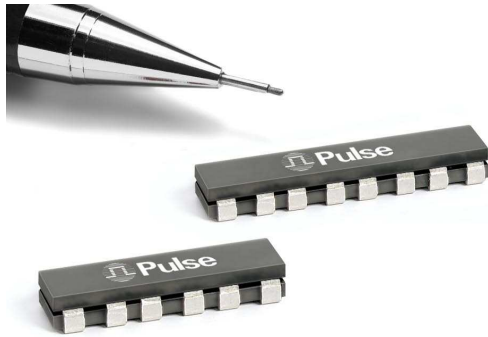
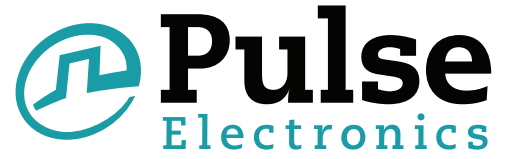


SMT POWER INDUCTORS

Power Beads - PA131xAHL Series Coupled Inductors



- Gen1.5 Coupled Inductors (PA131xAHL) enables higher efficiency compared to the Gen1.0 Coupled Inductors (PA131xNL) due to lower switching losses in the same package size
- For use only with Volterra chipsets
- Halogen Free and RoHS compliant

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

Pulse Part No.	Number of Coupled Phases	Equivalent ¹ Transient Inductance per Phase (nH)	Rated ² per Phase (A _{dc})	Magnetizing Inductance per Phase ³ nH Min, 0A _{dc}					DCR/Phase ⁴ (mΩ)	
				L1	L2	L3	L4	L5	TYP	MAX
				(1-2)	(3-4)	(5-6)	(7-8)	(9-10)		
PA1312AHL	2	50	40	310	310	–	–	–	0.425	0.5
PA1313AHL	3	50	40	290	400	290	–	–		
PA1314AHL	4	50	40	296	392	392	296	–		

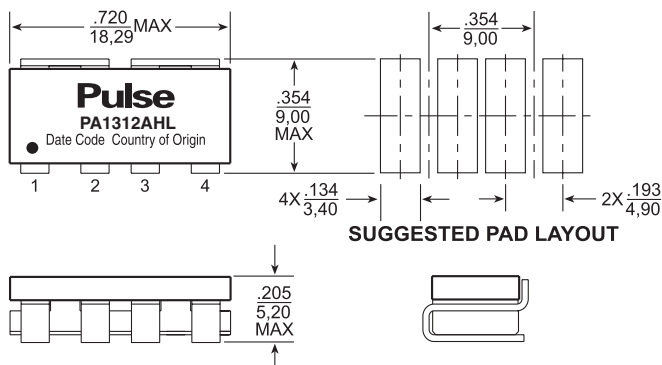
NOTES:

- 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 a 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 Volterra.
- The rated current per phase is based on Volterra's testing of the Pulse coupled inductors.
- The magnetizing inductance per phase is the measured inductance (at 0A_{dc}) across each phase when all other phases are open-circuit.
- The nominal value of DCR/phase is for reference only. For production testing, the maximum limit is used.

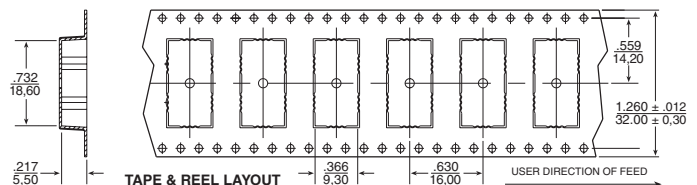
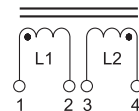
Mechanical

Schematic

PA1312AHL

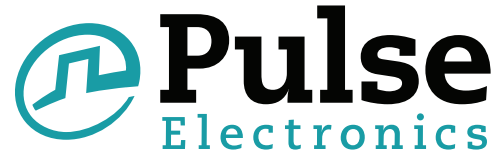


Weight 4.5 grams
 Tape & Reel 650/reel
 Tray 45/tray



SMT POWER INDUCTORS

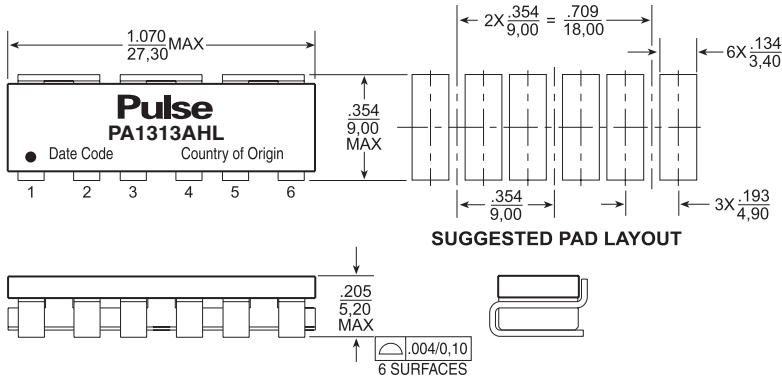
Power Beads - PA131xAHL Series Coupled Inductors



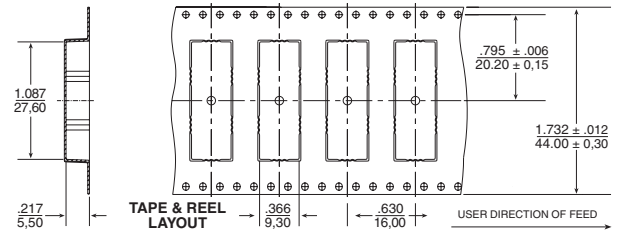
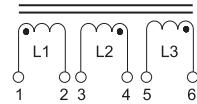
Mechanical

Schematic

PA1313AHL



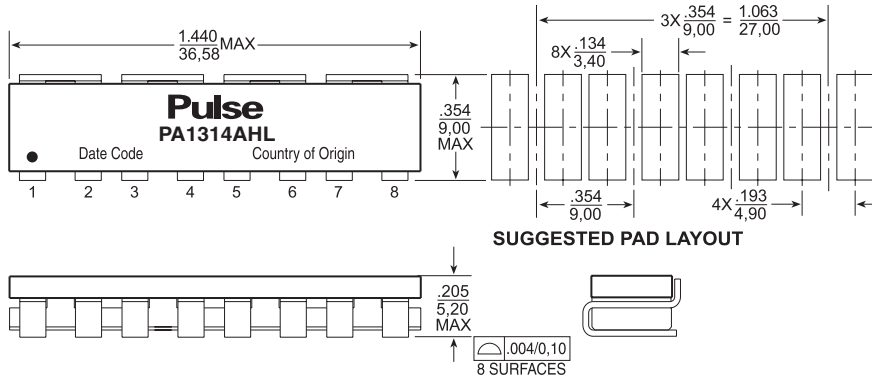
Weight 4.5 grams
 Tape & Reel 650/reel
 Tray 45/tray



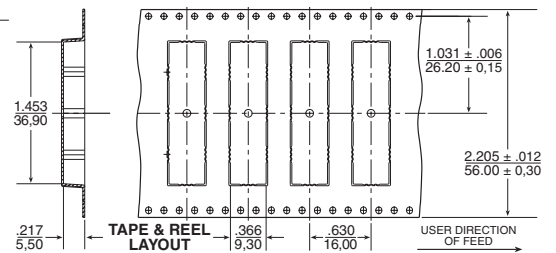
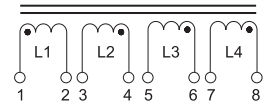
Mechanical

Schematic

PA1314AHL



Weight 6.0 grams
 Tape & Reel ... 550/reel
 Tray 30/tray



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