



## PNL5040-SERIES-A



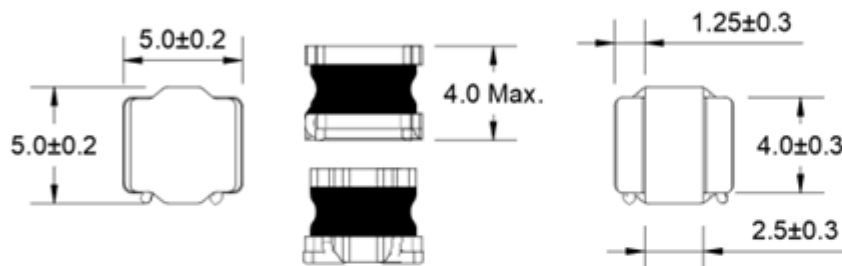
### Applications

- Noise suppression for motors : windshield wipers / power seats / power mirrors / heating and ventilation blower / HID lighting
- Engine and transmission control units
- DC/DC converters for entertainment/navigation systems
- LED drivers
- Battery power systems

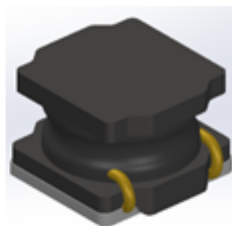
### Environmental data

- Operating temperature range : -50°C ~ +125°C(component)
- Storage conditions (packaged) : -25°C ~ +40°C, ≤75% RH
- Complies with AEC-Q200 standard

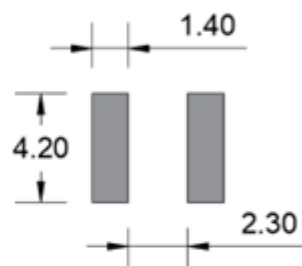
### Dimensions [Unit : mm]



### Picture



### Land Pattern [Unit : mm]



### Specifications

| Part No.       | L0 Inductance(μH)<br>100kHz, 1V, 0A | DCR (mΩ) |       | Saturation Current DC(A) a) | Heating Rating Current DC(A) b) |
|----------------|-------------------------------------|----------|-------|-----------------------------|---------------------------------|
|                |                                     | TYP.     | MAX.  | MAX.                        | MAX.                            |
| PNL5040-1R0N-A | 1.0±30%                             | 13       | 17    | 7.35                        | 4.9                             |
| PNL5040-1R5N-A | 1.5±30%                             | 15       | 20    | 6.3                         | 4.3                             |
| PNL5040-1R8N-A | 1.8±30%                             | 18       | 23    | 6.1                         | 3.9                             |
| PNL5040-2R2N-A | 2.2±30%                             | 19       | 25    | 4.9                         | 3.8                             |
| PNL5040-2R7N-A | 2.7±30%                             | 22       | 29    | 4.3                         | 3.6                             |
| PNL5040-3R3N-A | 3.3±30%                             | 24       | 31    | 3.95                        | 3.4                             |
| PNL5040-3R9N-A | 3.9±30%                             | 27       | 35    | 3.55                        | 3.2                             |
| PNL5040-4R7M-A | 4.7±20%                             | 30       | 39    | 3.5                         | 3                               |
| PNL5040-6R8M-A | 6.8±20%                             | 43       | 56    | 3                           | 2.5                             |
| PNL5040-8R2M-A | 8.2±20%                             | 55       | 72    | 2.9                         | 2.3                             |
| PNL5040-100M-A | 10.0±20%                            | 64       | 83    | 2.35                        | 2.1                             |
| PNL5040-150M-A | 15.0±20%                            | 86       | 112   | 2                           | 2                               |
| PNL5040-220M-A | 22.0±20%                            | 129      | 168   | 1.6                         | 1.5                             |
| PNL5040-270M-A | 27.0±20%                            | 165      | 215   | 1.5                         | 1.3                             |
| PNL5040-330M-A | 33.0±20%                            | 188      | 244   | 1.3                         | 1.2                             |
| PNL5040-390M-A | 39.0±20%                            | 225      | 293   | 1.2                         | 1.1                             |
| PNL5040-470M-A | 47.0±20%                            | 270      | 351   | 1.1                         | 1                               |
| PNL5040-680M-A | 68.0±20%                            | 400      | 520   | 0.9                         | 0.8                             |
| PNL5040-101M-A | 100.0±20%                           | 560      | 728   | 0.75                        | 0.7                             |
| PNL5040-221M-A | 220.0±20%                           | 1,200    | 1,560 | 0.45                        | 0.4                             |
| PNL5040-471M-A | 470.0±20%                           | 2,800    | 3,640 | 0.4                         | 0.3                             |

### Notes

- \* All test data is referenced to 25 °C ambient
- a) DC current (A) that will cause L0 to drop approximately 30 %
- b) DC current (A) that will cause an approximate ΔT of 40 °C

### Packing Q'ty (PCS)

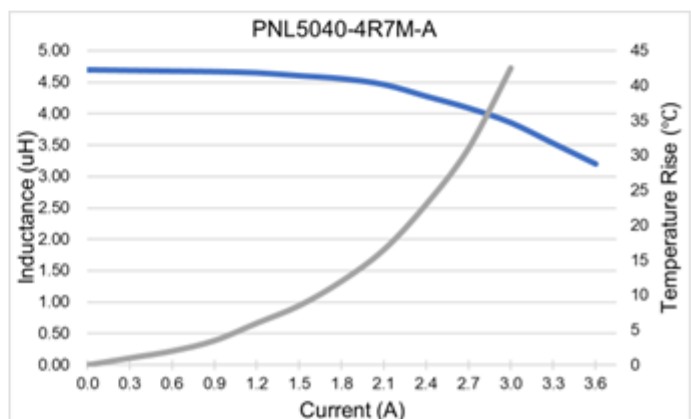
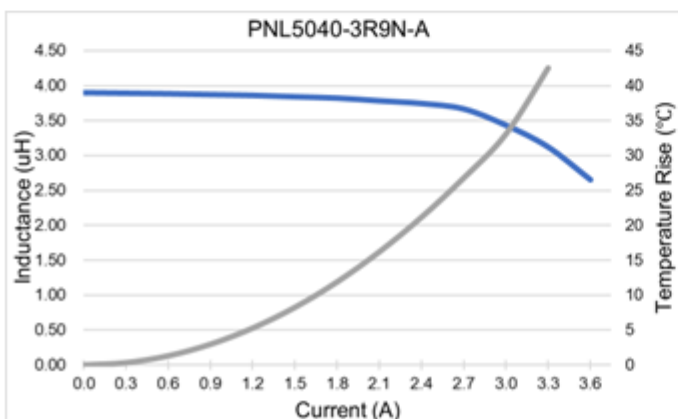
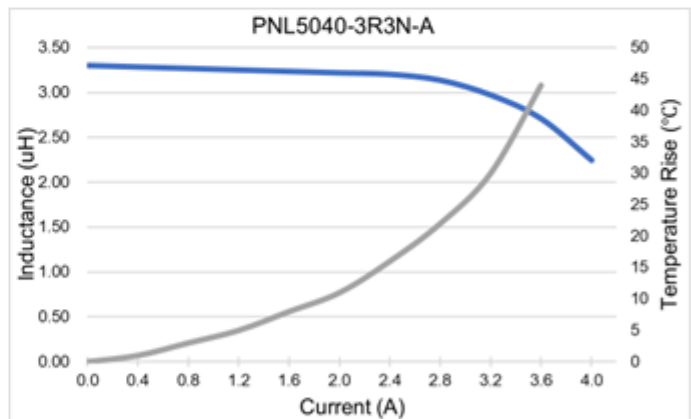
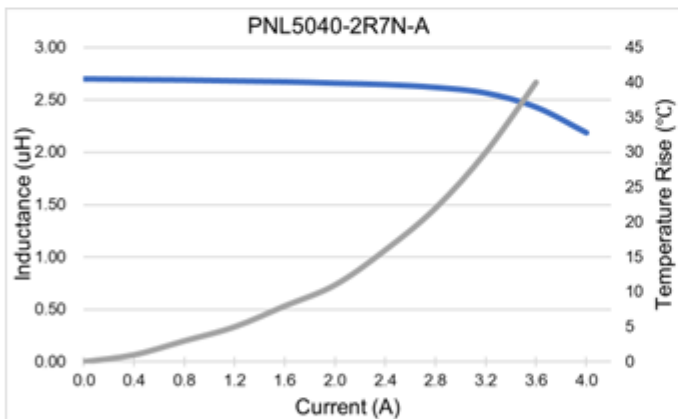
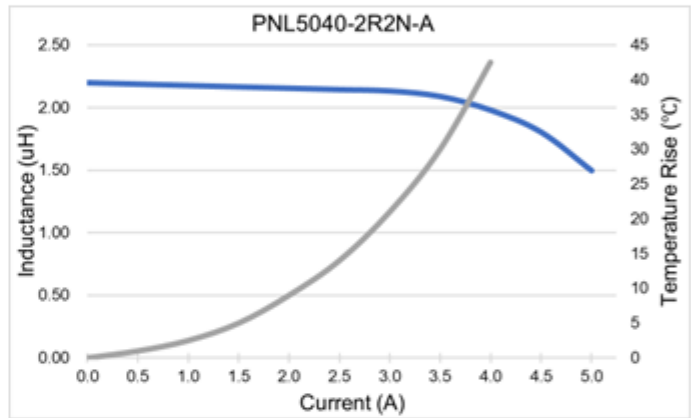
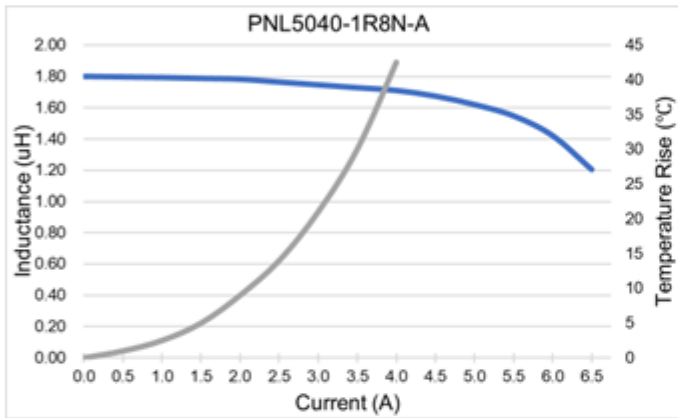
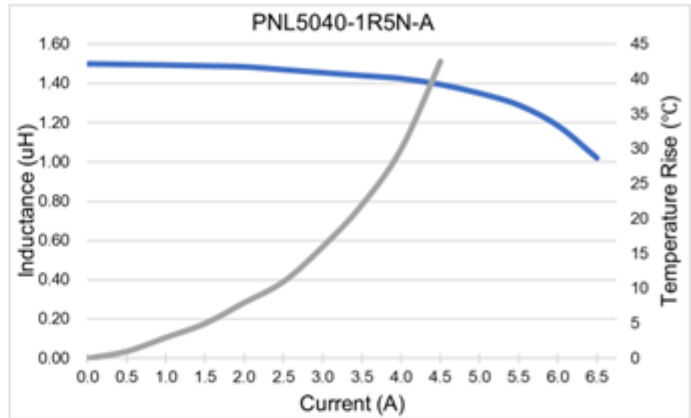
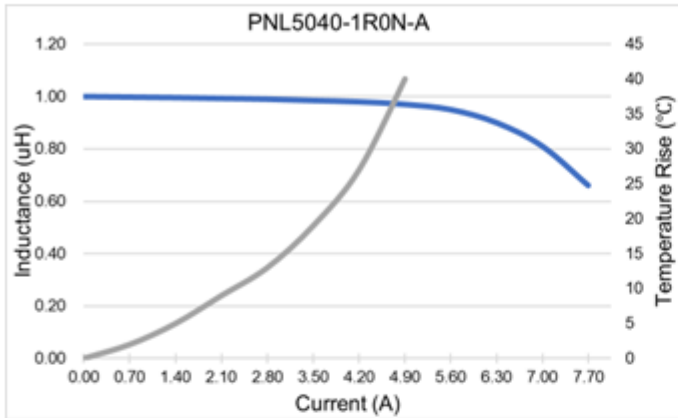
- \* Reel : 1,500
- \* Box : 9,000



## PNL5040-SERIES-A

### Performance Graph

— Inductance (uH)  
— Temperature Rise (°C)

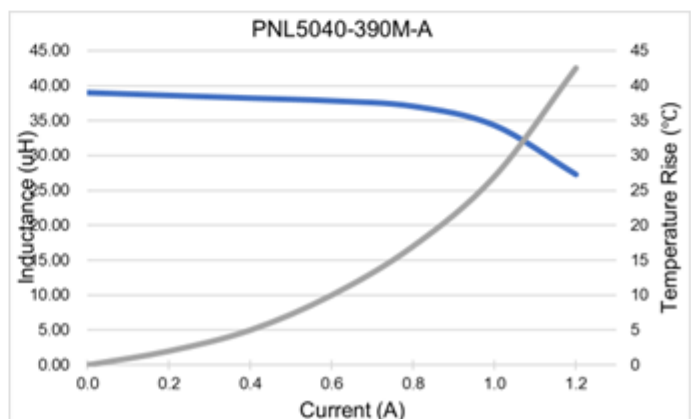
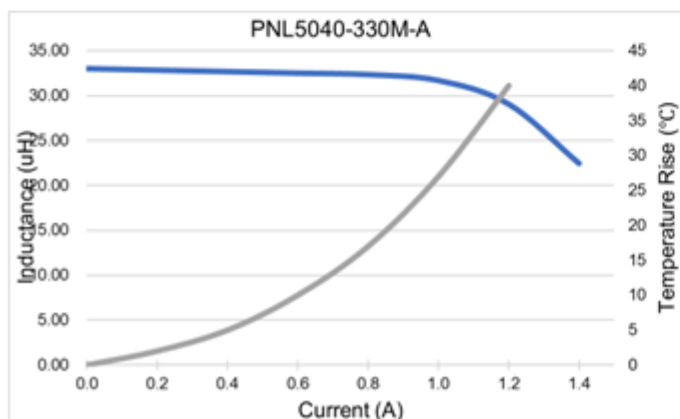
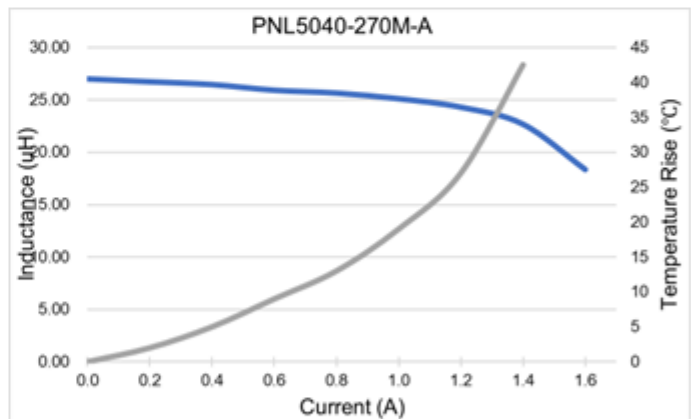
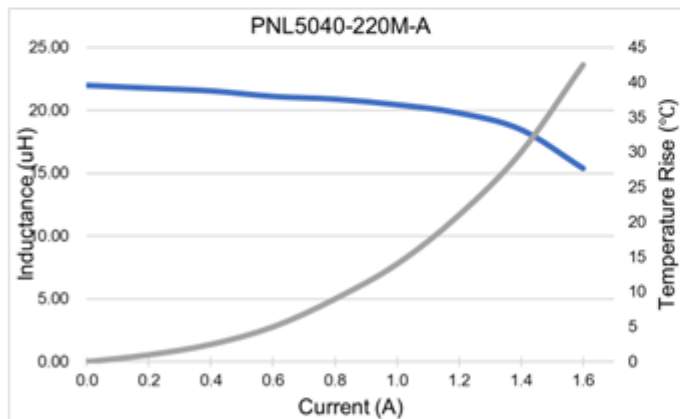
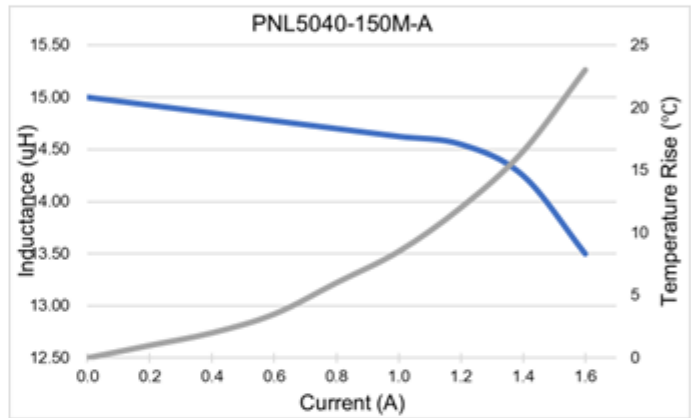
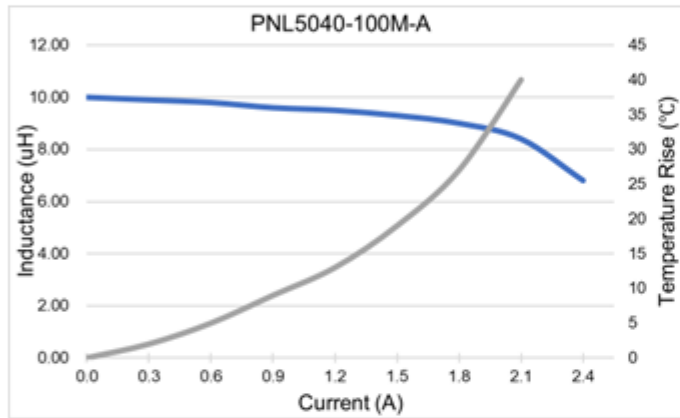
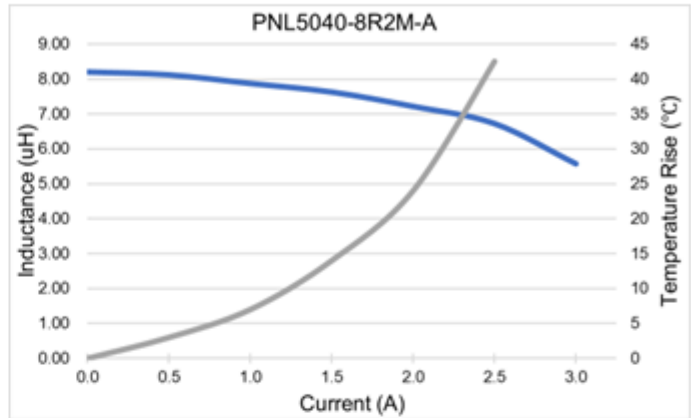
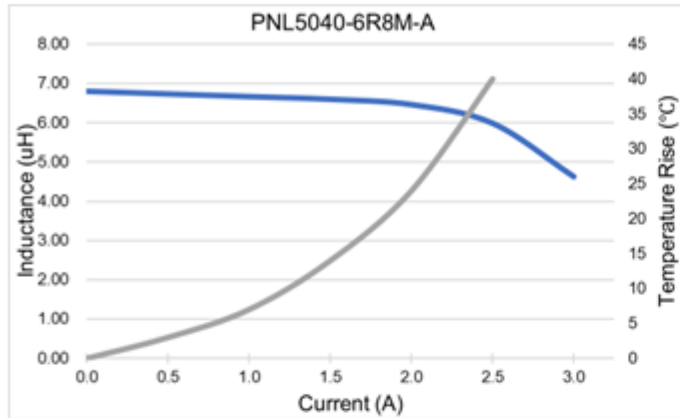




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— Temperature Rise (°C)





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