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.

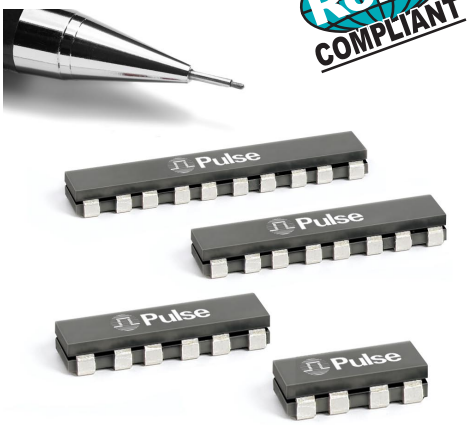
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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 - PA131xNL Series Coupled Inductors



- Gen 1.0 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
- Halogen Free

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

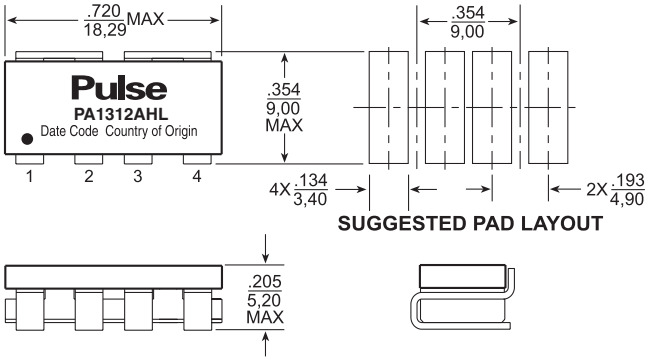
Pulse Part No.	Number of Coupled Phases	Equlavent[1] Transient Inductance per Phase (nH ±20%)	Irated[2] per Phase (Adc)	Open Circuit Ind. per Phase[3] nH ±20%, 0Adc					Open Circuit Ind. per Phase[3] nH Min, 5Adc					DCR/Phase[4] (mΩ)	
				L1 (1-2)	L2 (3-4)	L3 (5-6)	L4 (7-8)	L5 (9-10)	L1 (1-2)	L2 (3-4)	L3 (5-6)	L4 (7-8)	L5 (9-10)	TYP	MAX
PA1312NL	2	50	40	310	310	–	–	–	240	240	–	–	–		
PA1313NL	3	50	40	370	450	370	–	–	285	350	285	–	–	0.425	0.5
PA1314NL	4	50	40	370	490	490	370	–	285	385	385	285	–		
PA1315NL	5	50	40	370	470	490	470	390	285	365	385	365	285		

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 that would be required in an non-coupled topology to realize the same transient performance. This value is achieved by core and winding geometry and is not directly measured by Pulse. For more information on the operation of the coupled inductor topology, please contact Volterrra.
2. The rated current per phase is based on Volterra's testing of the Pulse coupled inductors.
3. The open-circuit inductance per phase is the measured inductance (at specified current) across each phase 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).
4. The nominal value of DCR/phase is for reference only. For production testing, the maximum limit is used.

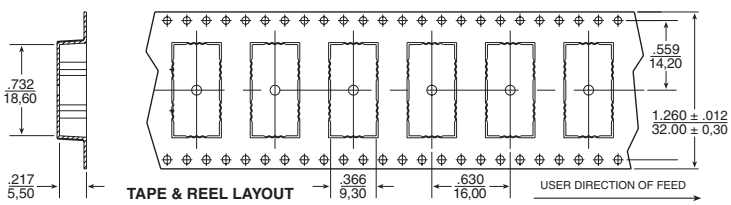
Mechanical

PA1312NL

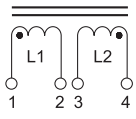


Weight . . . . . 3.0 grams
Tape & Reel . . . 650/reel
Tray 60/tray
Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25



Schematic



SMT POWER INDUCTORS

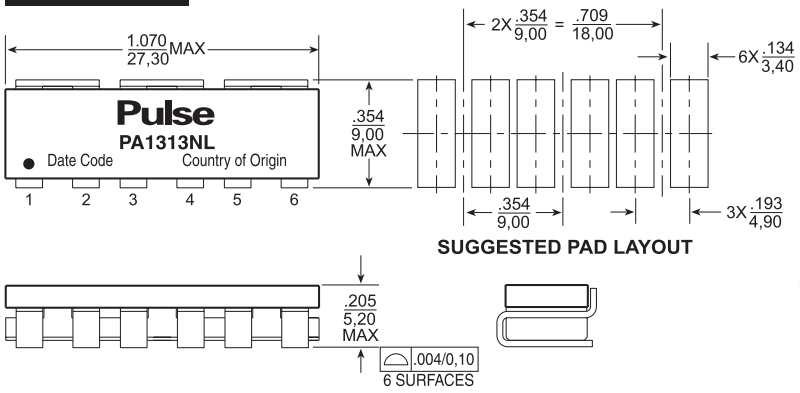
Power Beads - PA131xNL Series Coupled Inductors

Pulse Electronics

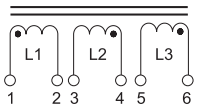
Mechanical

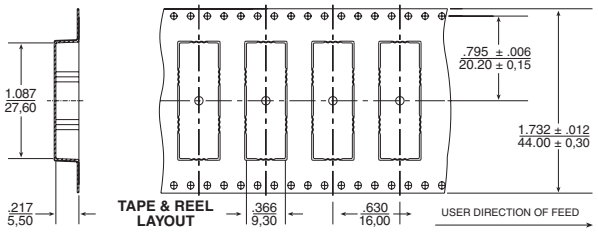
Schematic

PA1313NL

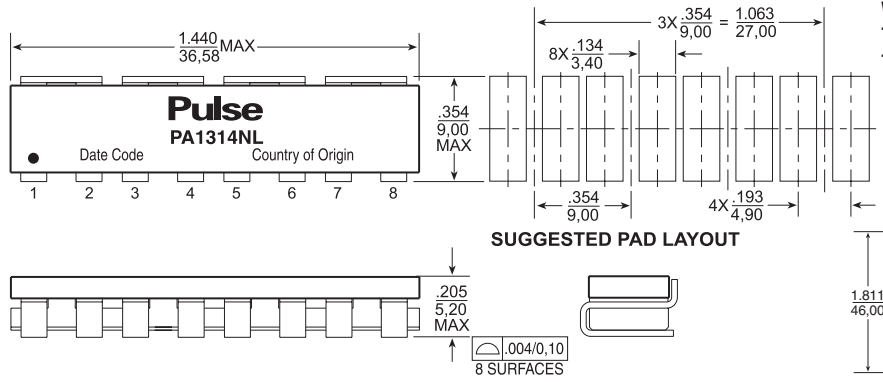


Weight . . . . . 4.5 grams
Tape & Reel . . . 650/reel
Tray 45/tray

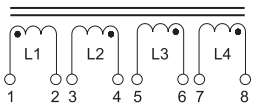


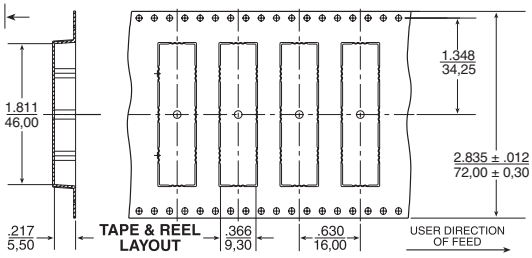


PA1314NL

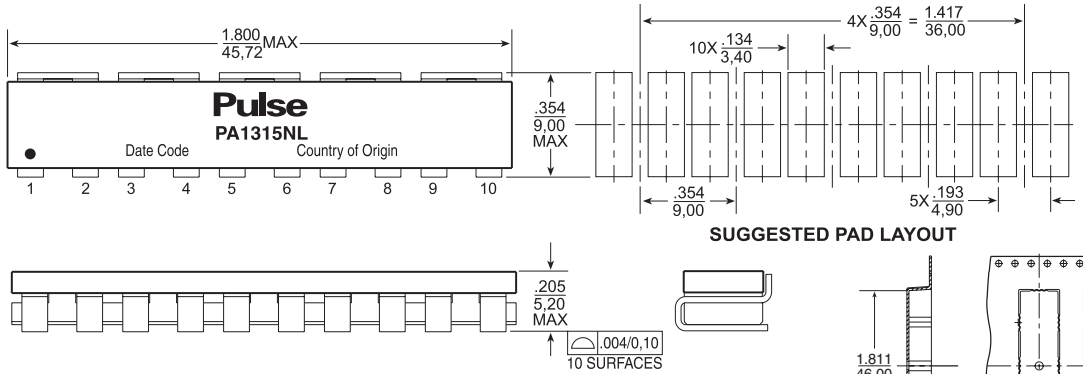


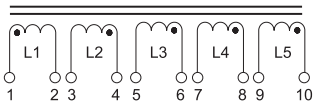
Weight . . . . . 4.5 grams
Tape & Reel . . . 550/reel
Tray 30/tray



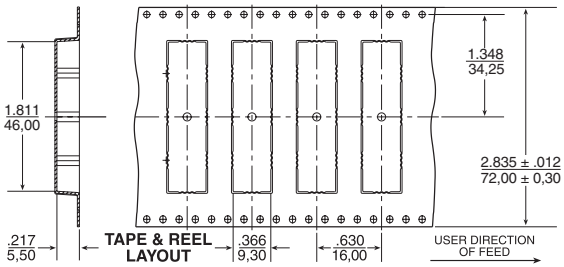


PA1315NL





Weight . . . . . 7.5 grams
Tape & Reel . . . 500/reel
Tray 30/tray



All Part Numbers

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25