

SMD High Current Inductors

Fixed Inductor for Surface Mounting

SPH13040

Construction

- Metal alloy powder core
- Shielded construction

Features

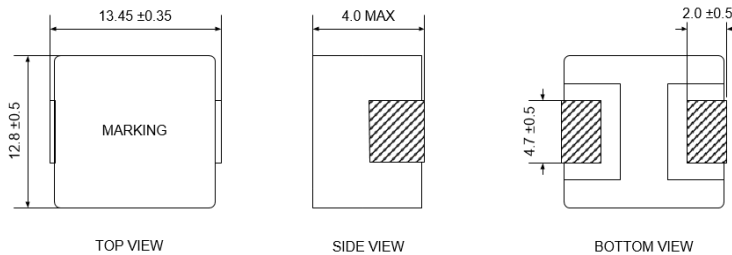
- Operating temperature -40 ~ +125°C
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering

Applications

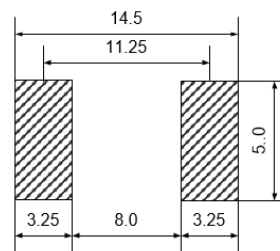
- Automotive / PDA / Notebook systems
- DC/DC converters
- Low profile, high current power supplies



Dimensions(Unit:mm)



Recommended Land Pattern(Unit:mm)



Electrical Characteristics

Ordering code	Inductance range (μH)	DCR(mΩ,MAX)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH13040-R22M	0.22±20%	0.9	50.0	42.0	R22
SPH13040-R47M	0.47±20%	2.0	48.0	33.0	R47
SPH13040-R68M	0.68±20%	3.5	47.0	28.0	R68
SPH13040-R82M	0.82±20%	4.5	40.0	28	R82
SPH13040-1R0M	1.0±20%	7.5	35.0	24.0	1R0
SPH13040-1R5M	1.5±20%	9.5	30.5	20.0	1R5
SPH13040-2R2M	2.2±20%	11.5	26.0	18.0	2R2
SPH13040-3R3M	3.3±20%	13.0	21.0	15.0	3R3
SPH13040-4R7M	4.7±20%	14.5	18.0	13.0	4R7
SPH13040-6R8M	6.8±20%	20.0	14.0	9.0	6R8
SPH13040-100M	10±20%	25.0	10.0	8.0	100
SPH13040-150M	15±20%	39.0	7.5	6.5	150
SPH13040-220M	22±20%	51.0	6.0	4.5	220

※Test Equipment

*Inductance : Agilent 4284A (100kHz, 1.0V)

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : Agilent 4284A + Agilent 42841A

*SRF : Agilent HP8753ES

*Notes

*1.Isat : DC current at which the inductance drops approximate 30%

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

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

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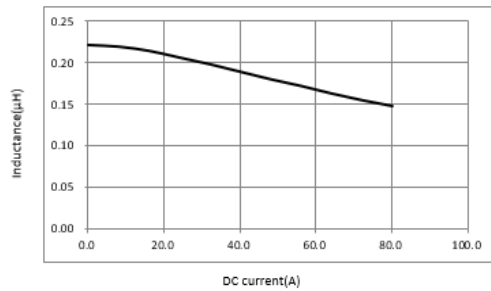
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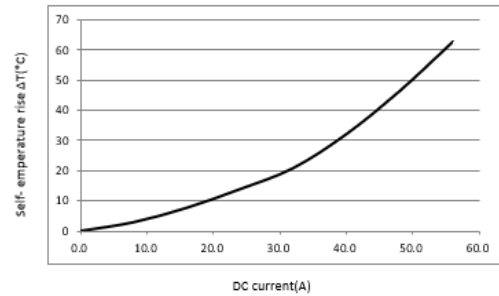
SPH13040

*SPH13040-R22M

Inductance vs DC current

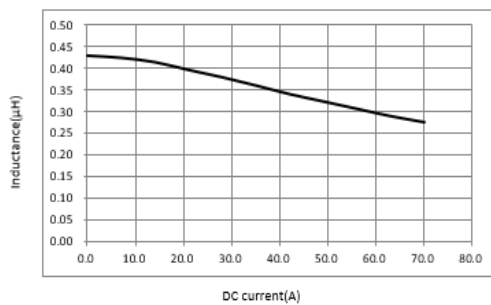


DC current vs Temperature

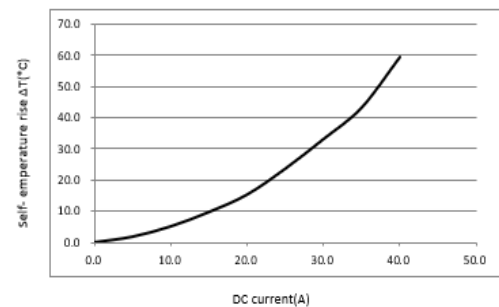


*SPH13040-R47M

Inductance vs DC current

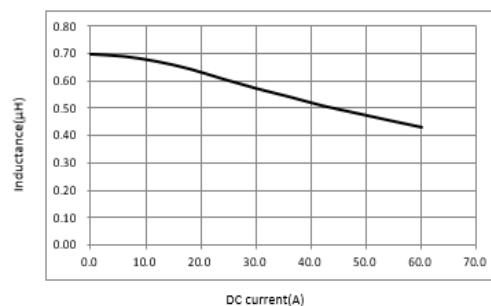


DC current vs Temperature

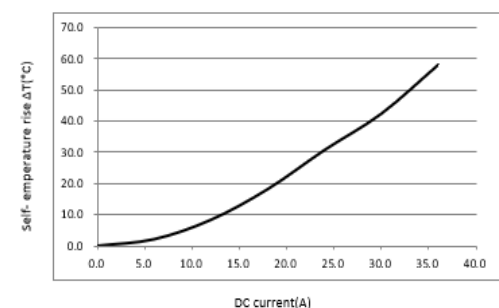


*SPH13040-R68M

Inductance vs DC current



DC current vs Temperature



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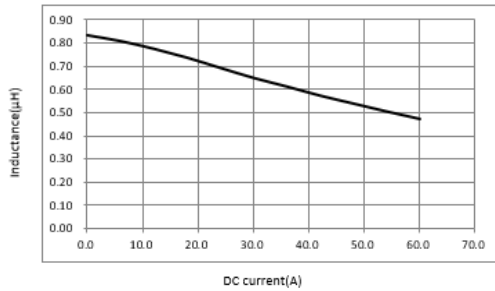
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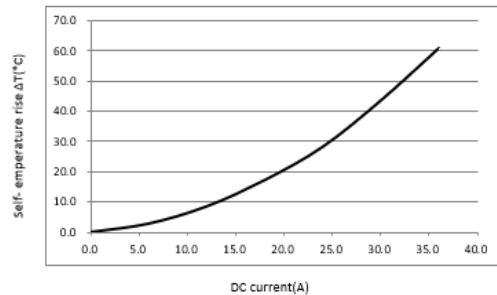
SPH13040

*SPH13040-R82M

Inductance vs DC current

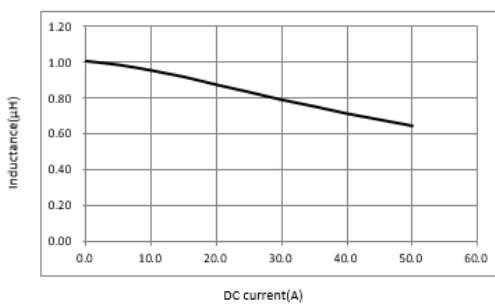


DC current vs Temperature

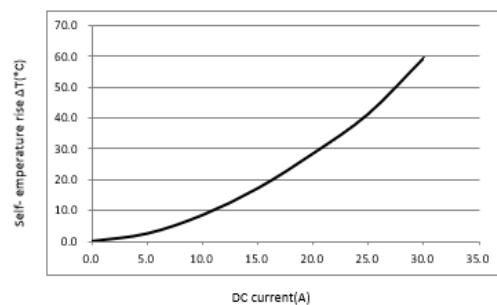


*SPH13040-1R0M

Inductance vs DC current

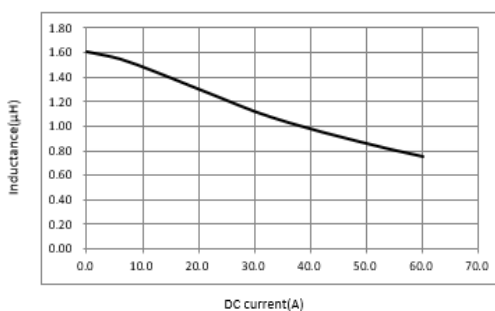


DC current vs Temperature

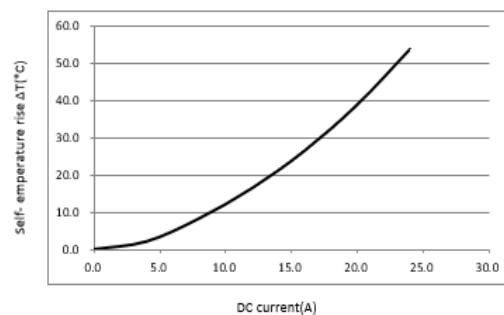


*SPH13040-1R5M

Inductance vs DC current



DC current vs Temperature



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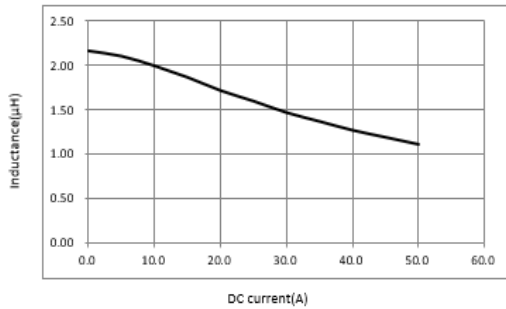
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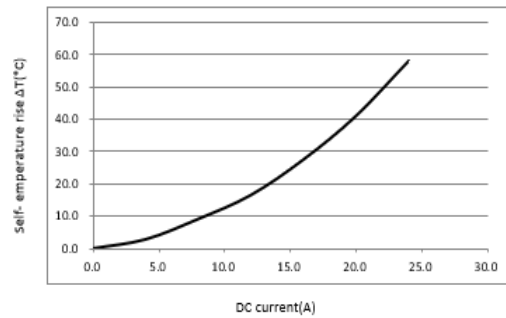
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*SPH13040-2R2M

Inductance vs DC current

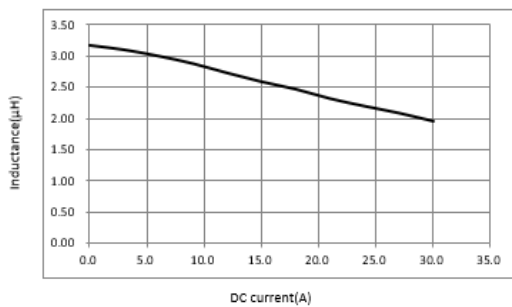


DC current vs Temperature

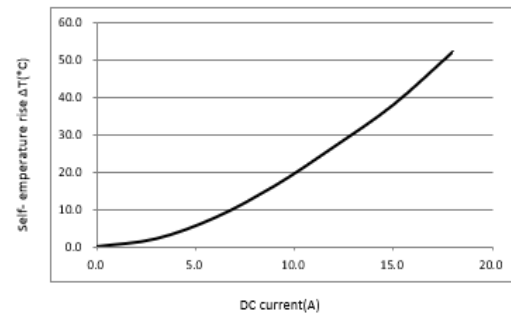


*SPH13040-3R3M

Inductance vs DC current

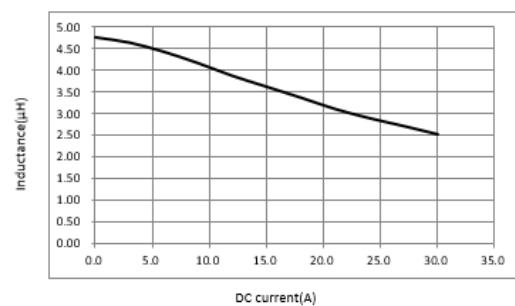


DC current vs Temperature

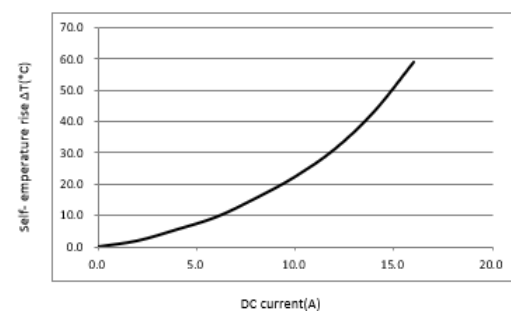


*SPH13040-4R7M

Inductance vs DC current



DC current vs Temperature



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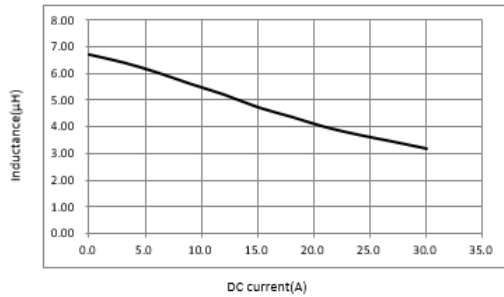
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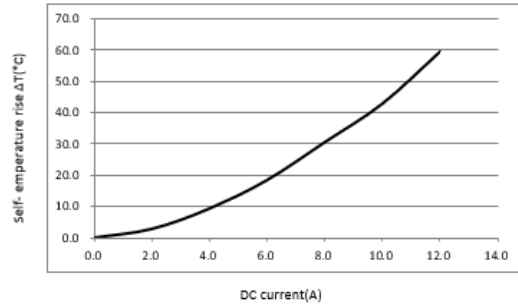
SPH13040

*SPH13040-6R8M

Inductance vs DC current

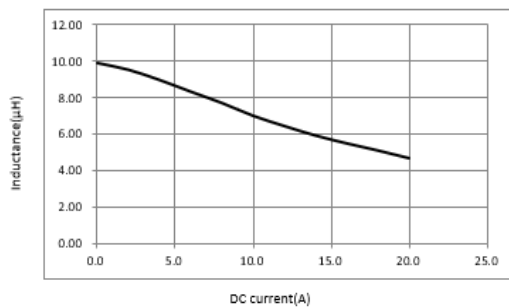


DC current vs Temperature

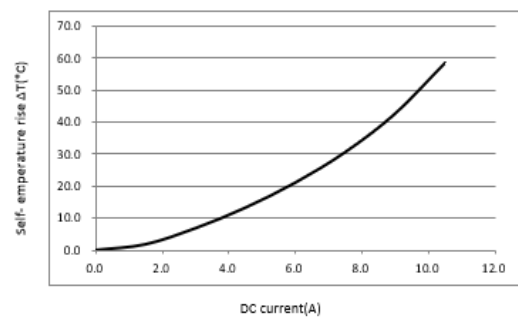


*SPH13040-100M

Inductance vs DC current

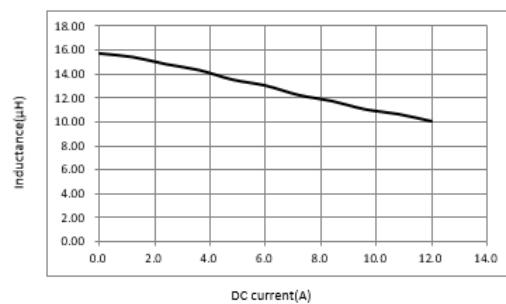


DC current vs Temperature

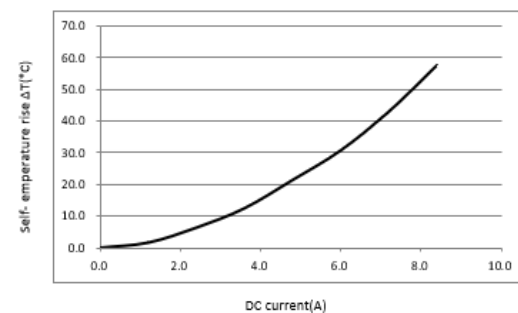


*SPH13040-150M

Inductance vs DC current



DC current vs Temperature



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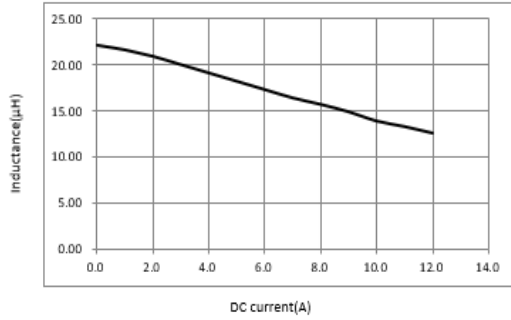
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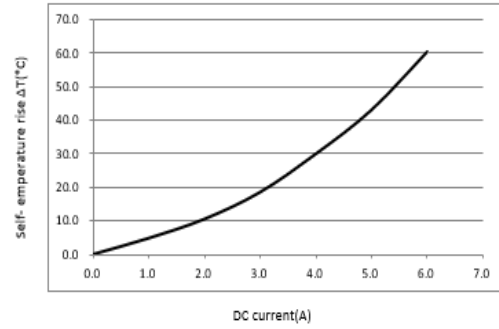
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*SPH13040-220M

Inductance vs DC current



DC current vs Temperature



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