SMD High Current Inductors

Fixed Inductor for Surface Mounting — SPH7030

Construction

- Metal alloy powder core
- Shielded construction

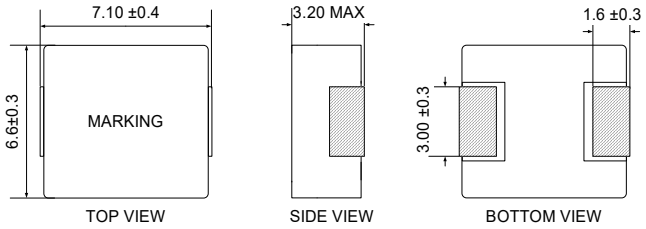
Features

- Operating temperature -40 ~ +125°C
- Qualified to AEC-Q200
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering

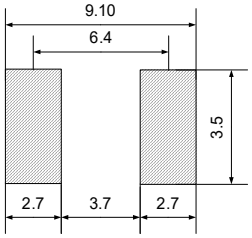
Applications

- 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)	SRF(TYP,MHz)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPH7030-R12N	0.12±30%	1.3	300.0	55.0	30.0	R12
SPH7030-R15N	0.15±30%	1.6	220.0	41.0	29.0	R15
SPH7030-R22M	0.22±20%	3.0	185.0	34.0	24.0	R22
SPH7030-R33M	0.33±20%	3.5	110.0	25.0	21.0	R33
SPH7030-R47M	0.47±20%	4.1	83.0	20.0	18.0	R47
SPH7030-R56M	0.56±20%	4.5	79.0	18.0	16.5	R56
SPH7030-R68M	0.68±20%	5.3	65.0	17.0	16.0	R68
SPH7030-R82M	0.82±20%	6.0	56.0	16.0	14.0	R82
SPH7030-1R0M	1.0±20%	7.4	55.0	15.0	12.0	1R0
SPH7030-1R5M	1.5±20%	12.1	37.0	12.0	11.0	1R5
SPH7030-2R2M	2.2±20%	15.0	31.0	10	9.5	2R2
SPH7030-3R3M	3.3±20%	22.0	30.0	9.5	8.5	3R3
SPH7030-4R7M	4.7±20%	33.0	19.0	9.0	6.0	4R7
SPH7030-5R6M	5.6±20%	42.0	18.0	6.5	5.5	5R6
SPH7030-6R8M	6.8±20%	48.0	16.0	6.0	5.0	6R8
SPH7030-8R2M	8.2±20%	60.0	15.0	5.5	4.8	8R2
SPH7030-100M	10±20%	68.0	14.0	5.5	4.5	100
SPH7030-150M	15±20%	113.0	11.0	4.0	3.0	150
SPH7030-220M	22±20%	170.0	10.0	3.0	2.5	220
SPH7030-330M	33±20%	270.0	8.0	2.5	2.0	330
SPH7030-470M	47±20%	385.0	6.5	2.0	1.5	470

※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

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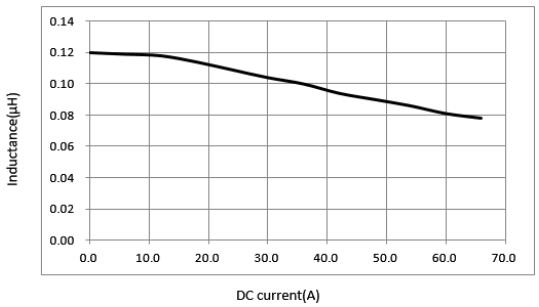
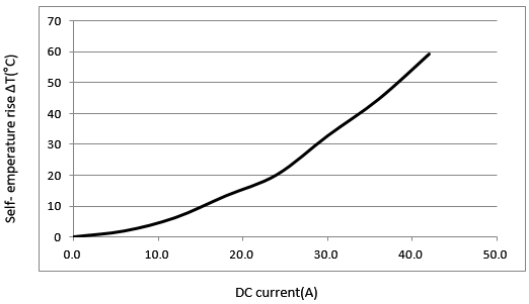
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-R12N

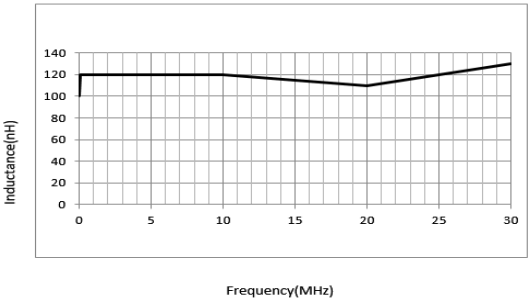
Inductance vs DC current



DC current vs Temperature

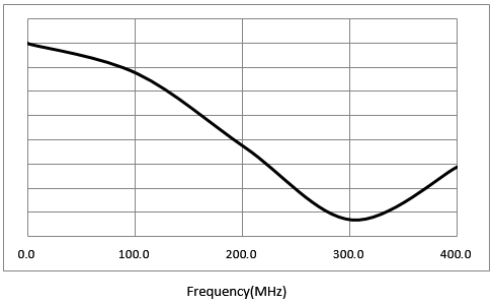


Inductance vs Frequency



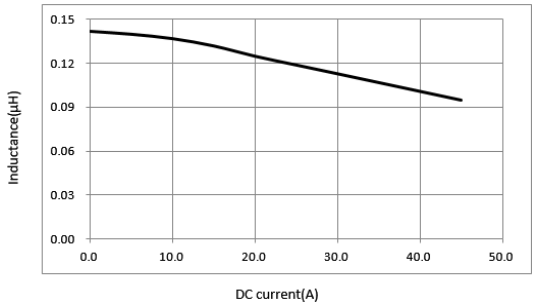
SRF(Self Resonance Frequency)

(S21)

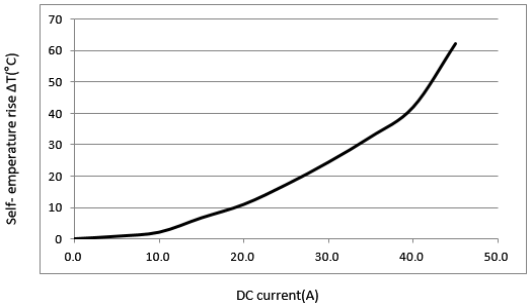


*SPH7030-R15N

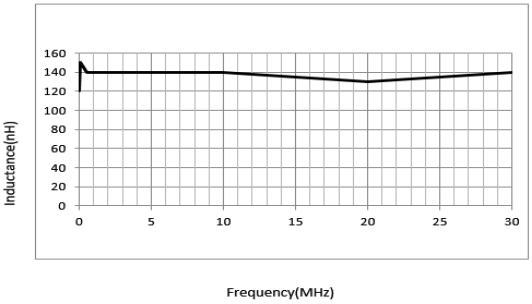
Inductance vs DC current



DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)

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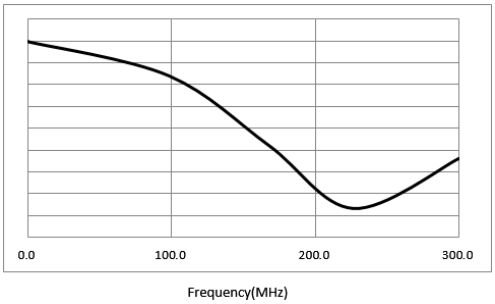

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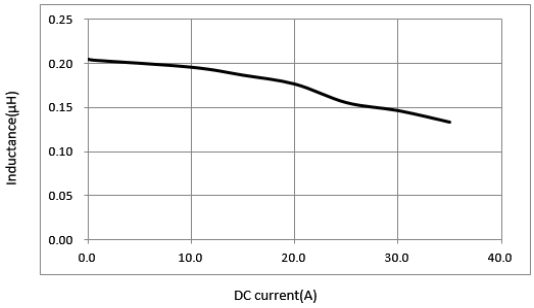
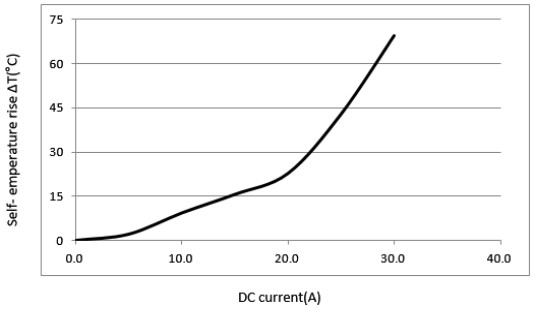
*SPH7030-R22M

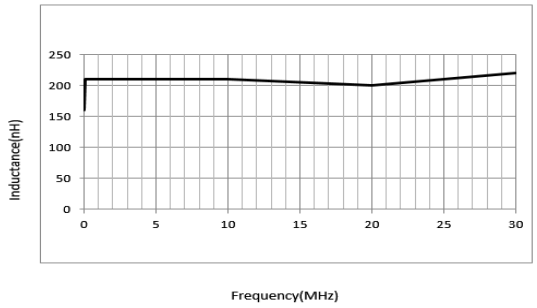
Inductance vs DC current



DC current vs Temperature

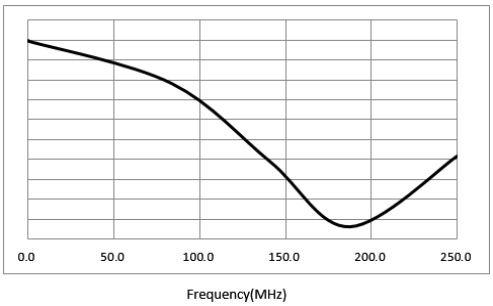


Inductance vs Frequency



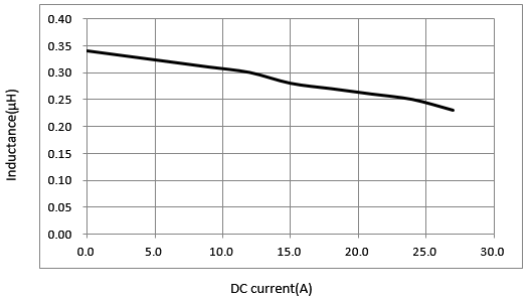
SRF(Self Resonance Frequency)

(S21)

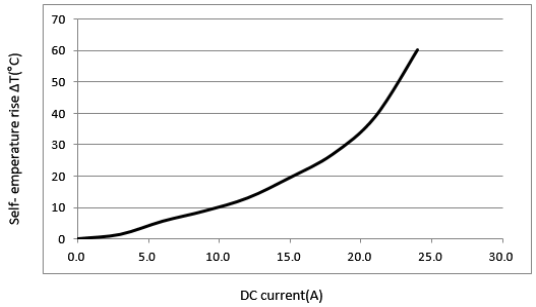


*SPH7030-R33M

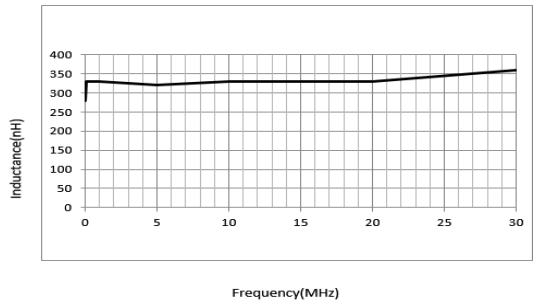
Inductance vs DC current



DC current vs Temperature

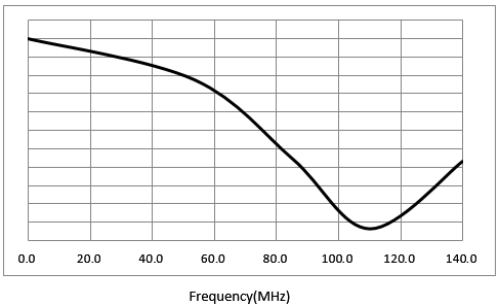


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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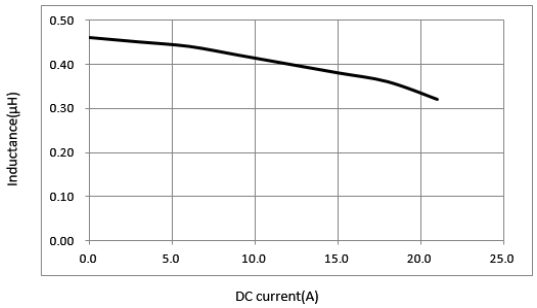
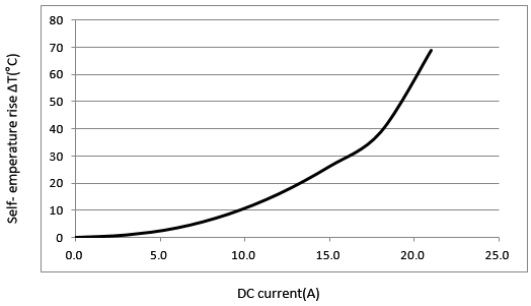
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-R47M

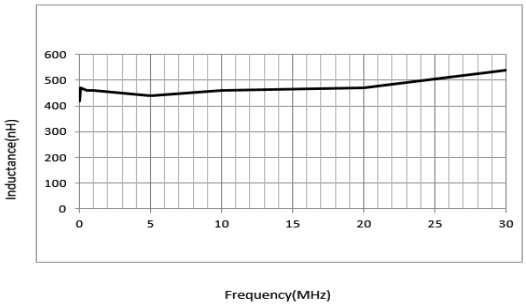
Inductance vs DC current



DC current vs Temperature

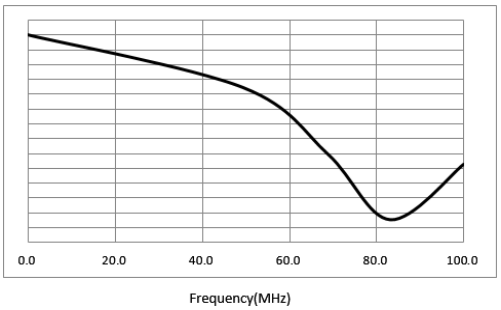


Inductance vs Frequency



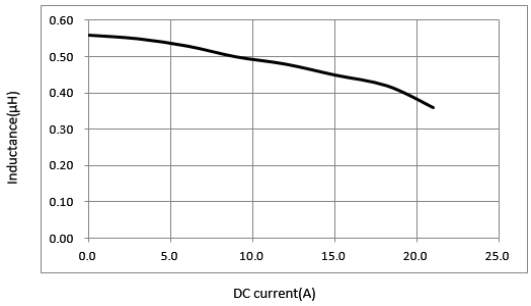
SRF(Self Resonance Frequency)

(S21)

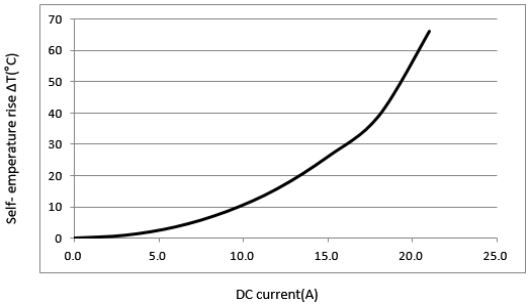


*SPH7030-R56M

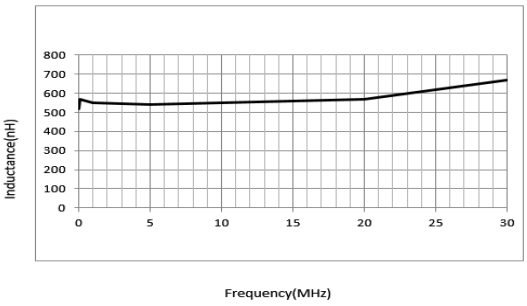
Inductance vs DC current



DC current vs Temperature

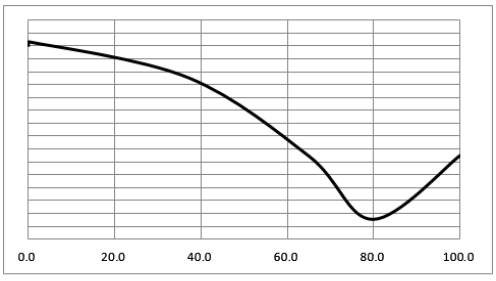


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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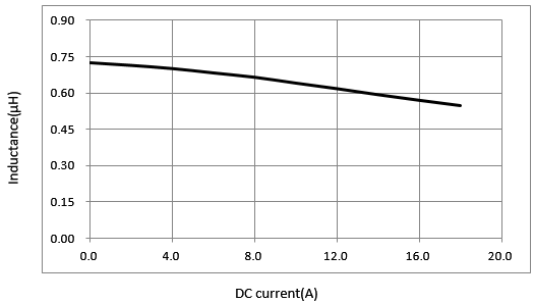
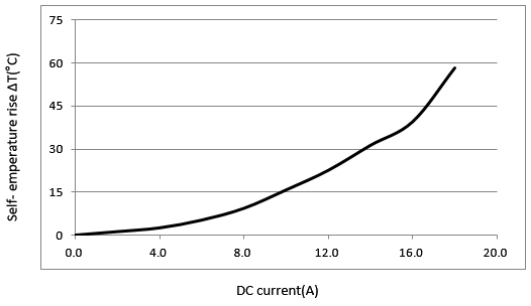
*SPH7030-R68M

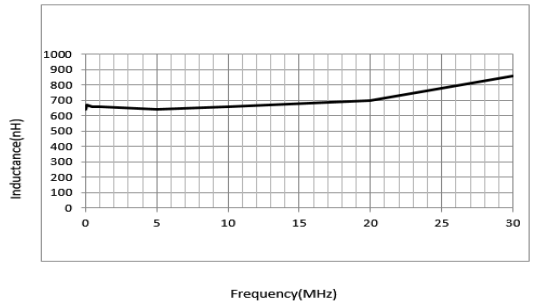
Inductance vs DC current



DC current vs Temperature

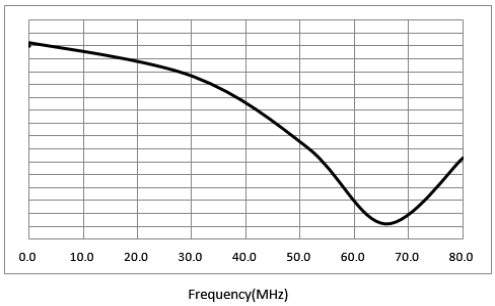


Inductance vs Frequency



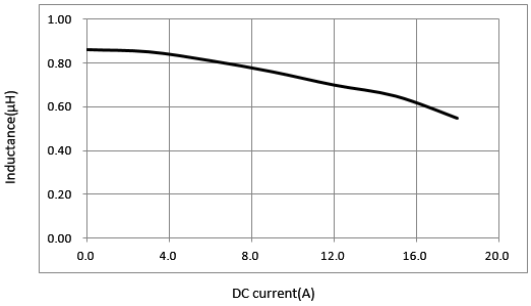
SRF(Self Resonance Frequency)

(S21)

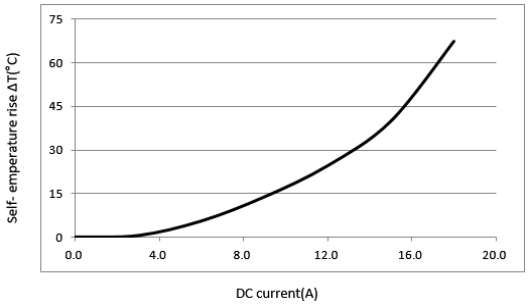


*SPH7030-R82M

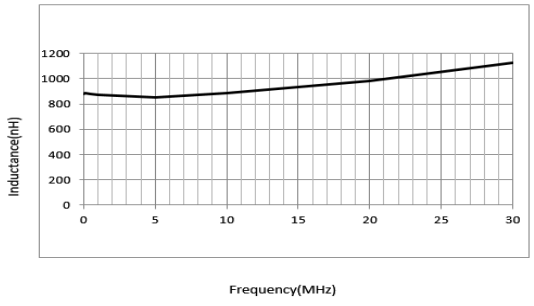
Inductance vs DC current



DC current vs Temperature

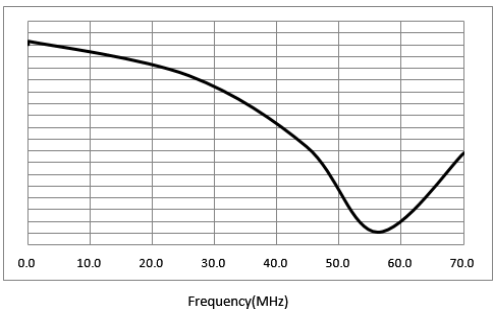


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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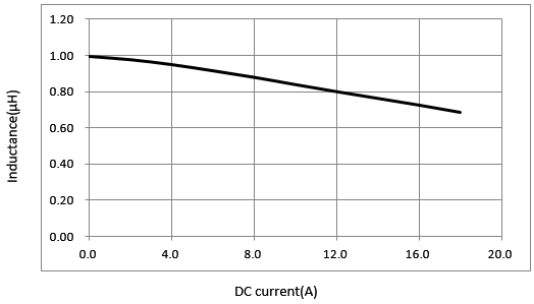
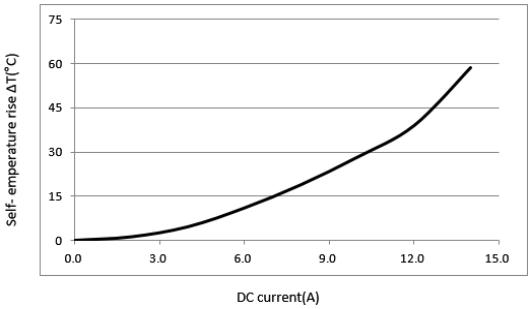
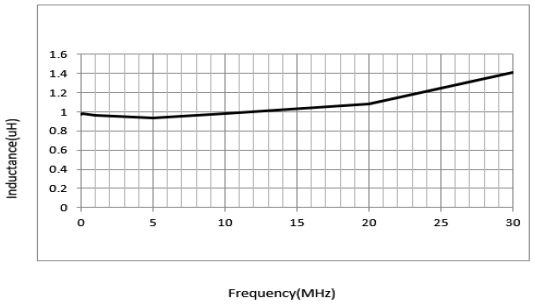
Inductance vs DC current



DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)

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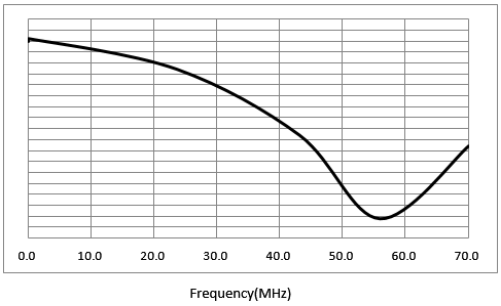
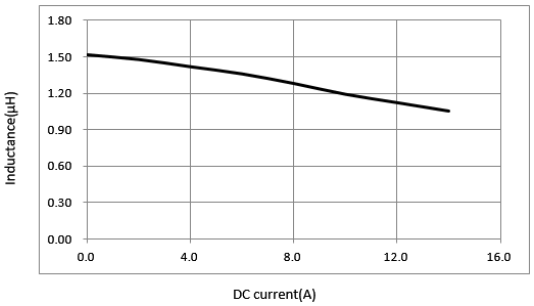
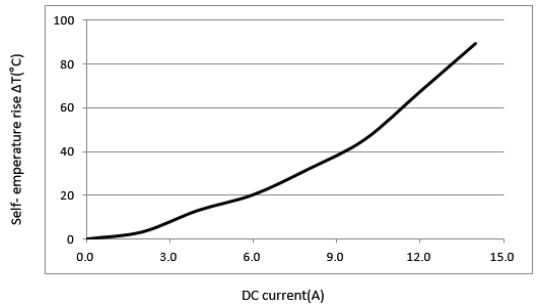


*SPH7030-1R5M

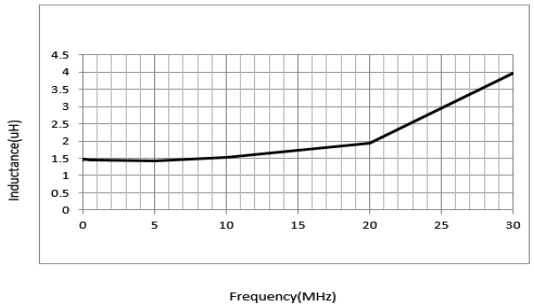
Inductance vs DC current



DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)

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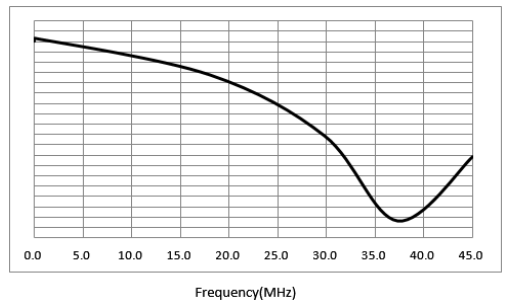

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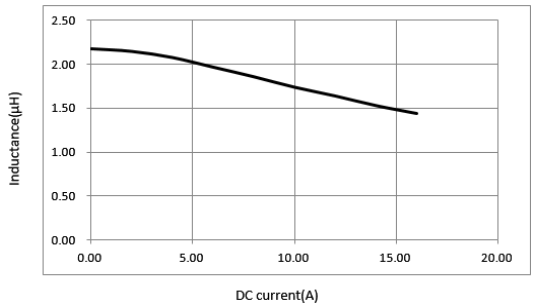
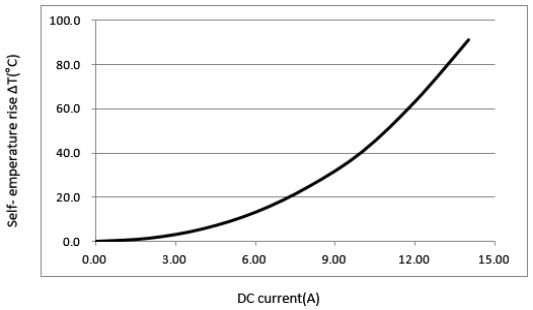
*SPH7030-2R2M

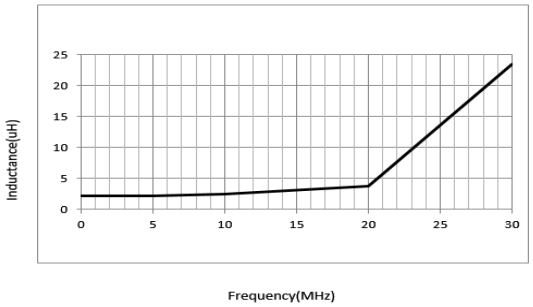
Inductance vs DC current



DC current vs Temperature

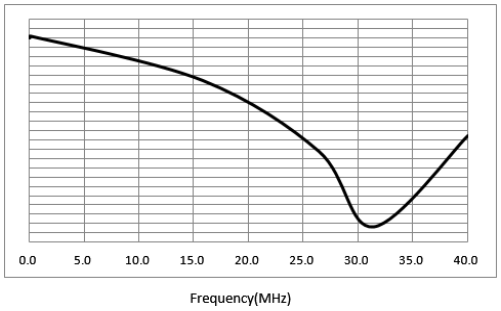


Inductance vs Frequency



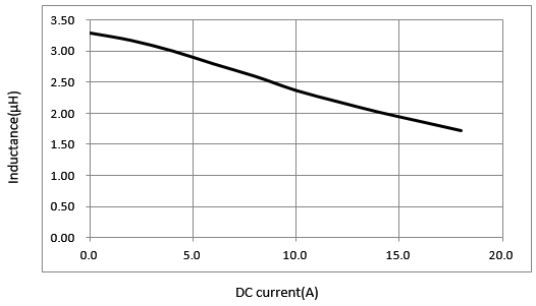
SRF(Self Resonance Frequency)

(S21)

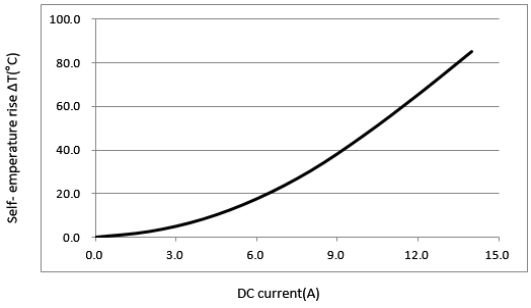


*SPH7030-3R3M

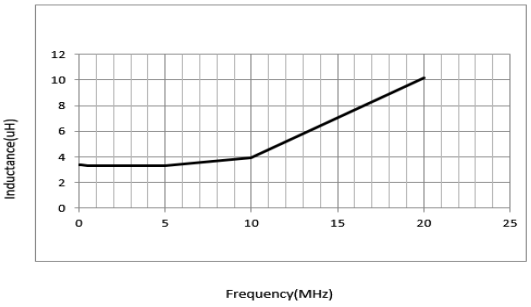
Inductance vs DC current



DC current vs Temperature

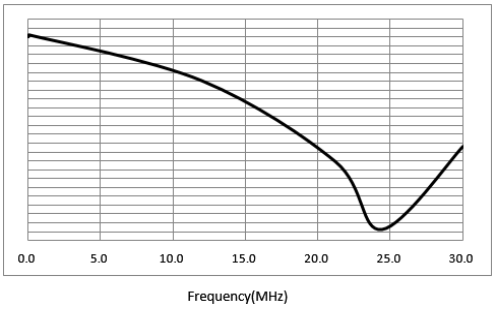


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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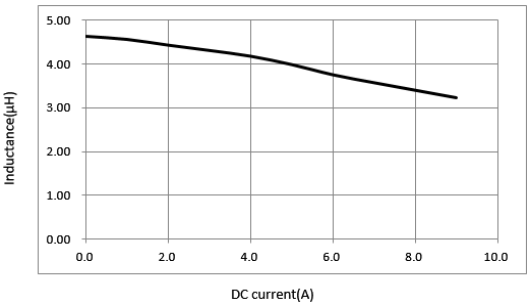
SMD High Current Inductors

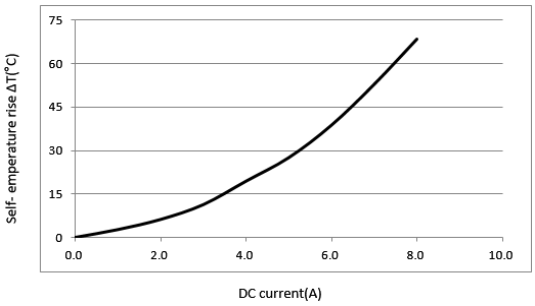
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-4R7M

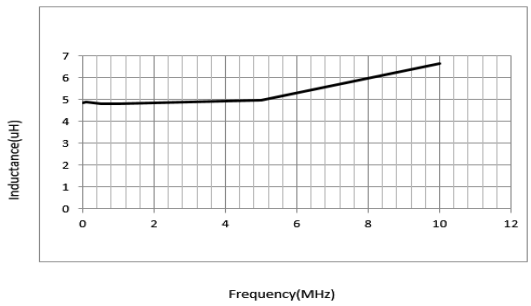
Inductance vs DC current



DC current vs Temperature

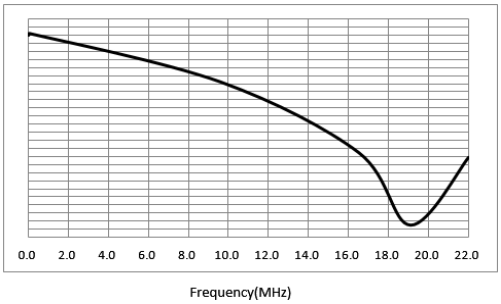


Inductance vs Frequency



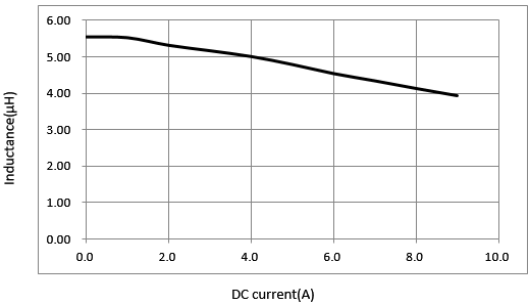
SRF(Self Resonance Frequency)

(S21)

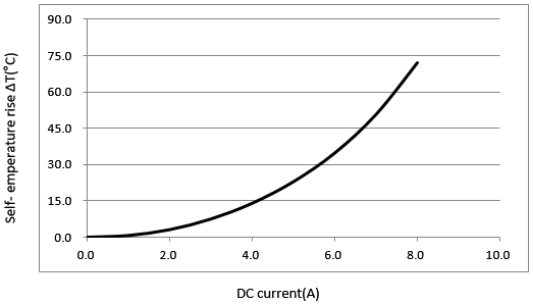


*SPH7030-5R6M

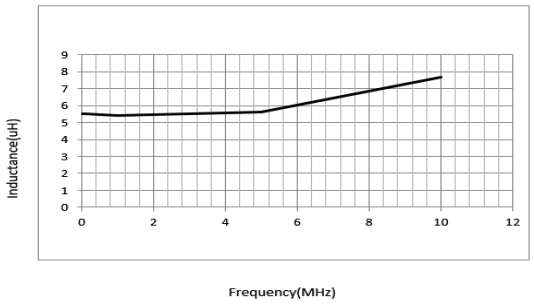
Inductance vs DC current



DC current vs Temperature

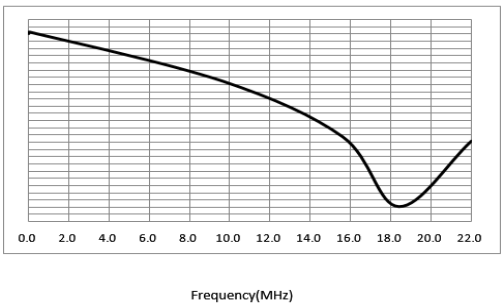


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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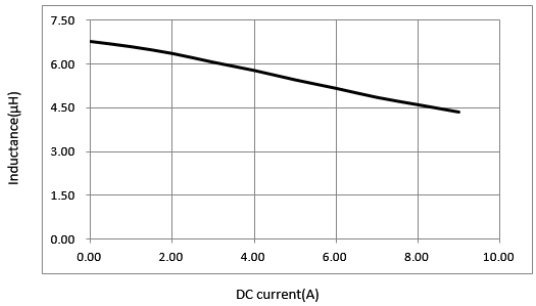
SMD High Current Inductors

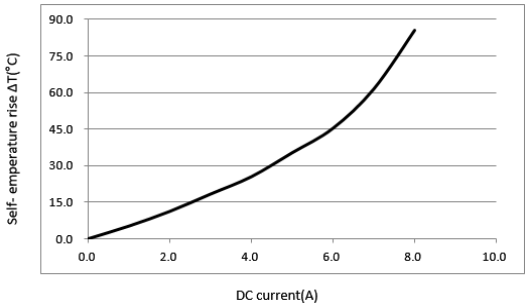
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-6R8M

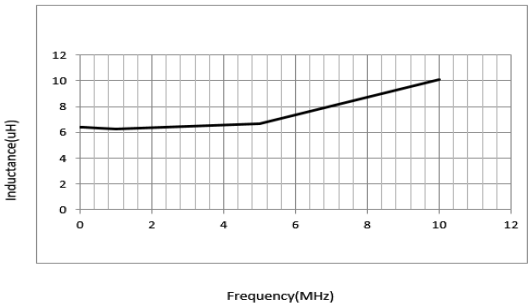
Inductance vs DC current



DC current vs Temperature

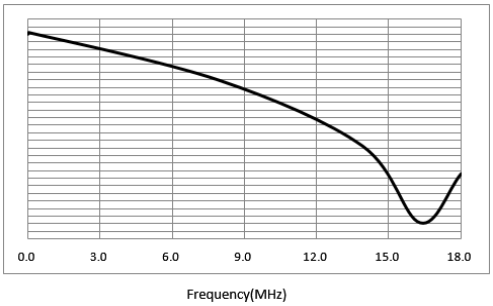


Inductance vs Frequency



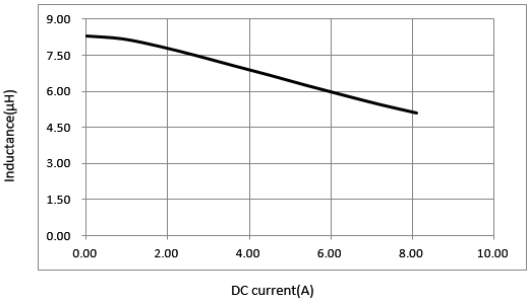
SRF(Self Resonance Frequency)

(S21)

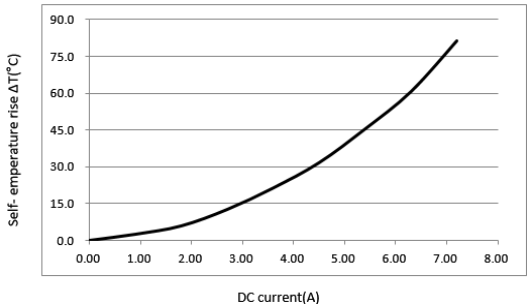


*SPH7030-8R2M

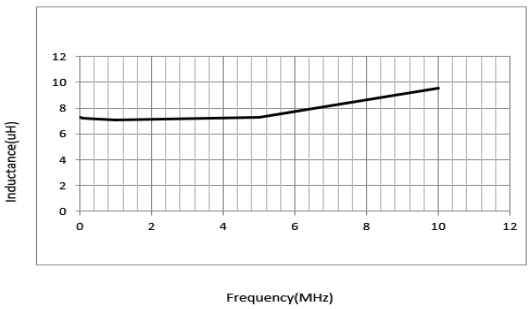
Inductance vs DC current



DC current vs Temperature

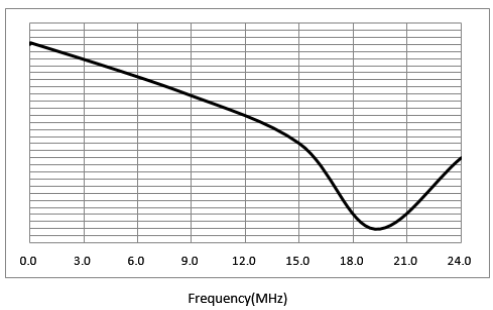


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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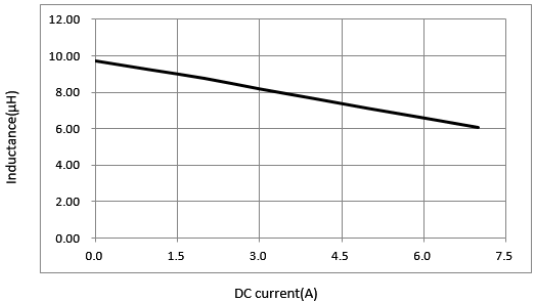
SMD High Current Inductors

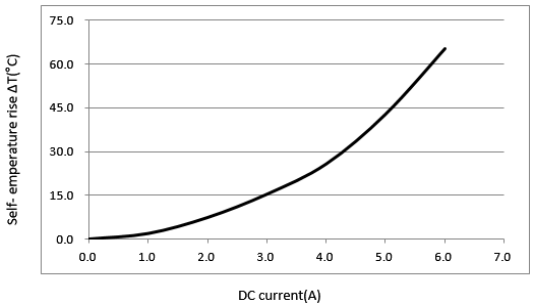
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-100M

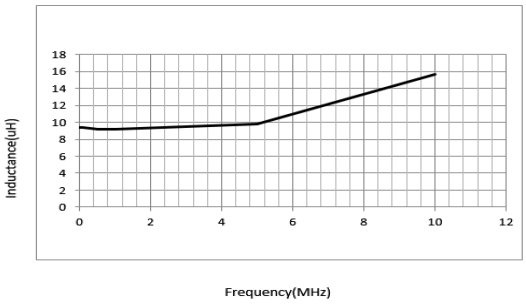
Inductance vs DC current



DC current vs Temperature

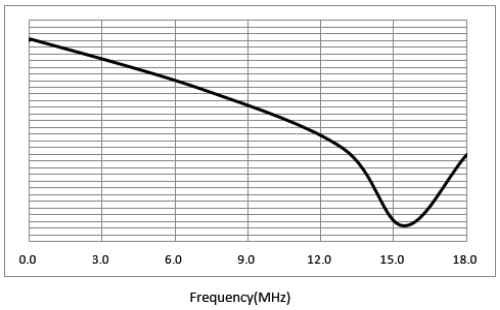


Inductance vs Frequency



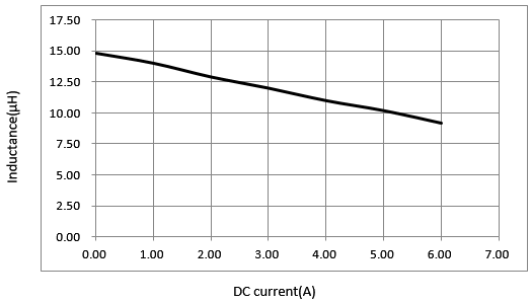
SRF(Self Resonance Frequency)

(S21)

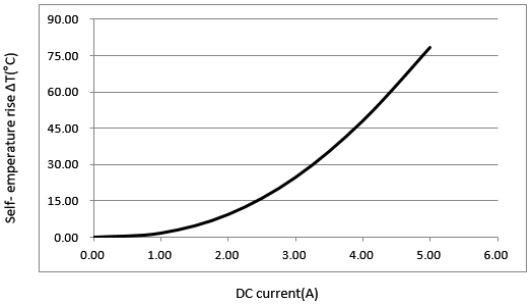


*SPH7030-150M

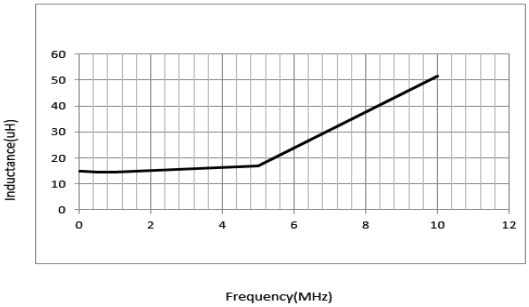
Inductance vs DC current



DC current vs Temperature

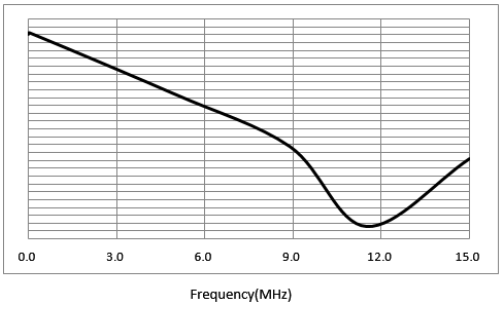


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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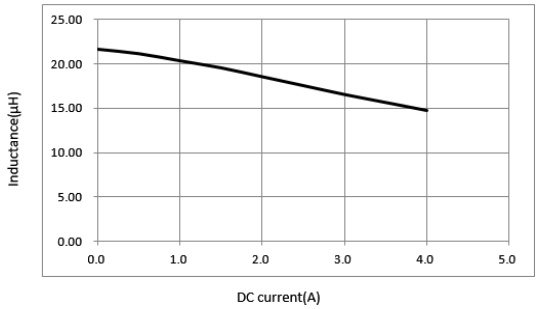
SMD High Current Inductors

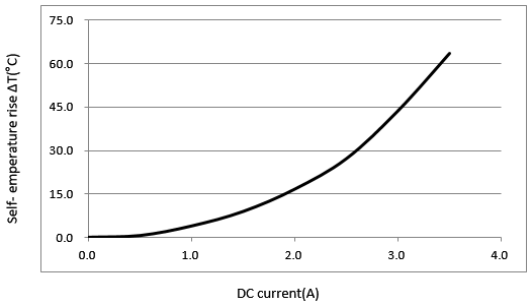
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-220M

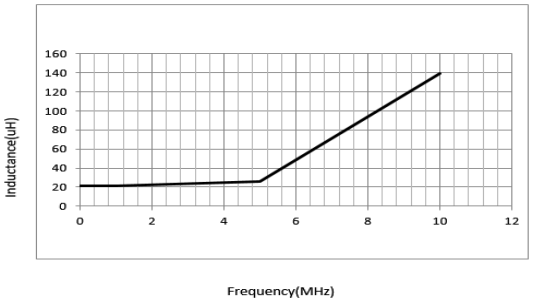
Inductance vs DC current



DC current vs Temperature

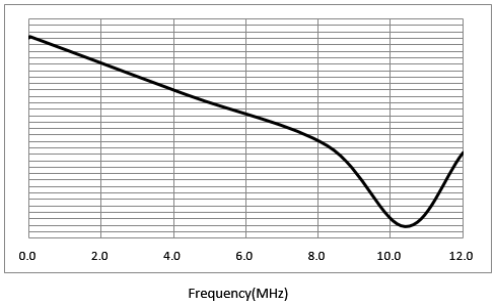


Inductance vs Frequency



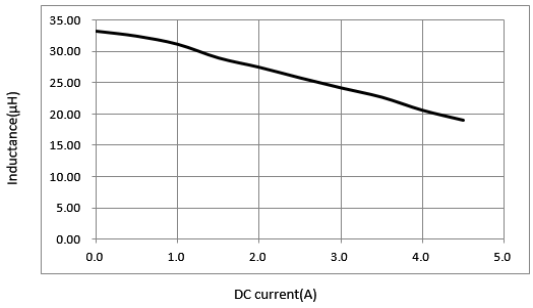
SRF(Self Resonance Frequency)

(S21)

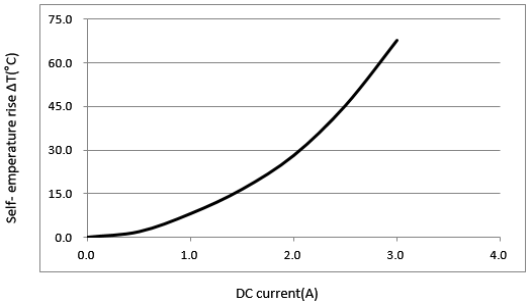


*SPH7030-330M

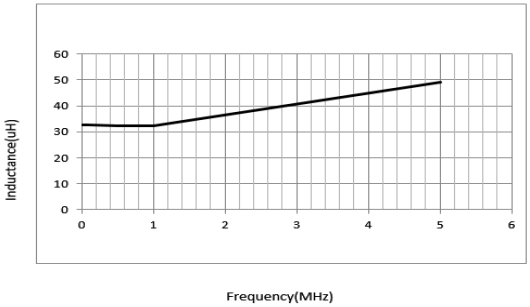
Inductance vs DC current



DC current vs Temperature

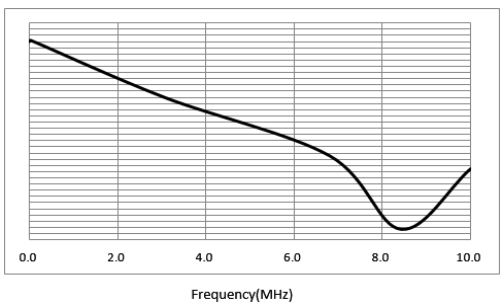


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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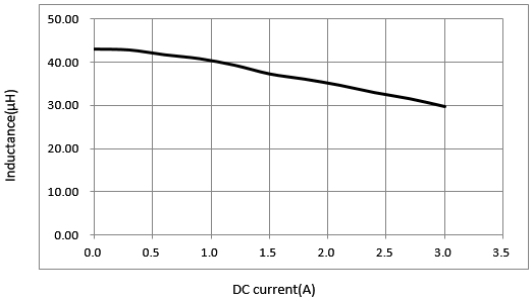
SMD High Current Inductors

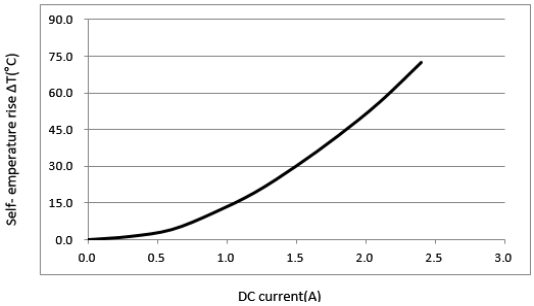
Fixed Inductor for Surface Mounting SPH7030

*SPH7030-470M

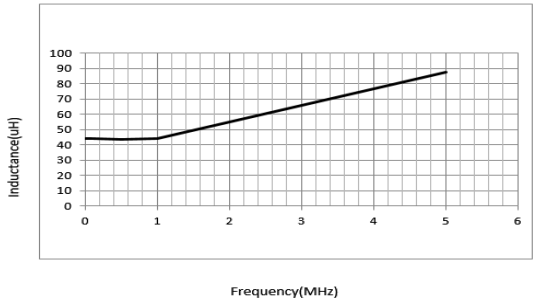
Inductance vs DC current



DC current vs Temperature

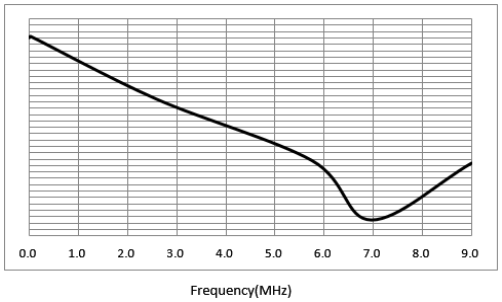


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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