

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPH8040-2R2M-

Construction

- Metal alloy powder
- Shielded construction

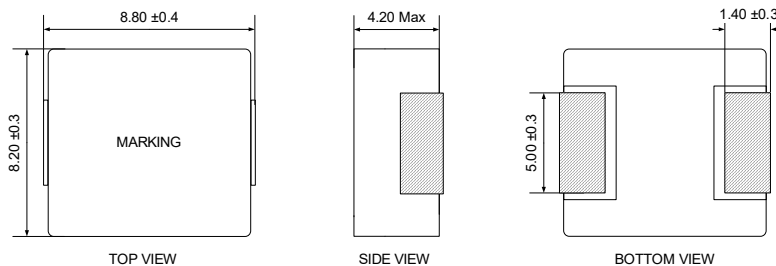
Features

- 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

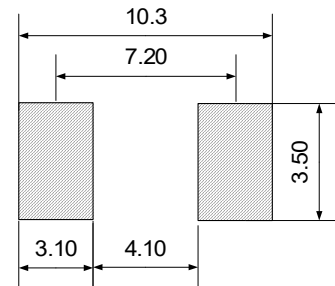
Applications

- 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
SPH8040-R22M	0.22±20%	1.80	60.0	36.0	R22
SPH8040-R33M	0.33±20%	2.40	45.0	30.0	R33
SPH8040-R47M	0.47±20%	2.80	42.0	28.0	R47
SPH8040-R56M	0.56±20%	3.20	26.0	24.0	R56
SPH8040-R68M	0.68±20%	3.80	24.0	23.0	R68

※Test Equipment

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

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : MICROTTEST 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 01/02/25

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SPH8040 Series

Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ,MAX)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH8040-R82M	0.82±20%	4.40	21.0	21.0	R82
SPH8040-1R0M	1.00±20%	4.62	19.0	19.0	1R0
SPH8040-1R5M	1.50±20%	7.60	17.0	17.0	1R5
SPH8040-1R8M	1.80±20%	11.0	15.0	15.0	1R8
SPH8040-2R2M	2.20±20%	11.4	14.0	14.0	2R2
SPH8040-3R3M	3.30±20%	15.0	12.5	12.0	3R3
SPH8040-4R7M	4.70±20%	26.5	11.5	9.50	4R7
SPH8040-5R6M	5.60±20%	30.0	11.0	9.00	5R6
SPH8040-6R8M	6.80±20%	36.8	9.00	8.00	6R8
SPH8040-8R2M	8.20±20%	46.0	8.70	7.00	8R2
SPH8040-100M	10.0±20%	59.0	8.00	6.50	100
SPH8040-150M	15.0±20%	71.0	5.50	5.40	150
SPH8040-220M	22.0±20%	113.0	5.00	4.80	220
SPH8040-330M	33.0±20%	156.0	3.50	3.50	330
SPH8040-470M	47.0±20%	225.0	3.10	2.90	470

※Test Equipment

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*Notes

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Revised 01/02/25

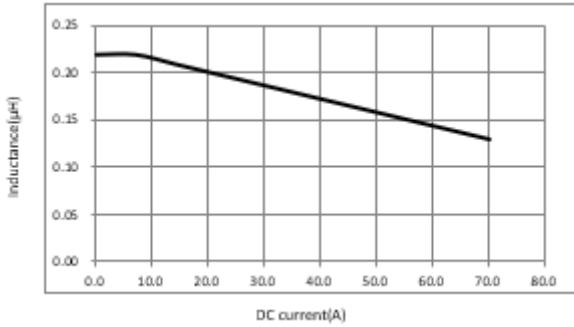
SMD Power Inductor

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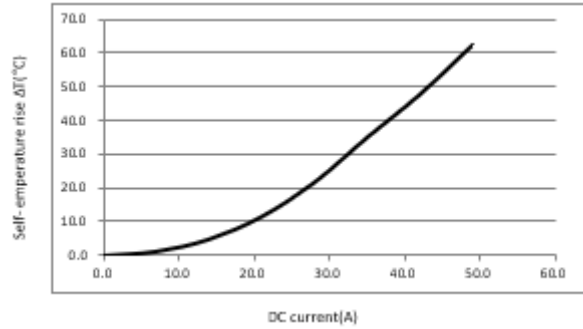
SPH8040 Series

*SPH8040-R22M

Inductance vs DC current

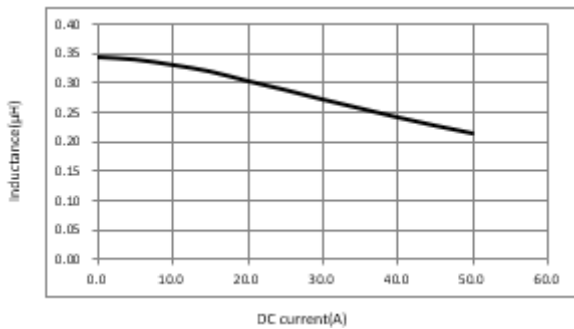


DC current vs Temperature

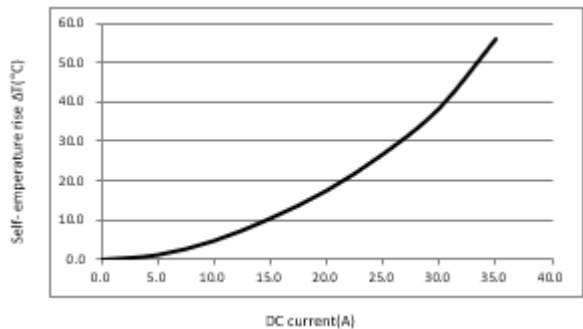


*SPH8040-R33M

Inductance vs DC current

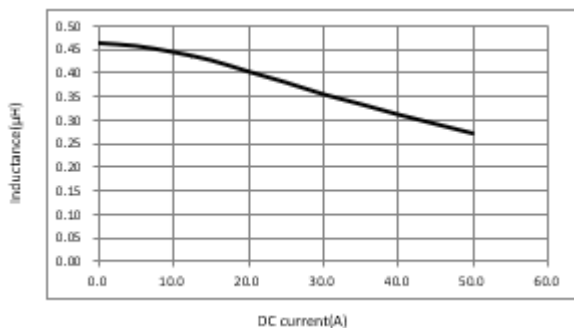


DC current vs Temperature

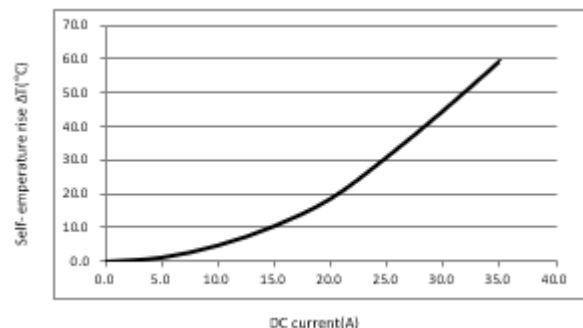


*SPH8040-R47M

Inductance vs DC current



DC current vs Temperature



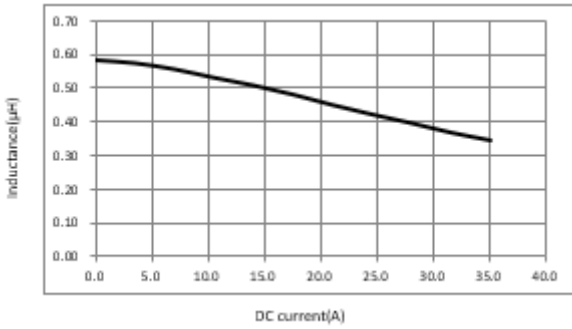
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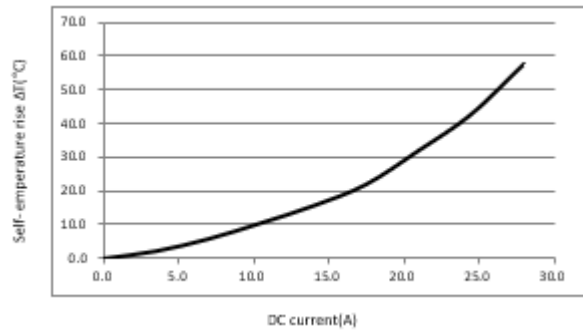
SPH8040 Series

*SPH8040-R56M

Inductance vs DC current

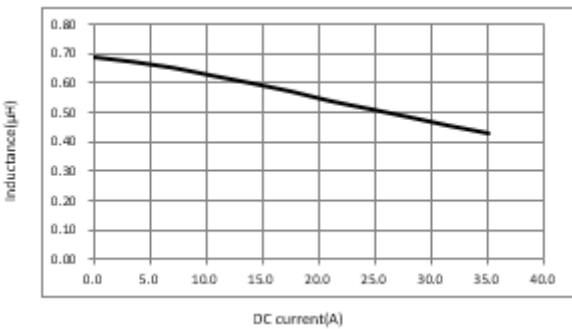


DC current vs Temperature

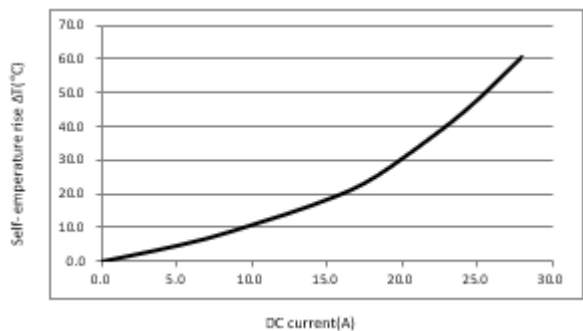


*SPH8040--R68M

Inductance vs DC current

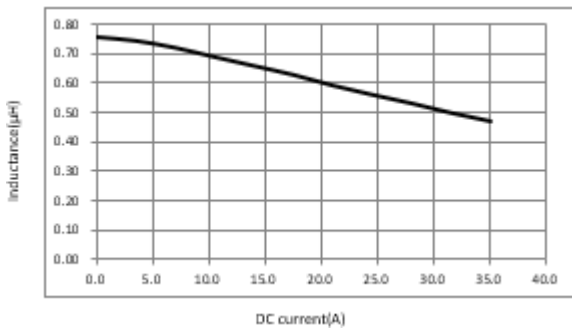


DC current vs Temperature

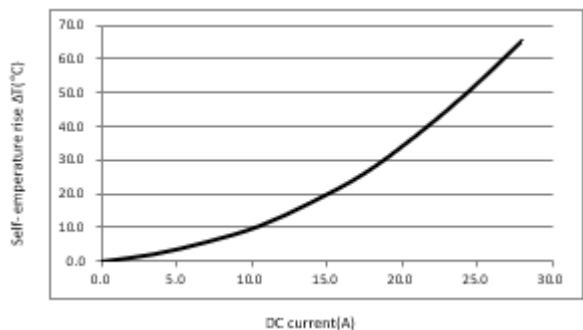


*SPH8040-R82M

Inductance vs DC current



DC current vs Temperature



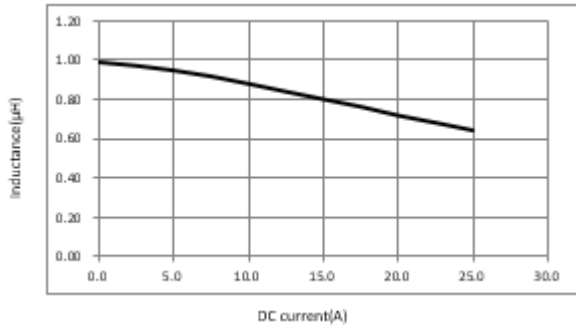
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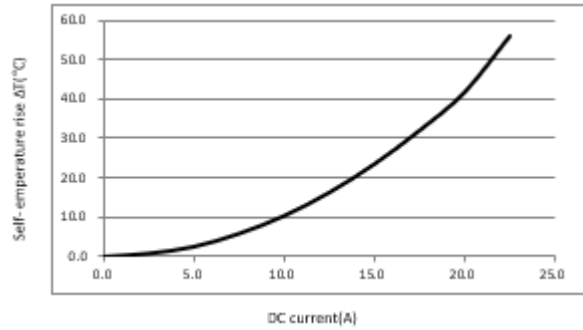
SPH8040 Series

*SPH8040-1R0M

Inductance vs DC current

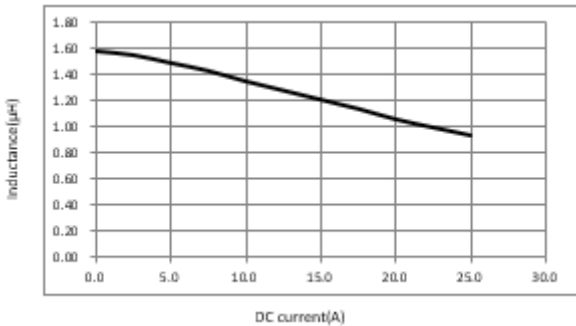


DC current vs Temperature

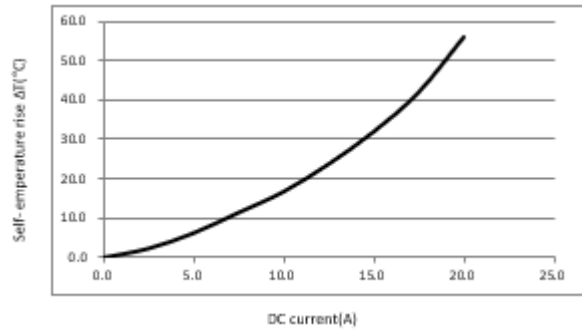


*SPH8040--1R5M

Inductance vs DC current

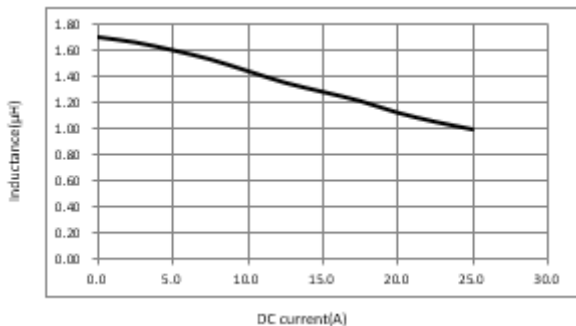


DC current vs Temperature

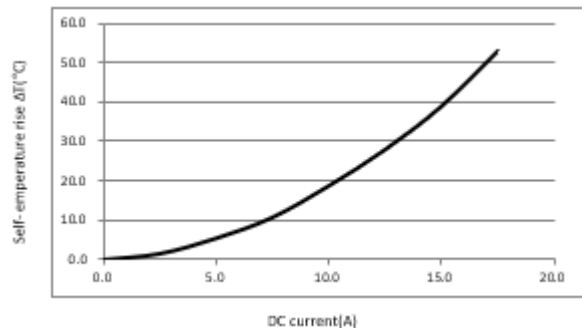


*SPH8040-1R8M

Inductance vs DC current



DC current vs Temperature



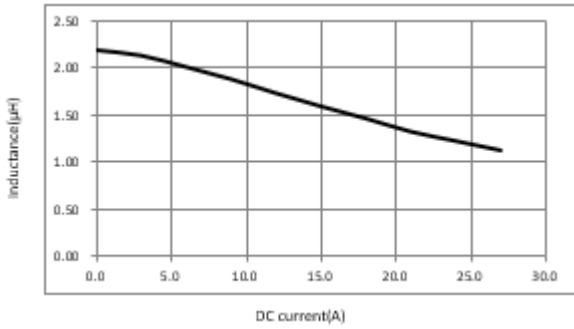
SMD Power Inductor

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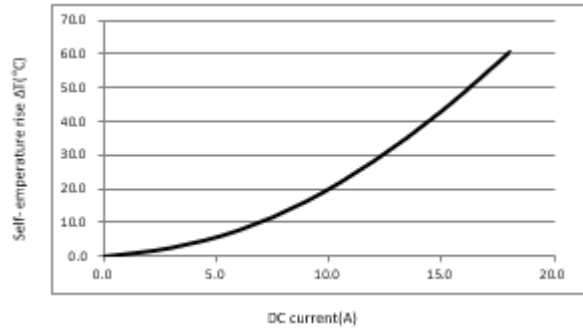
SPH8040 Series

*SPH8040-2R2M

Inductance vs DC current

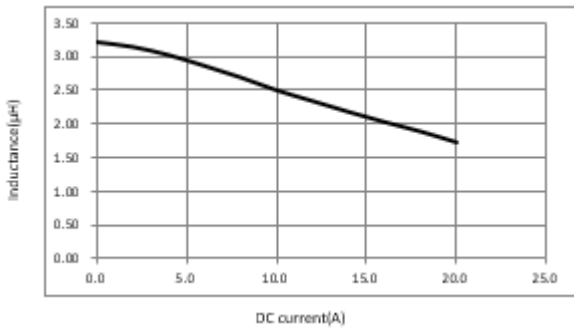


DC current vs Temperature

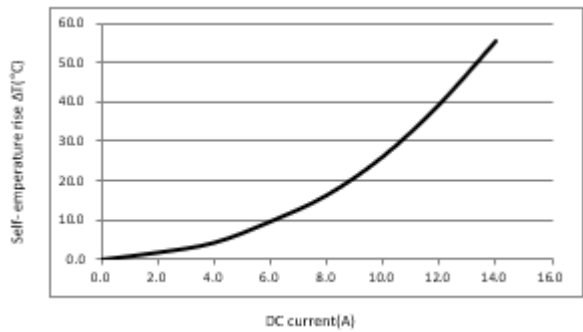


*SPH8040--3R3M

Inductance vs DC current

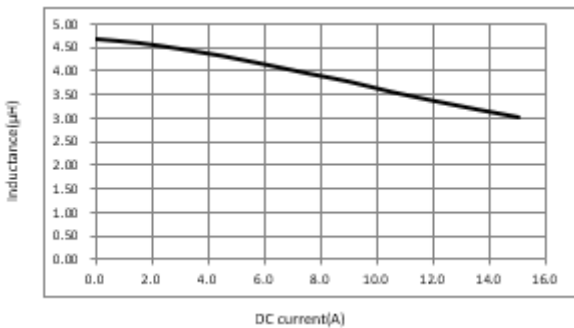


DC current vs Temperature

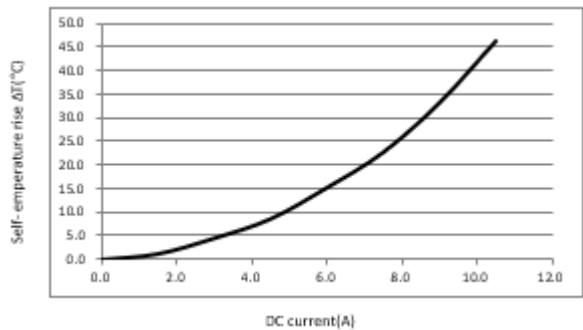


*SPH8040-4R7M

Inductance vs DC current



DC current vs Temperature



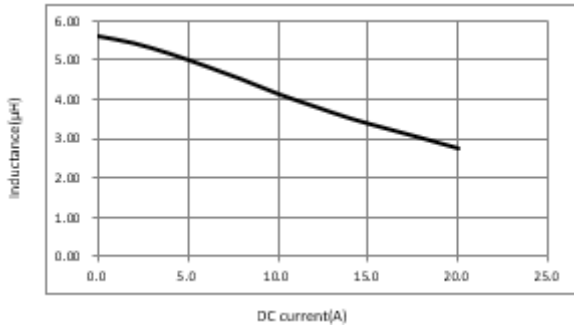
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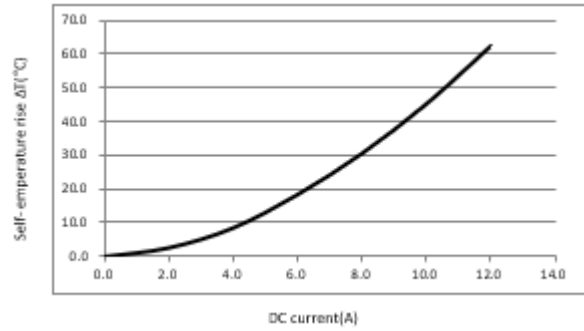
SPH8040 Series

*SPH8040-5R6M

Inductance vs DC current

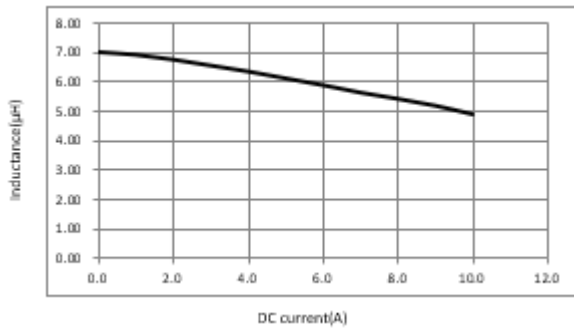


DC current vs Temperature

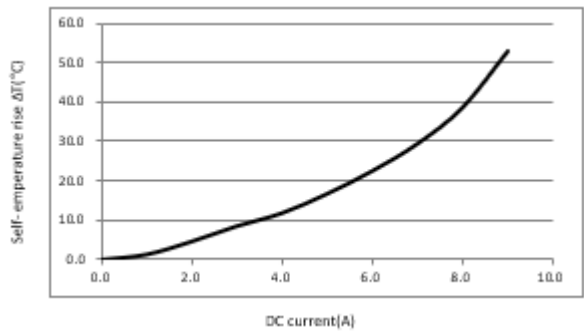


*SPH8040--6R8M

Inductance vs DC current

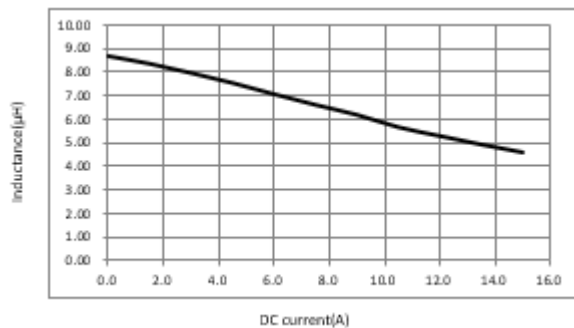


DC current vs Temperature

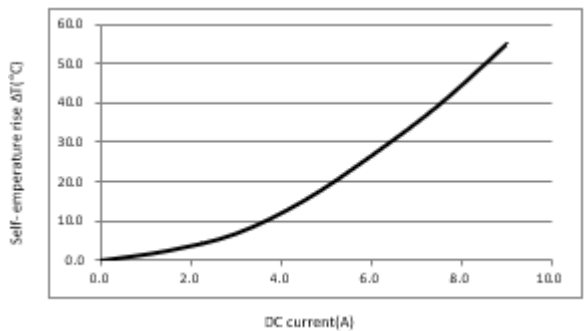


*SPH8040-8R2M

Inductance vs DC current



DC current vs Temperature



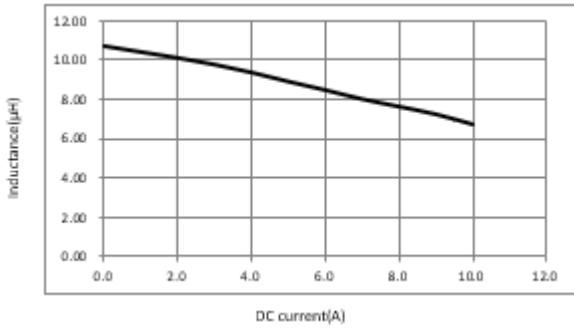
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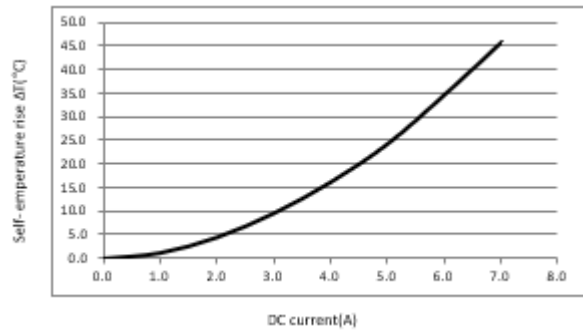
SPH8040 Series

*SPH8040-100M

Inductance vs DC current

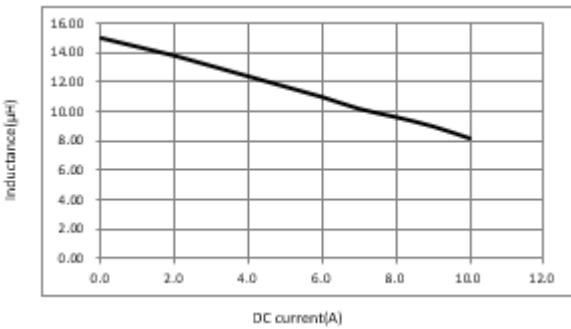


DC current vs Temperature

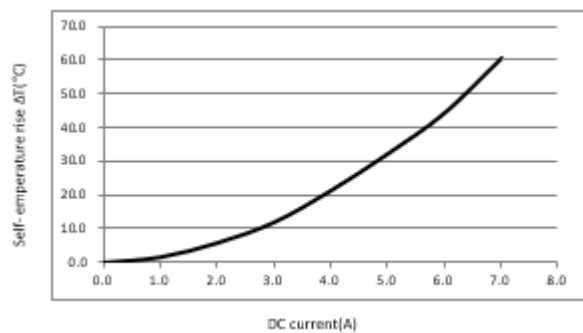


*SPH8040--150M

Inductance vs DC current

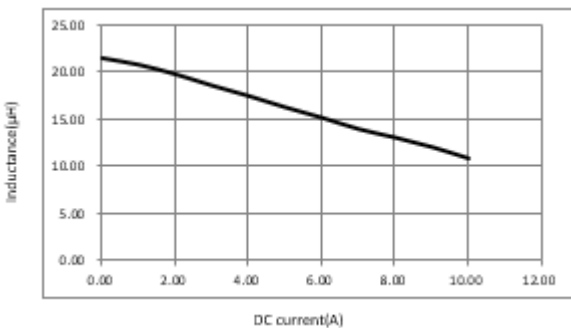


DC current vs Temperature

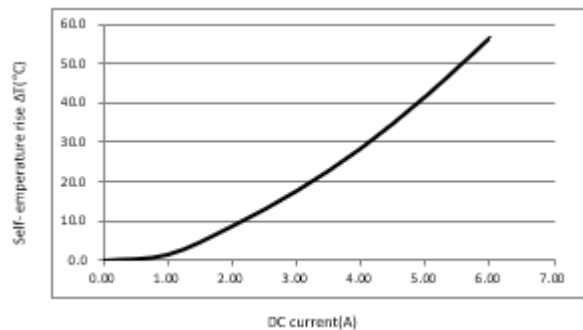


*SPH8040-220M

Inductance vs DC current



DC current vs Temperature



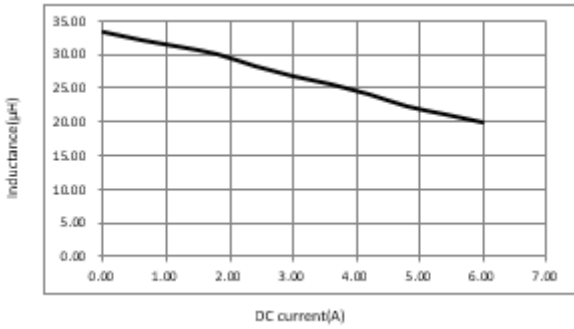
SMD Power Inductor

Fixed Inductor for Surface Mounting

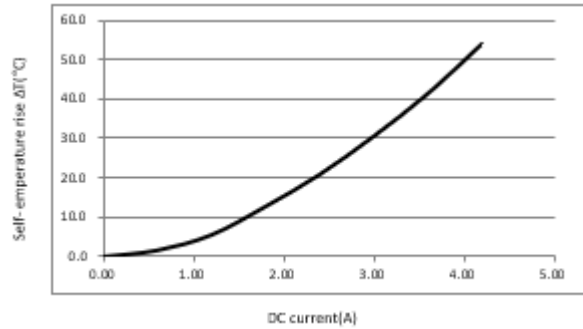
SPH8040 Series

*SPH8040-330M

Inductance vs DC current

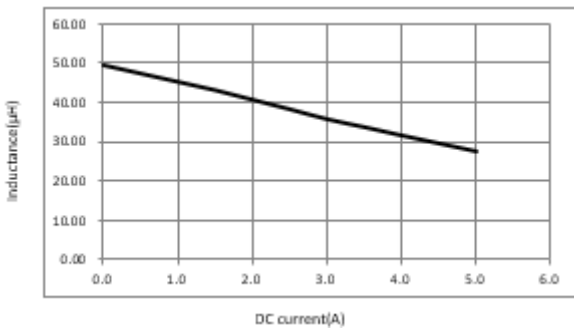


DC current vs Temperature



*SPH8040--470M

Inductance vs DC current



DC current vs Temperature

