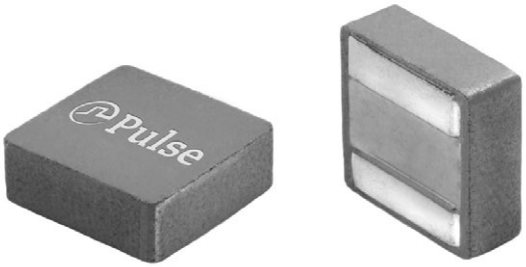
# SMT Power Inductor

*High Current Composite Inductor - PA5430.XXXNLT and PM5430.XXXNLT*

Pulse a YAGEO company




- ***Height:*** *3.1mm Max*
- ***Footprint:*** *4.35mm x 4.35mm Max*
- ***Current Rating:*** *up to 6.6Apk*
- ***Inductance Range****: 3.3uH to 6.8uH*
- *High current, low DCR, and high efficiency*
- *High reliability*
- *Minimized acoustic noise and minimized leakage flux noise*
- *Available in Commercial (PA5430) and Automotive (PM5430) grades*

**Electrical Specifications @ 25°C, Operating Temperature Range -55°C to +155°C**

| Part Number | | ▽Inductance 100KHz, 0.1V | Rated[3] Current | DC Resistance | Isat[2] | SRF |
|---|---|---|---|---|---|---|
| Commerical | Automotive[6] | uH±20% | A | mΩ MAX. | A MAX | MHz |
| PA5430.332NLT | PM5430.332NLT | 3.3 | 6.6 | 28.6 | 5.5 | 43 |
| PA5430.472NLT | PM5430.472NLT | 4.7 | 5.1 | 44.1 | 4.5 | 36 |
| PA5430.682NLT | PM5430.682NLT | 6.8 | 3.9 | 74.1 | 3.6 | 29 |

**Notes:**

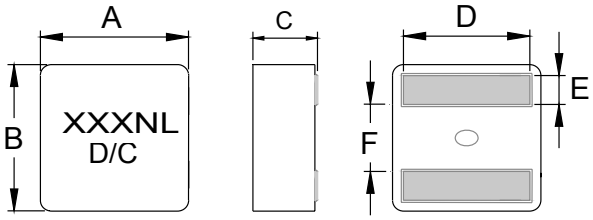
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance is guaranteed to drop by no more than 40%.
3. The rated current is the DC current required to raise the component temperature by approximately 40 ˚ C. Take note that the components' performanc varies depending on the system condition. It is suggested that the component be tested at the system level, to verify the temperature rise of the component during system operation.
4. The part temperature (ambient+temp rise) should not exceed 155 ˚ C under worst case operating conditions. Circuit design, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Parts shown in bold are standard catalog parts and are available through sample stock and distribution. Parts in lighter font are available but are not necessarily held in sample stock or distribution and lead times may be longer. Please contact Pulse for availablity.
6. The PM5430.XXXNLT part numbers are AEC-Q200 and IATF16949 certified. The inductance and mechanical dimensions are 100% tested in production but do not necessarily meet a product capability index (Cpk) >1.33 and therefore may not strictly conform to PPAP.
7. Special Characteristics ▽

# SMT Power Inductor

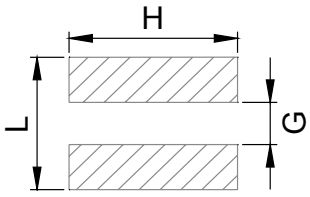
*High Current Composite Inductor - PA5430.XXXNLT and PM5430.XXXNLT*

## Mechanical

### PA5430/PM5430.XXXNLT and PA5431.XXXNLT




FINAL LAYOUT

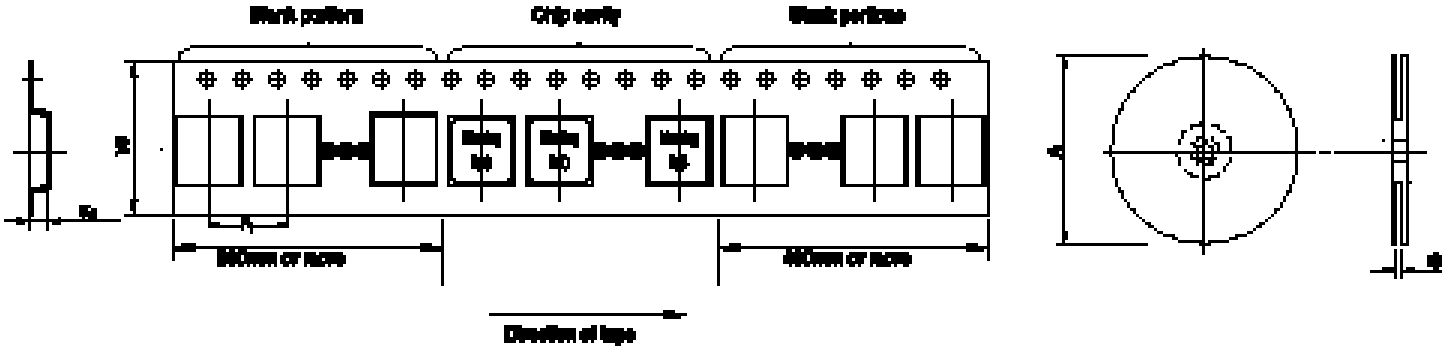



SUGGESTED PAD LAYOUT

| Series | A | B | C | D | E | F | L | G | H |
|---|---|---|---|---|---|---|---|---|---|
| PA5430/PM5430 | 4.1±0.25 | 4.1±0.25 | 2.8±0.3 | 3.4±0.3 | 0.88±0.3 | 1.6±0.3 | 3.4 (REF) | 1.4 (REF) | 3.8 (REF) |

All Dimensions in mm.

### TAPE & REEL INFO



| SURFACE MOUNTING TYPE, REEL/TAPE LIST | | | | | | |
|---|---|---|---|---|---|---|
| Series | REEL SIZE (mm) | | TAPE SIZE (mm) | | | QTY |
| | A | G | $P_1$ | W | $K_0$ | PCS/REEL |
| PA5430/PM5430 | Ø330 | 12.4 | 8 | 12 | 3.3 | 2000 |


**For More Information:**

**Americas -** prodinfo_power@pulseelectronics.com | **Europe -** power-apps-europe@pulseelectronics.com | **Asia -** power-apps-asia@pulseelectronics.com



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