### **SMT Power Inductors**

Power Beads - PA4792.XXXHL and PA4793.XXXHL





**Current Rating:** PA4792 (100Apk), PA4793 (60Apk)

**PInductance Range:** 230nH to 500nH

**Height:** 7.25mm Max (PA4792)

6.6mm Max (PA4793)

Prootprint: 22.2mm x 8.2mm Max (PA4792)

15.1mm x 8.6mm Max (PA4793)

	Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C $^7$									
Part Number	Inductance <sup>1</sup> @ OA <sub>DC</sub>	Inductance <sup>2</sup> @Irated (nH TYP)	<b>Irated</b> <sup>3</sup> (ADC)	$\frac{\text{DCR}^4}{(\text{m}\Omega)}$	Saturation Current <sup>5</sup> (A TYP)		Heating Current <sup>6</sup>	Hi-pot <sup>10</sup>		
	(nH ±10%)				25°C	100°C	(A TYP)	(Vdc)		
PA4792.XXXHL: 22.2 x 8.2 x 7.25mm Max										
PA4792.231HLT	230	230	46	0.47±10%	100	86	46	200		
PA4793.XXXHL: 15.1 x 8.6	x 6.6mm Max									
PA4793.501HLT	500	470	40	1.15±15%	60	51	40	200		

#### NOTES:

- Inductance measured at 100kHz, 100mVrms. For PA4793 the listed inductance is measured from 1-3 with pins 2.4 shorted
- 2. Inductance at Irated 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.
- 4. The nominal DCR is measured from point ① to point ② , as shown below on the mechanical drawing. For PA4793 the listed DCR value is for each winding.
- 5. 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.

- 7. In high volt\*time applications, additional heating in the component can occur due to core losses in the inductor which may neccessitate 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 coreloss 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.
   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.
- Hi-pot is measured from the bottom of the core to the leads. Hi-pot is tested for 2sec with a leakage current maximum of 0.1mA.

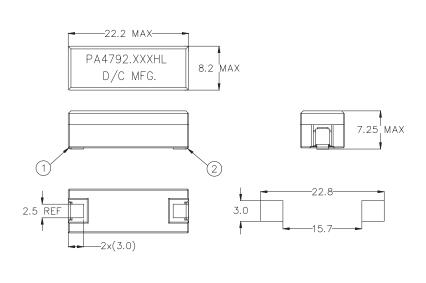
# **SMT Power Inductors**

Power Beads - PA4792.XXXHL and PA4793.XXXHL

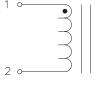


### Mechanical Schematic

### PA4792.XXXHLT



FINAL OUTLINE RECOMMENDED PAD LAYOUT



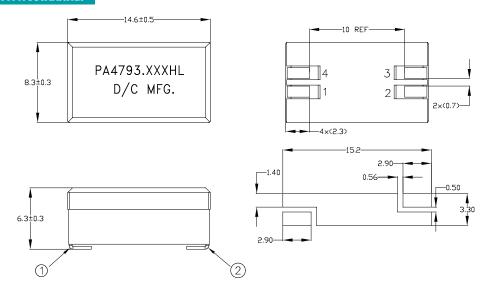
**Weight** ......5.20grams **Tape & Reel** .....500/reel

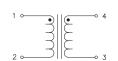
Dimensions: mm

Unless otherwise specified, all tolerances are  $\pm 0.25$ 

## Mechanical Schematic

### PA4793.XXXHLT





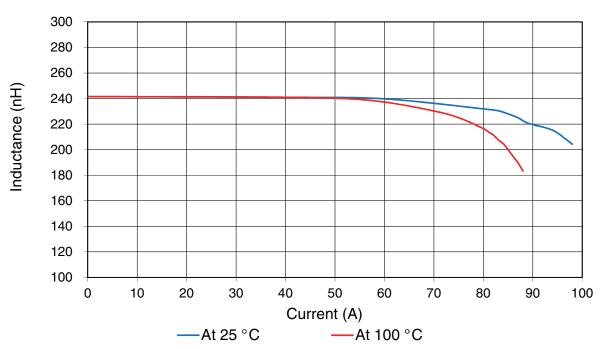
### Dimensions: mm

Unless otherwise specified, all tolerances are  $\pm 0.25$ 

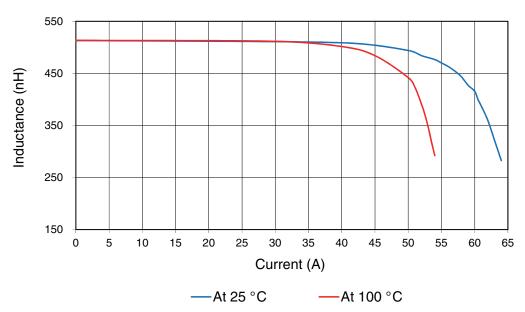
FINAL OUTLINE RECOMMENDED PAD LAYOUT



# PA4792.231HL, Lvsl, 25 °C/100 °C

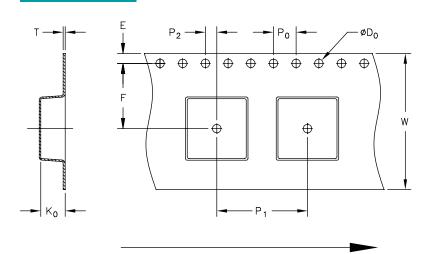


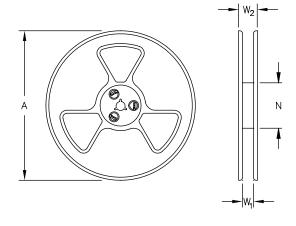
## PA4793.501HL, Lvsl, 25 °C/100 °C





### **TAPE & REEL INFO**





USER DIRECTION OF FEED

SURFACE MOUNTING TYPE, REEL/TAPE LIST														
TVDF	REEL SIZE (mm)				TAPE SIZE (mm)							QTY		
TYPE	Α	<b>W</b> 1	W <sub>2</sub>	N	E	F	D <sub>0</sub>	Po	P <sub>1</sub>	P <sub>2</sub>	W	T	<b>K</b> 0	PCS/REEL
PA4792.XXXHLT	Ø330	44.4	50.4	100	1.75	20.2	1.5	4	16	2	44	0.5	7.9	500
PA4793.XXXHLT	Ø330	32.4	38.4	100	1.75	14.2	1.5	4	16	2	32	0.5	7	500

For More Information	r More Information										
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### Pulse:

PA4340.151NLT PA4343.331NLKIT PA4346.223ANLT PA4346.473ANLT PA4346.683ANLT PA4346.821ANLT PA4346.822ANLT PA4349.153ANLT PA4346.333ANLT PA4343.473ANLT PA4343.561ANLT PA4343.821ANLT PA4340.151NLT PA4340.223ANLT PA4340.561NLT PA4340.821NLT PA4341.153NLT PA4341.333NLT PA4343.242ANLT PA4343.331ANLT PA4343.471ANLT