

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPH3020-00BN Series

Construction

- Metal alloy powder
- Shielded construction



Features

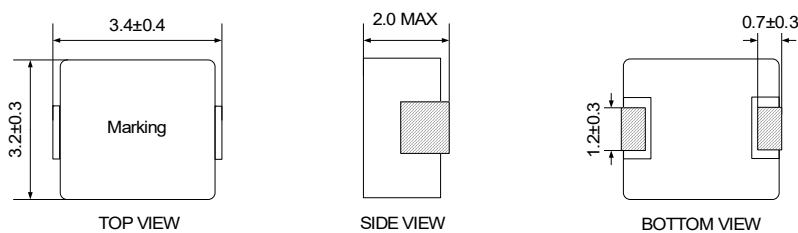
- Qualified to AEC-Q200
- Operating temperature -50 ~ +125°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



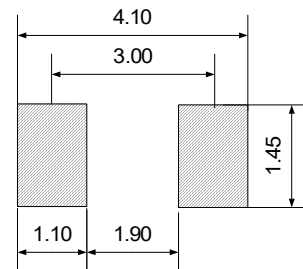
Applications

- Automotive / Noise filtering and filter chokes
- DC/DC converters
- Portable gaming devices / personal navigation systems
- multimedia devices
- Portable and devices

Dimensions (Unit:mm)



Recommended Land Pattern (Unit:mm)



Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ,MAX)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH3020-R33M-00BN	0.33±20%	21.0	10.0	8.00	.33
SPH3020-R47M-00BN	0.47±20%	23.0	9.00	7.00	.47
SPH3020-R68M-00BN	0.68±20%	29.0	7.00	5.50	.68
SPH3020-1R0M-00BN	1.00±20%	38.0	5.00	4.00	1.0
SPH3020-1R5M-00BN	1.50±20%	50.0	4.00	3.80	1.5

※Test Equipment

*Inductance : MICROTEST 6632 (100kHz, 1.0V)

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : MICROTEST 6632 + 6240

*Specifications subject to change without notice. Please check our website for latest information.

*Notes

*1.Isat : DC current (A) that will cause L0 to drop approximately 30%

*2.Irms : DC current (A) that will cause an approximate ΔT of 40°C

Revised 30/06/26

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Ordering code	Inductance(uH)	DCR(mΩ,MAX)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH3020-2R2M-00BN	2.20±20%	75.0	3.70	3.50	2.2
SPH3020-3R3M-00BN	3.30±20%	145.0	3.50	3.00	3.3
SPH3020-4R7M-00BN	4.70±20%	200.0	3.00	2.60	4.7
SPH3020-5R6M-00BN	5.60±20%	238.0	2.60	2.20	5.6
SPH3020-6R8M-00BN	6.80±20%	300.0	2.20	1.90	6.8
SPH3020-8R2M-00BN	8.20±20%	390.0	1.90	1.60	8.2
SPH3020-100M-00BN	10.0±20%	422.0	1.60	1.40	100

※Test Equipment

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Revised 30/06/26

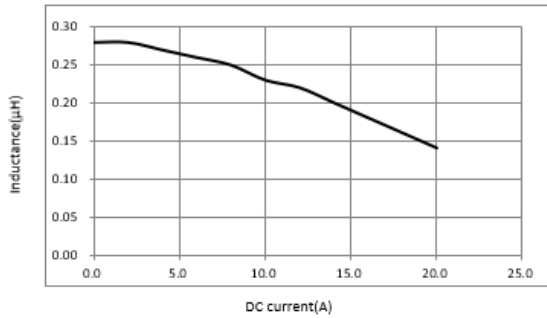
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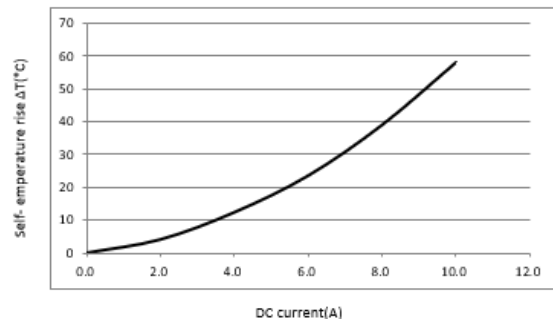
SPH3020-00BN Series

*SPH3020-R33M-00BN

Inductance vs DC current

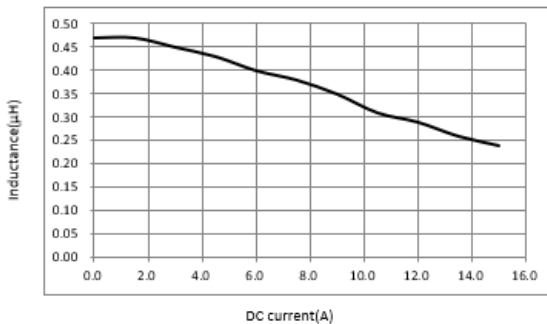


DC current vs Temperature

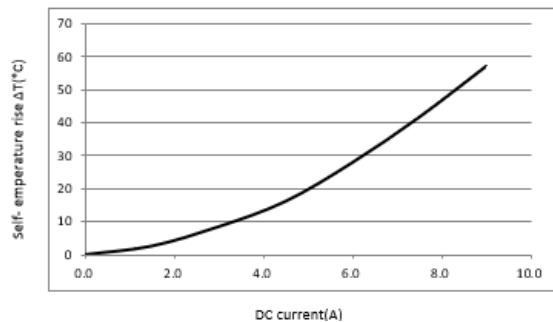


*SPH3020-R47M-00BN

Inductance vs DC current

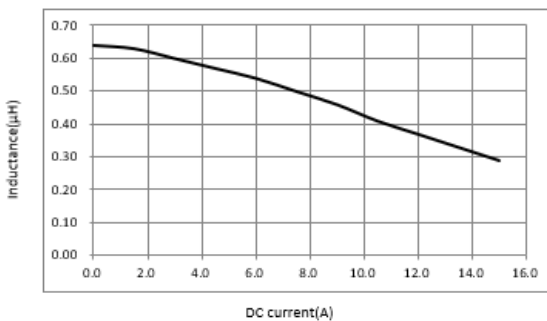


DC current vs Temperature

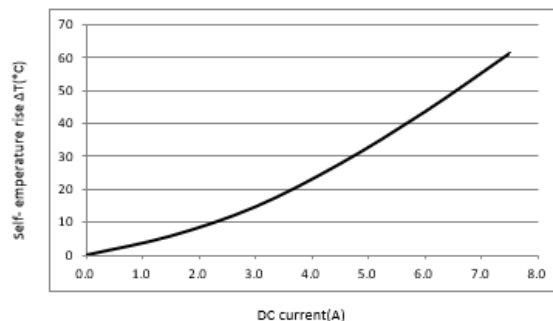


*SPH3020-R68M-00BN

Inductance vs DC current



DC current vs Temperature



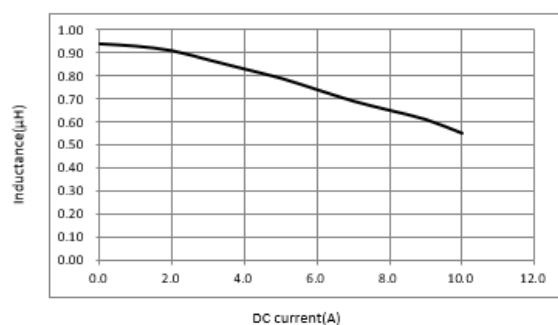
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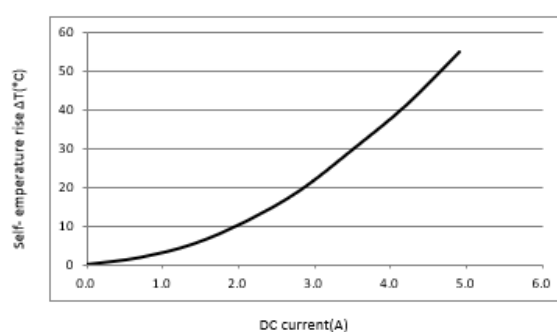
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*SPH3020-1R0M-00BN

Inductance vs DC current

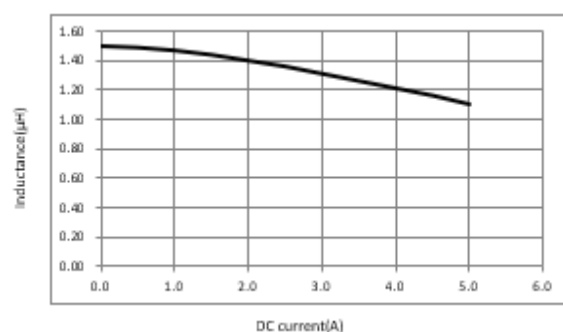


DC current vs Temperature

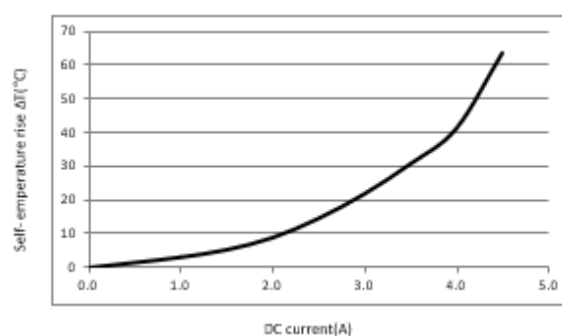


*SPH3020-1R5M-00BN

Inductance vs DC current

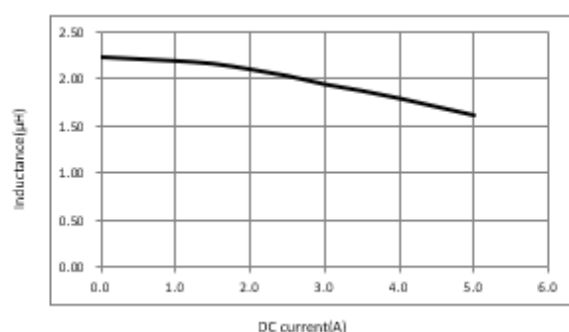


DC current vs Temperature

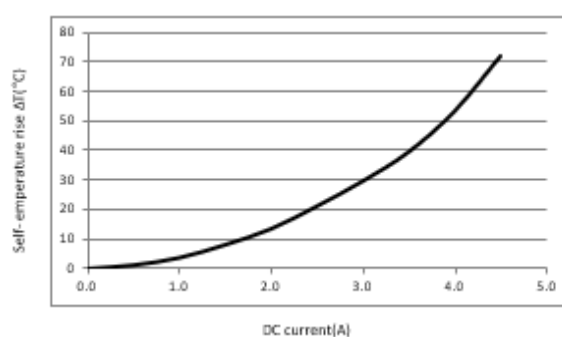


*SPH3020-2R2M-00BN

Inductance vs DC current



DC current vs Temperature



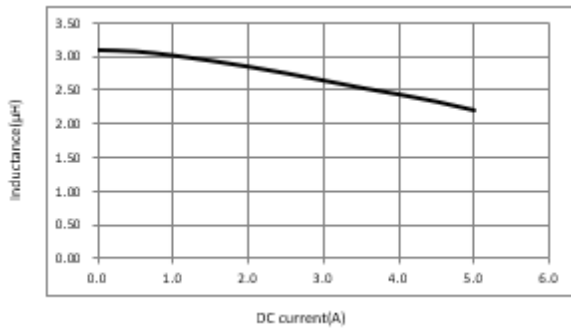
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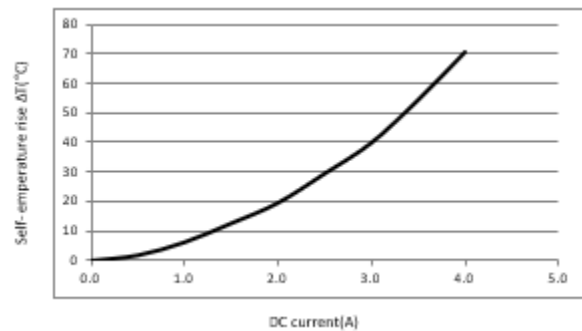
SPH3020-00BN Series

*SPH3020-3R3M-00BN

Inductance vs DC current

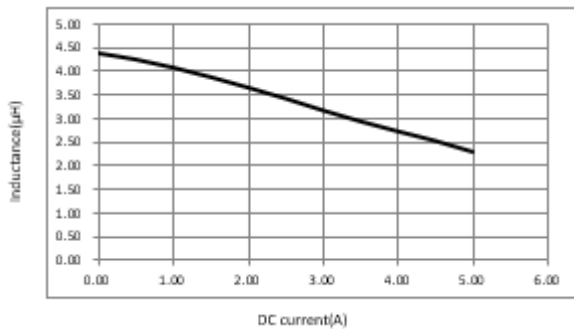


DC current vs Temperature

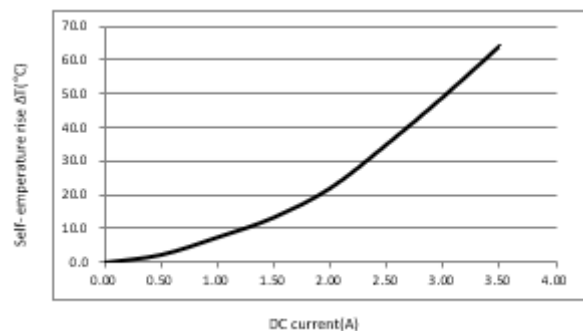


*SPH3020-4R7M-00BN

Inductance vs DC current

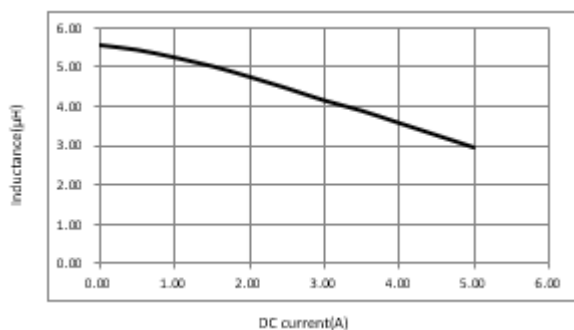


DC current vs Temperature

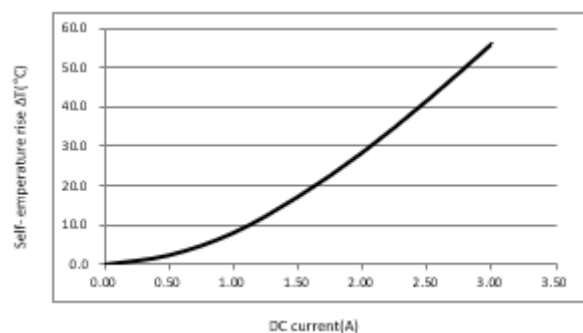


*SPH3020-5R6M-00BN

Inductance vs DC current



DC current vs Temperature



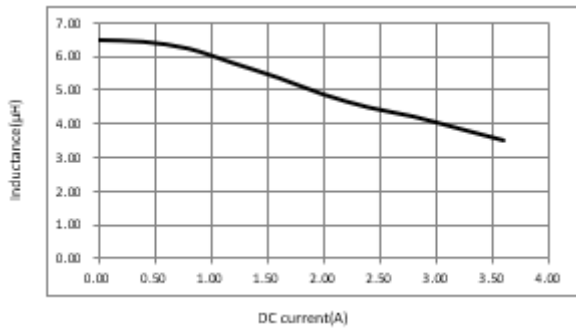
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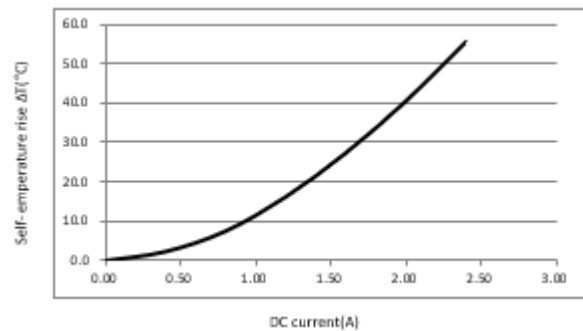
SPH3020-00BN Series

*SPH3020-6R8M-00BN

Inductance vs DC current

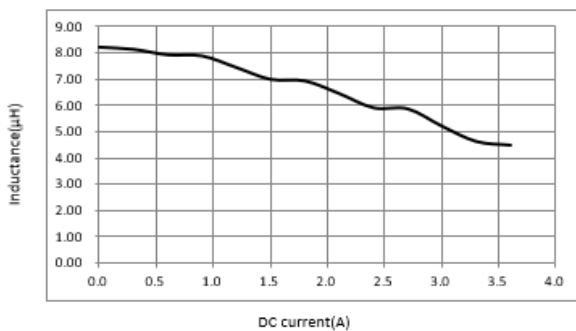


DC current vs Temperature

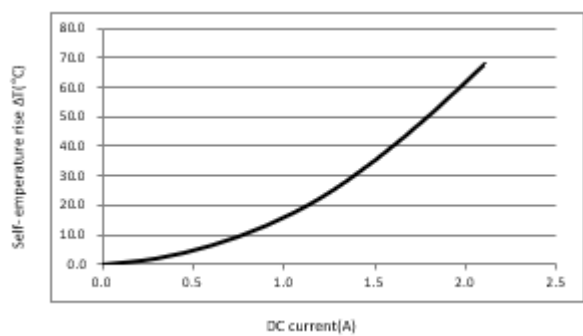


*SPH3020-8R2M-00BN

Inductance vs DC current

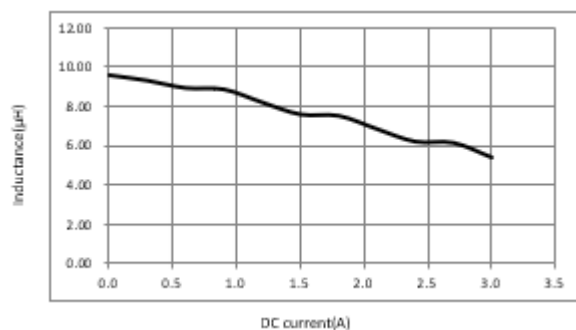


DC current vs Temperature



*SPH3020-100M-00BN

Inductance vs DC current



DC current vs Temperature

