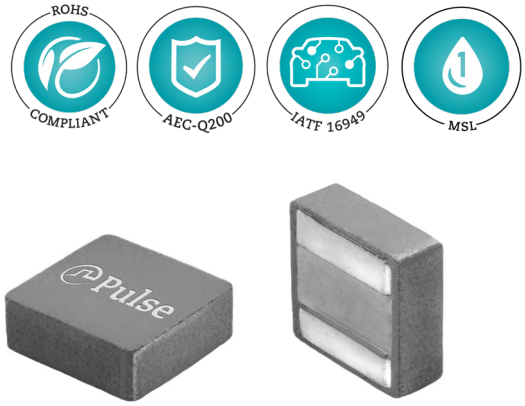
SMT Power Inductors

High Current Composite Inductor - PA2240XXXNLT and PM2240.XXXNLT

Pulse a YAGEO company



- ***Height:*** *7.0mm Max*
- ***Footprint:*** *8.05mm x 7.85mm Max*
- ***Current Rating:*** *up to 15Apk*
- ***Inductance Range****: 3.3uH to 6.8uH*
- *High current, low DCR, and high efficiency*
- *Rated Voltage between Terminals: 60V*
- *Minimized acoustic noise and minimized leakage flux noise*
- *Available in Commercial (PA2240) and Automotive (PM2240) grades*

Electrical Specifications @ 25°C, Operating Temperature Range per Below[4,5]

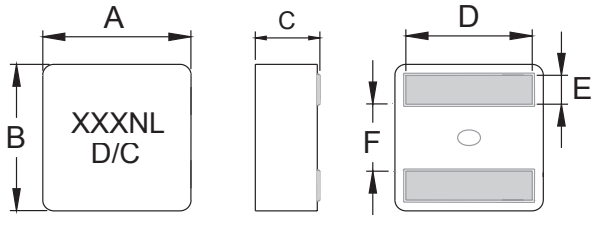
Part Number		▽Inductance 100KHz, 0.1V	Rated[3] Current	DC Resistance		Saturation Current[2] (25°C)		K Factor for Core Loss	Mechanical D
Commerical	Automotive[6]			TYP.	MAX.	TYP.	MAX.		
(-55°C to 125°C)	(-55°C to 155°C)	uH±20%	A	mΩ	mΩ	A	A		±0.3
PA2240.332NLT	PM2240.332NLT	3.3	15.1	8.56	9.42	19.4	15.1	40.0	6.7
PA2240.472NLT	PM2240.472NLT	4.7	13.6	12.2	13.5	15.5	14.0	36.3	6.7
PA2240.682NLT	PM2240.682NLT	6.8	9.5	17.8	19.6	12.8	11.0	26.4	6.5

Notes:

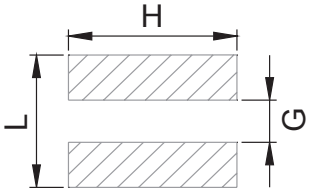
1. Actual temperature of the component during system operation (ambient plus temperature rise) must be within the standard operating range.
2. The saturation current is the current at which the initial inductance drops approximately 30% at the stated ambient temperature. This current is determined by placing the compnent in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effect) to the component.
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 125 ° 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. The PMxxxx.XXXNLT part numbers are AEC-Q200 and IATF16949 certified. The 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.
6. Special Characteristics ▽

Mechanical

PA2240.XXXNLT and PM2240.XXXNLT



FINAL LAYOUT

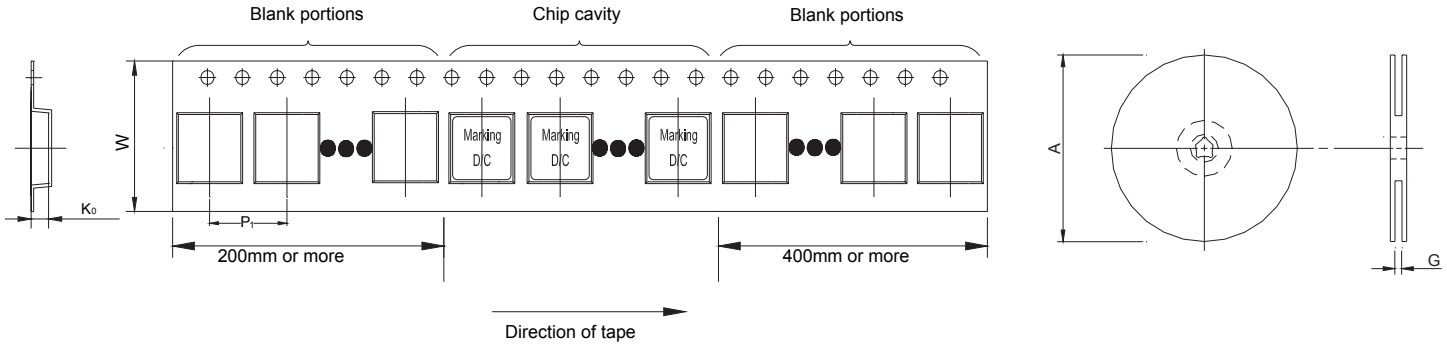


SUGGESTED PAD LAYOUT

Series	A	B	C	D	E	F	L	G	H
PA2240/PM2240	7.8±0.25	7.6±0.25	6.7±0.3	SEE SPEC TABLE	1.75±0.2	3.15±0.25	7.8 (REF)	2.8 (REF)	6.7 (REF)

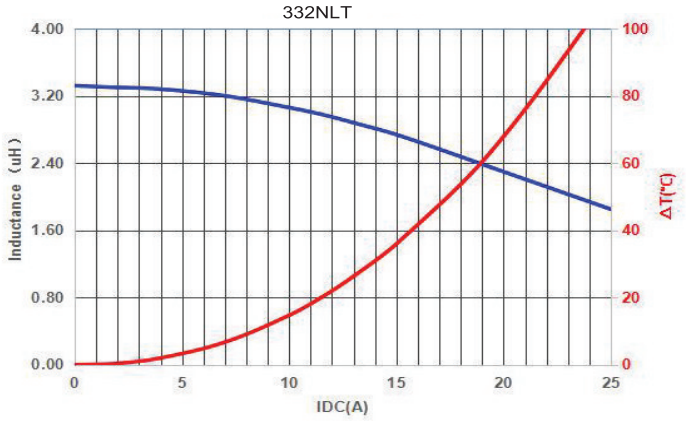
All Dimensions in mm.

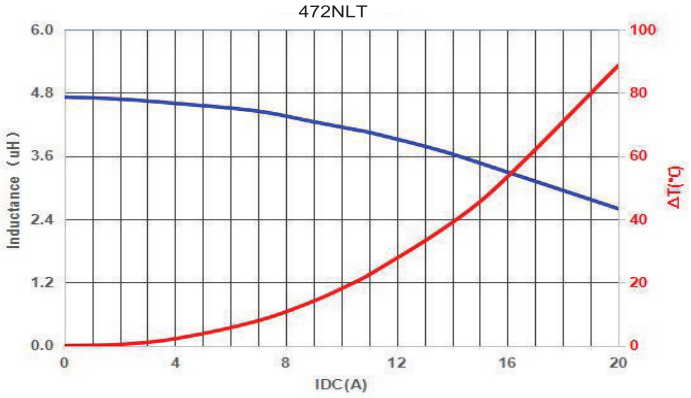
TAPE & REEL INFO

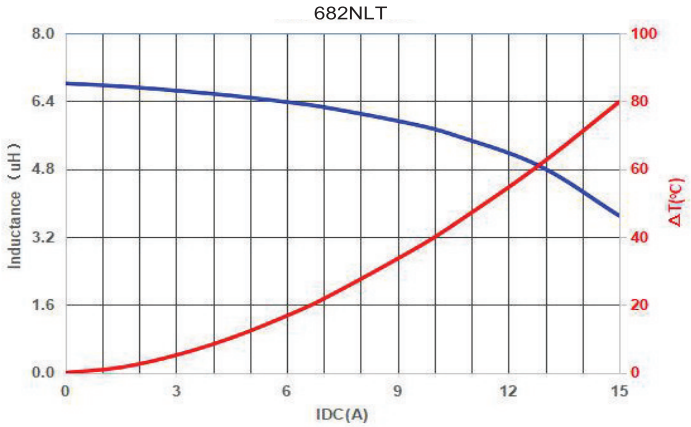


SURFACE MOUNTING TYPE, REEL/TAPE LIST						
	REEL SIZE (mm)		TAPE SIZE (mm)			QTY
	A	G	P_1	W	K_0	PCS/REEL
PA2240/PM2240	Ø330	16.4	12	16	7.3	700

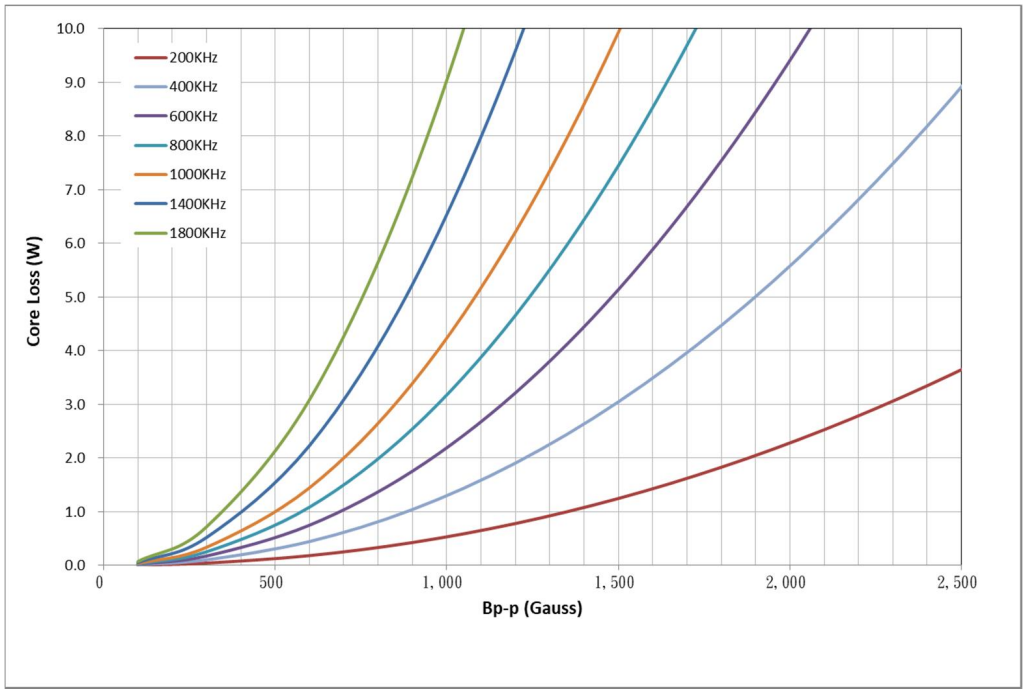
Typical Performance Curves







CORE LOSS vs FLUX DENSITY



Bp-p = K *L(uH) *delta I(A)

For More Information:
Americas - prodinfo_power@pulseelectronics.com | **Europe -** power-apps-europe@pulseelectronics.com | **Asia -** power-apps-asia@pulseelectronics.com

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BSPQ000603043N0B00 JXD2-0Z10NL P0585NL PA4320.334NLT W1902 JXD0-2015NL PA4320.104NLT
PE-67100NL ANT1204F007R0870A DPX1608LKF3R2460A W3334B0150 BDHE002520122R2MQ1
PA0369NL W1093 AWCS0012070736NJ00 PGL6395.121HLT W3078 BSPQ000603041N4B00