



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

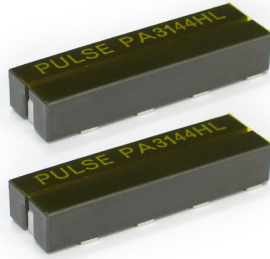
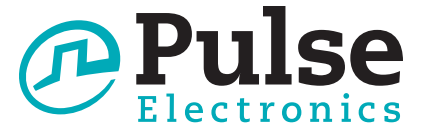
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SMT POWER INDUCTORS

Power Beads - PA314xHL Series Coupled Inductor



- Gen 3.0 Coupled Inductors (2, 3, 4 and 5 phases)
- For use only with Volterra chipsets
- Coupled Inductors enable:
 - Phase ripple current reduction due to AC magnetic field cancellation within the inductor core.
 - Improved efficiency due to lower peak currents
 - Reduction in required output capacitance

Electrical Specifications @ 25°C - Operating Temperature -40°C to +130°C

Part Number	Number of Coupled Phases	Equivalent Transient ¹ Inductance per Phase (nH+/-20%)	I _{rated} ² (Adc)	I _{max} ² Peak per Phase (Adc)	OCL ³ (nH Min, 0Adc)	DCR/Phase (mΩ Max)
PA3142HL	2	50	50	80	150	.25
PA3143HL	3				250	
PA3144HL	4				350	
PA3145HL	5				450	

Notes:

1. In a non-coupled multi-phase topology, the power supply sees the same inductance during transient and steady-state conditions. As a result, any attempt to lower the inductance to improve transient response has the negative result of increasing ripple and peak currents throughout the system during steady-state operation. However, in a coupled inductor multi-phase topology, the interaction of magnetic fields from each phase enables an overall reduction in ripple current during steady-state operation and a lower equivalent inductance during transient operation. The equivalent transient inductance per phase, as listed, represents the actual value of inductance (Lk) that would be required in a non-coupled topology to realize the same transient performance. For more information on the

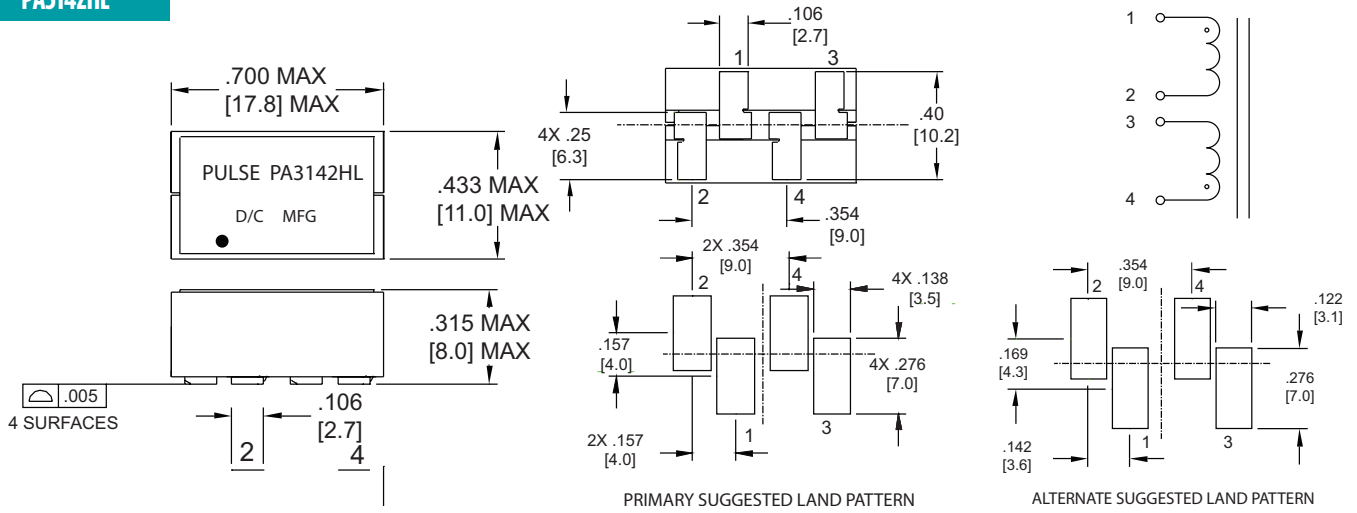
operation of the coupled inductor topology, please contact Volterra.

2. The rated current and peak current are based on Volterra's testing of the Pulse coupled inductors. For more information, please contact Volterra.

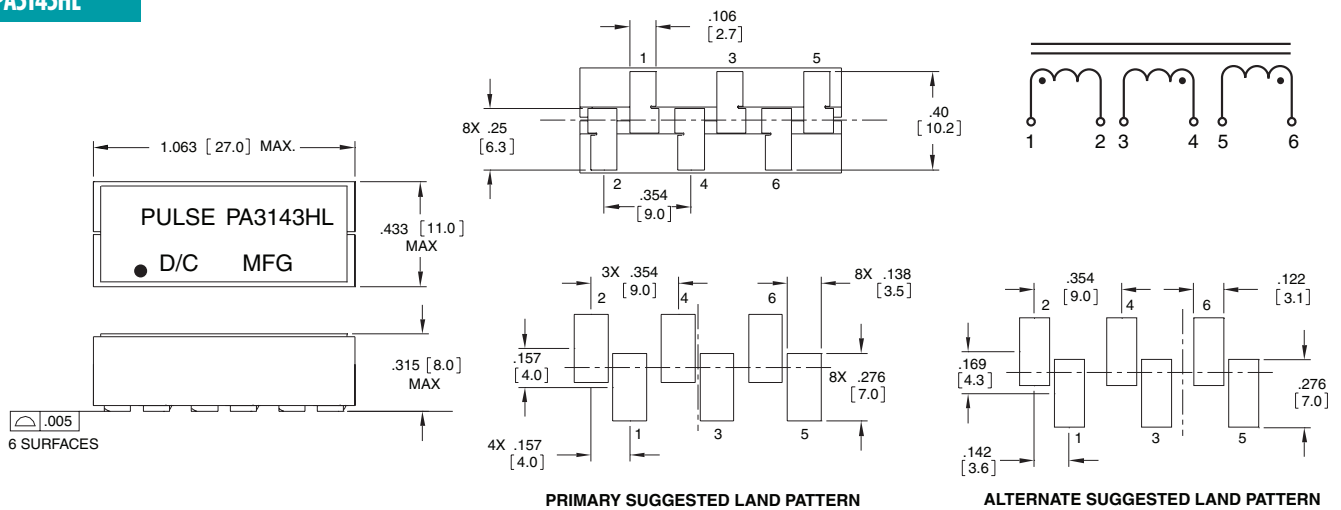
3. The open-circuit inductance per phase is measured inductance across each phase (ie: measured at (1-2) or (3-4) or (5-6) or (7-8), when all other windings are open) when all other phases are open circuit. The open circuit inductance is equal to the magnetizing inductance per phase (Lm) plus the equivalent transient inductance (Lk).

Mechanicals

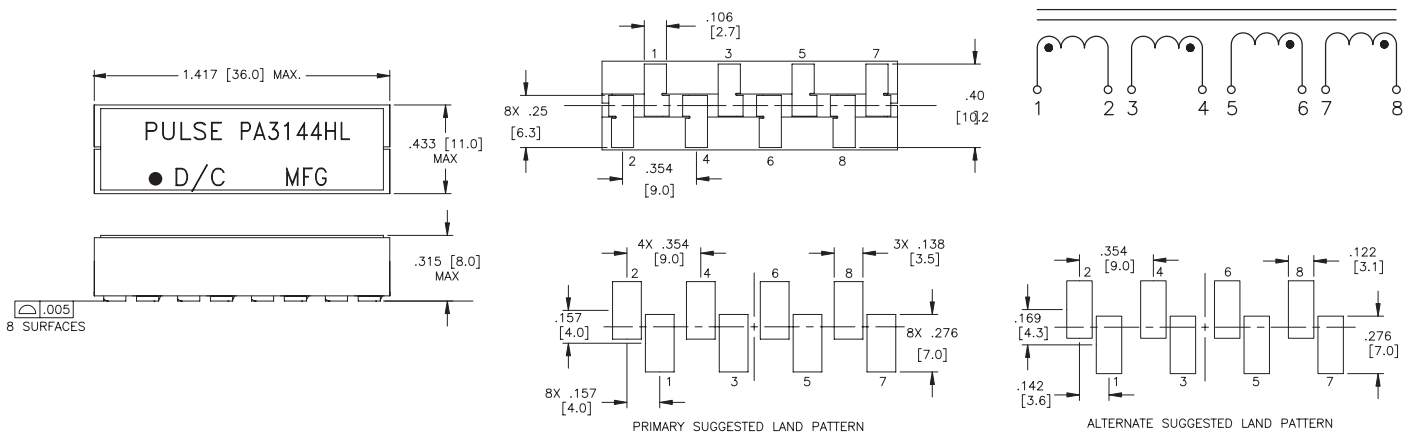
PA3142HL



PA3143HL



PA3144HL



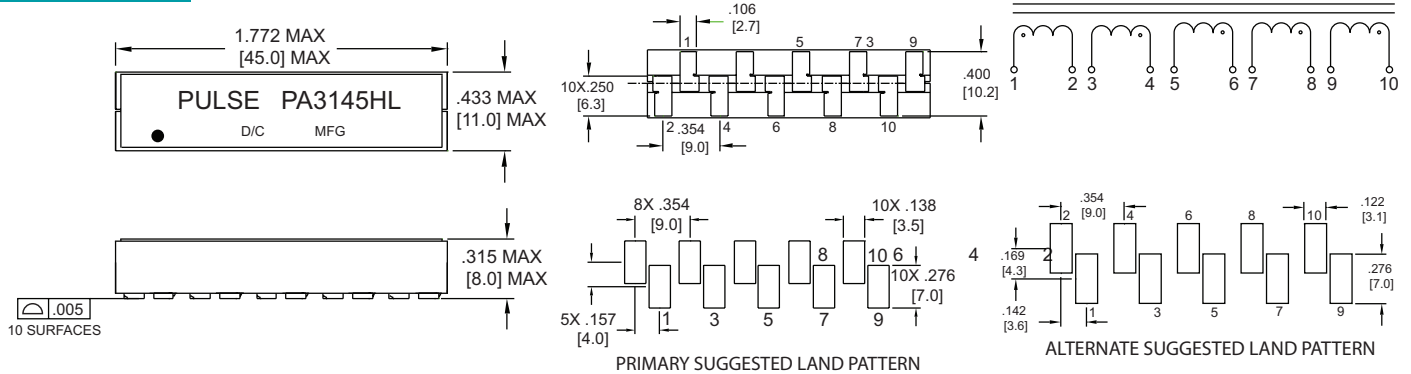
SMT POWER INDUCTORS

Power Beads - PA314xHL Series Coupled Inductor

Mechanicals

Schematics

PA3145HL



For More Information

Pulse Worldwide Headquarters

12220 World Trade Drive
San Diego, CA
92128
U.S.A.

Tel: 858 674 8100

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejian Road
High-Tech Zone
Nanshan District
Shenzen, PR China
518057

Pulse North China

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

Pulse South Asia

135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia

3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823
(Pulse)

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