sup>5</sup> (A TYP)			Heating Current <sup>6</sup> (A TYP)
					25°C	100°C	125°C	
PA4390.101HLT	100	100	68	0.185+/-10%	113	86	81	68
PA4390.121HLT	120	120	68		94	81	78	
PA4390.151HLT	150	150	68		80	75	73	
PA4390.221HLT	220	190	52		70	52	48	
PA4390.331HLT	330	310	33		43	33	31	

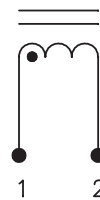
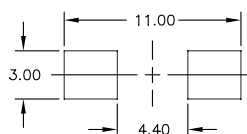
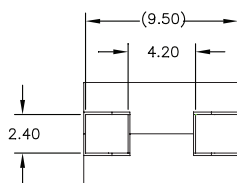
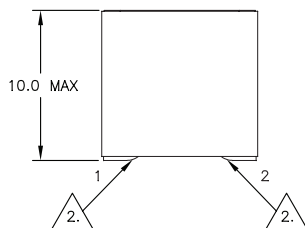
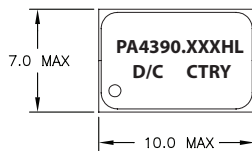
### NOTES:

- Inductance measured at 100kHz, 100mVrms.
- Inductance at I<sub>rated</sub> is the value of the inductance at 25°C at the listed rated current.
- The rated current as listed is either the saturation current (25°C or 100°C) or the heating current depending on which value is lower.
- The nominal DCR is measured at point as shown below on the mechanical drawing.
- The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C, 100°C). This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
- The heating current is the DC current which causes the part temperature to increase by approximately 40°C when used in a typical application.
- In high volt\*time applications, additional heating in the component can occur due to core losses in the inductor which may necessitate derating the current in order to limit the temperature rise of the component. To determine the approximate total losses (or temperature rise) for a given application, the core loss and temperature rise curves can be used.
- Parts with the HLT suffix are sold in tape and reel packaging. Pulse complies to industry standard tape and reel specification EIA-481. The tape and reel for this product has a width (W=24mm), pitch (Po=16mm) and depth (Ko=10.5mm). Samples of these parts can be ordered by removing the HLT suffix and replacing with HL.
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

### Mechanical

### Schematic

#### PA4390.XXXHLT

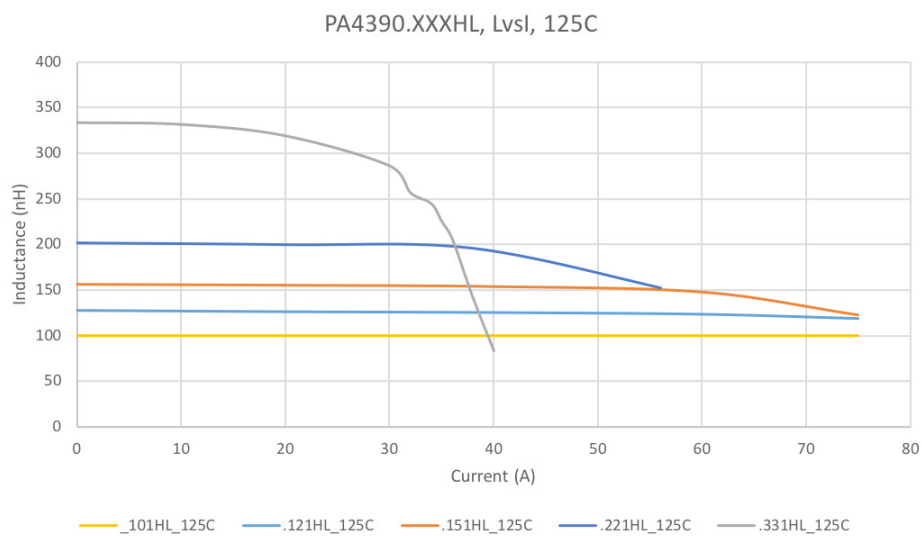
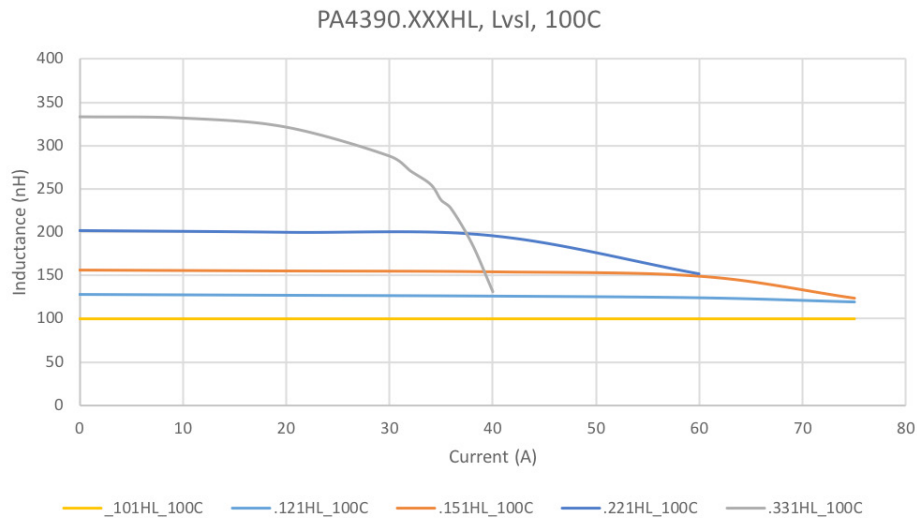
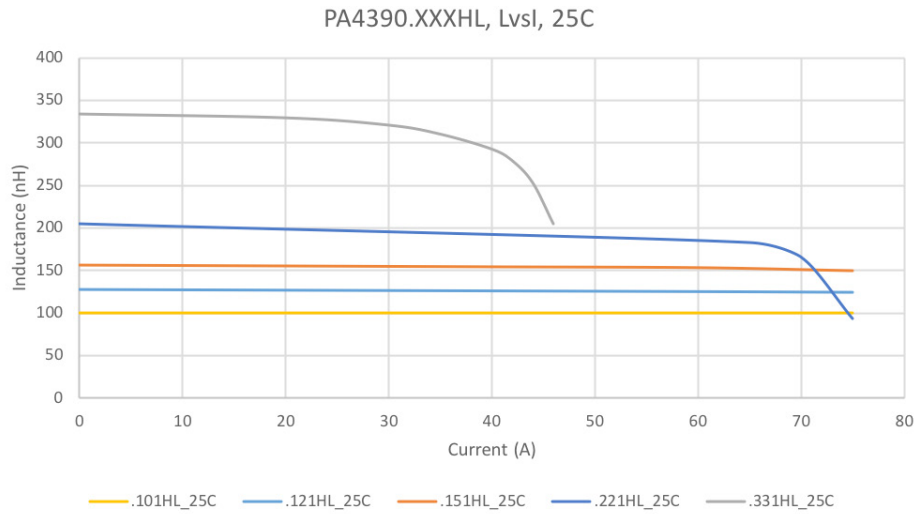


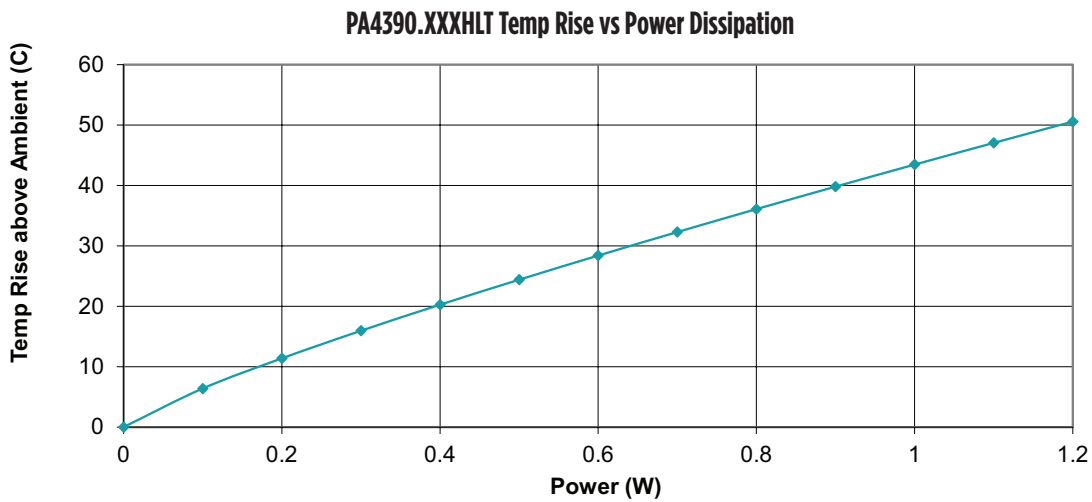
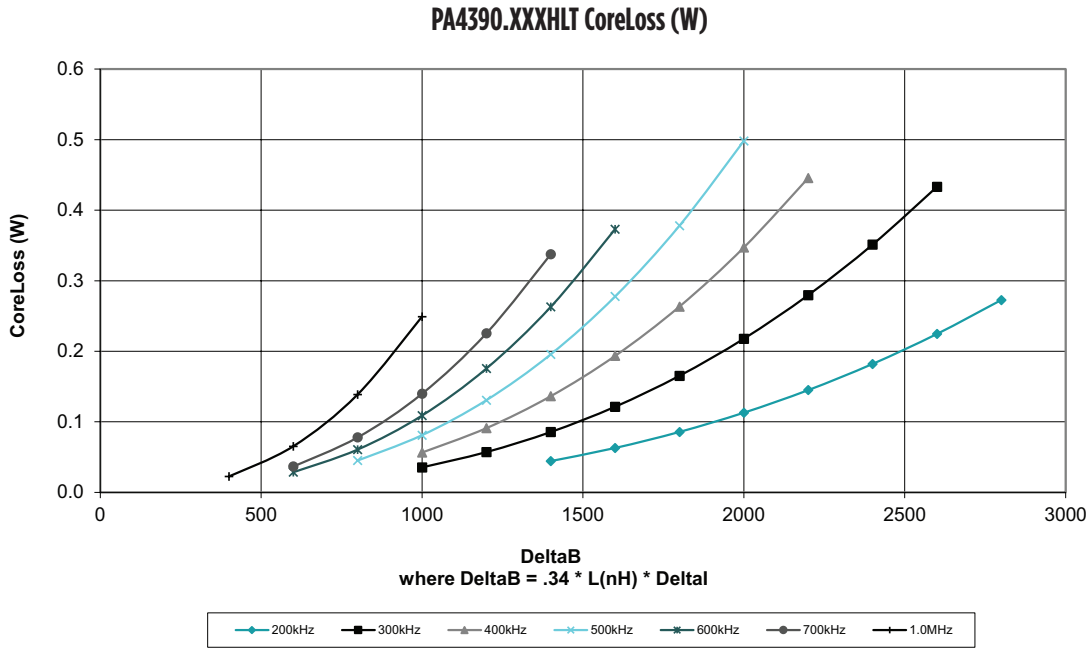
**Weight:** ..... 2.74grms

**Tape & Reel:** ..... 300/ Reel

**Dimensions:** mm

Unless otherwise specified, all tolerances are ± 0.25





**Total Power Dissipation (W) = CopperLoss + CoreLoss**  
**CopperLoss =  $I_{rms}^2 * R_{dc}(m\Omega) / 1000$**   
**CoreLoss = (from table)**

**For More Information**

**Pulse Worldwide Headquarters**

15255 Innovation Drive Ste 100  
San Diego, CA 92128  
U.S.A.

**Pulse Europe**

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

**Pulse China Headquarters**

Pulse Electronics (Shenzhen) CO., LTD  
D708, Shenzhen Academy of  
Aerospace Technology,  
The 10th Keji South Road,  
Nanshan District, Shenzhen,  
P.R. China 518057

**Pulse North China**

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

**Pulse South Asia**

3 Fraser Street  
0428 DUO Tower  
Singapore 189352

**Pulse North Asia**

1F., No.111 Xiyuan Rd  
Zhongli City  
Taoyuan City 32057  
Taiwan (R.O.C)

Tel: 858 674 8100  
Fax: 858 674 8262

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

Tel: 86 755 33966678  
Fax: 86 755 33966700

Tel: 86 21 62787060  
Fax: 86 2162786973

Tel: 65 6287 8998  
Fax: 65 6280 0080

Tel: 886 3 4356768  
Fax: 886 3 4356820

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2020. Pulse Electronics, Inc. All rights reserved.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View PA4390.151HLT on WIN SOURCE](#)

 [Pulse Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management