



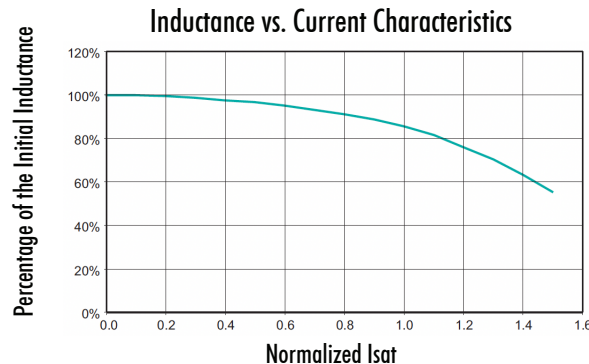
- ⊙ Height: 3.1mm MAX
- ⊙ Footprint: 6.5mm x 6.5mm MAX
- ⊙ Current Rating: up to 2.60A
- ⊙ Inductance Range: 2.15 μ H to 85.39 μ H
- ⊙ Operating Temperature: -55°C to +130°C
- ⊙ Lead Finish: Sn63/Pb37
- ⊙ Moisture Sensitivity Level: 1

Electrical Specifications @ 25°C

Part Number	Inductance @ Rated TYP (μ H)	Rated (A)	DCR (m Ω)		Inductance @ 0 ADC (μ H)	Saturation Current @ 25°C (A)	Heating Current (A)
			TYP	MAX			
PL9501 ³	2.15	2.60	15.3	17.6	2.5	2.60	3.45
PL9502 ³	2.58	2.30	16.6	20.3	3.3	2.30	3.31
PL9503 ³	3.43	2.10	22.5	27.0	4	2.10	2.84
PL9504 ³	4.63	1.85	24.9	31.1	5	1.85	2.70
PL9505 ³	5.22	1.70	32.3	41.9	6	1.70	2.37
PL9506 ³	6.57	1.50	37.9	49.9	8	1.50	2.19
PL9507 ³	8.65	1.30	45	54	10	1.30	2.01
PL9508	9.78	1.20	59	72	12	1.20	1.76
PL9509	12.13	1.10	66	82	15	1.10	1.65
PL9510	15.23	1.05	88	102	18	1.05	1.44
PL9511	18.70	0.95	103	119	22	0.95	1.33
PL9512	21.54	0.85	114	146	27	0.85	1.26
PL9513	27.71	0.76	155	183	33	0.76	1.08
PL9514	33.57	0.68	193	210	39	0.68	0.97
PL9515	40.15	0.60	196	230	47	0.60	0.96
PL9516	49.68	0.55	248	305	56	0.55	0.86
PL9517	60.66	0.48	278	351	68	0.48	0.81
PL9518	74.71	0.45	323	419	82	0.45	0.75
PL9519	85.39	0.40	417	520	100	0.40	0.66

NOTES:

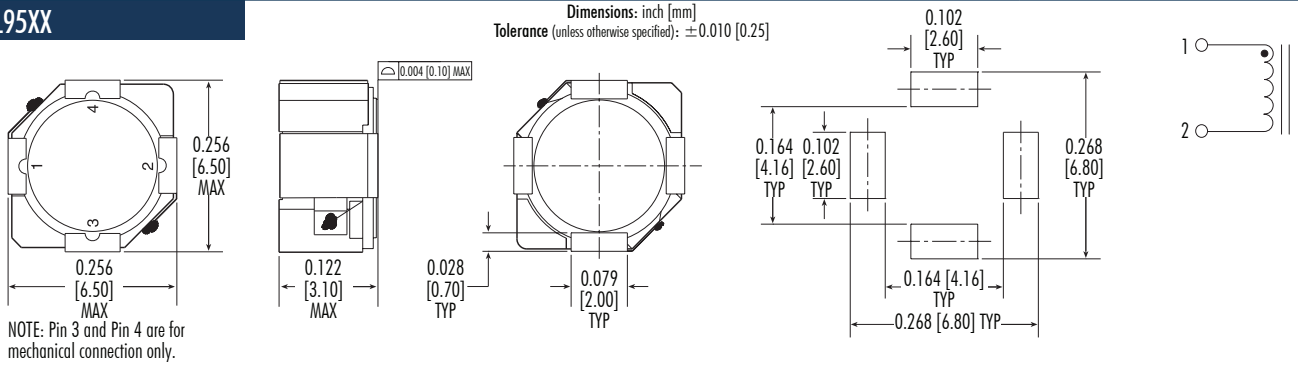
1. Add suffix "NL" for RoHS compliant version; i.e. PL9501 becomes **PL9501NL**. NL parts have 100% SN Lead Finish (MSL:4)
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. **PL9501T**.
3. Inductance at OADC tolerance on indicated part numbers is $\pm 30\%$; tolerance is $\pm 20\%$ on all other parts.
4. Temperature of the component (ambient plus temperature rise) must be within specified operating temperature range.
5. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
6. The saturation current is the current which causes the inductance to drop to 75% of its initial inductance at zero bias. This current is determined by placing the component at room ambient (25°C), and applying a short duration pulse current (to eliminate self-heating effects) to the component.
7. The heating current is the DC current, which causes the temperature of the part to increase by approximately 40°C. This current is determined by extending the terminals of the component with 30mm length 28 gauge buss wires and applying the current to the device for 30 minutes. The temperature is measured by placing the thermo-couple between the winding and the shield.
8. 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. In order to determine the approximate total loss (or temperature rise) for a given application, both copper losses and core losses should be taken into account.



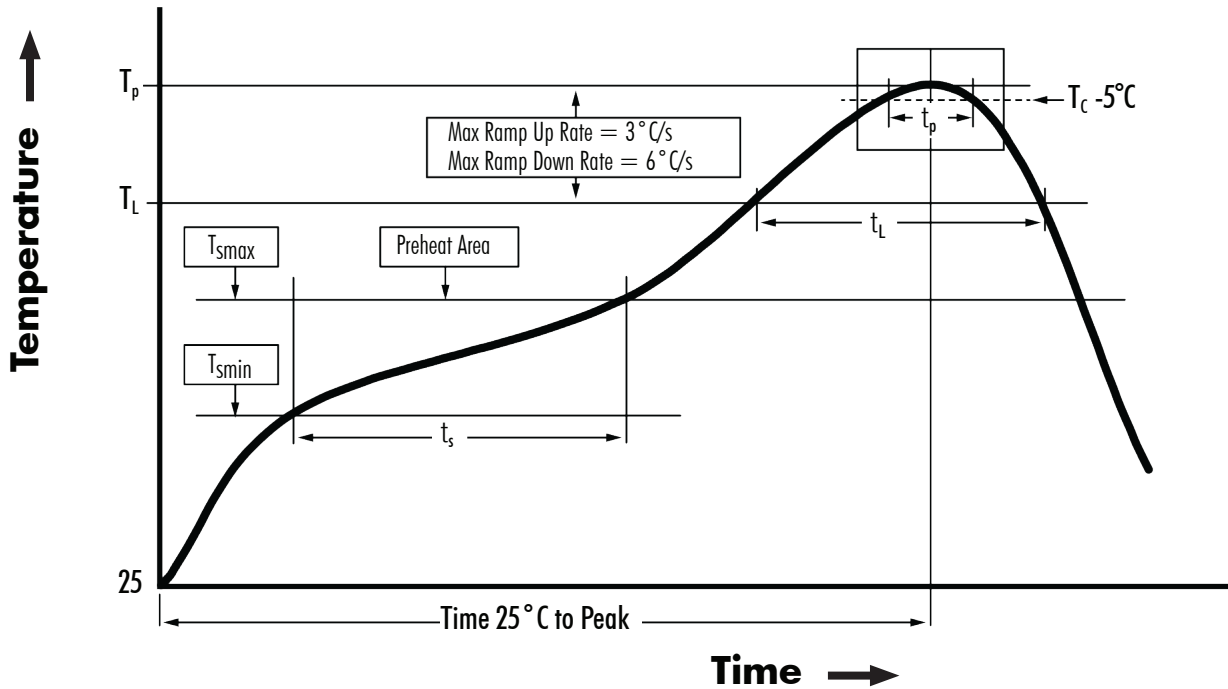
PL95XX

Mechanicals

Electrical Schematics



Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
100	150	183	235	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360

NOTES:

1. All temperatures measured on the package leads.
2. Maximum number of reflow cycles not to exceed 2.



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