

SMD Power Inductors

Fixed Inductor for Surface Mounting

SPL7045

(Ni Type)

Construction

- Ferrite core
- Shielded construction



Features

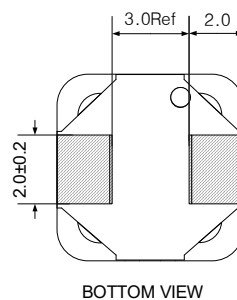
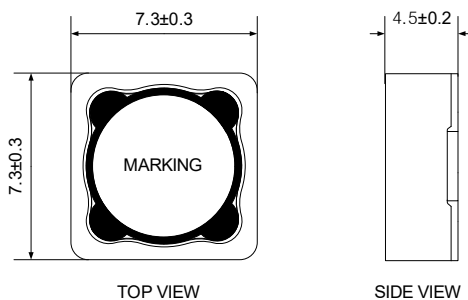
- Operating temperature -40 ~ +125°C
- Qualified to AEC-Q200
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



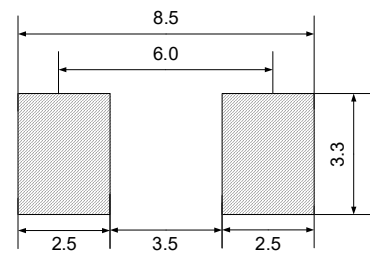
Applications

- 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,±30%)	Isat*1(A,TYP)	Isat*1(A,MAX)	Irms*2(A,MAX)	Marking
SPL7045-3R3N	3.3±30%	18.0	6.30	5.70	4.90	3R3
SPL7045-4R7M	4.7±20%	25.0	5.00	4.70	4.50	4R7
SPL7045-5R6M	5.6±20%	31.0	4.70	4.30	4.20	5R6
SPL7045-6R8M	6.8±20%	33.0	4.20	3.90	4.00	6R8
SPL7045-8R2M	8.2±20%	38.0	4.00	3.60	3.70	8R2

※Test Equipment

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

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : Agilent 4284A + Agilent 42841A

*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.

Revised 10/18/21

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SPL7045-100M	10 $\pm$ 20%	45.0	3.40	3.20	3.50	100
SPL7045-120M	12 $\pm$ 20%	61.0	3.30	3.00	3.00	120
SPL7045-150M	15 $\pm$ 20%	68.0	2.90	2.70	2.70	150
SPL7045-220M	22 $\pm$ 20%	90.0	2.40	2.20	2.20	220
SPL7045-330M	33 $\pm$ 20%	130	2.00	1.70	1.70	330
SPL7045-470M	47 $\pm$ 20%	190	1.60	1.30	1.40	470
SPL7045-560M	56 $\pm$ 20%	220	1.50	1.20	1.35	560
SPL7045-680M	68 $\pm$ 20%	250	1.40	1.10	1.30	680
SPL7045-820M	82 $\pm$ 20%	320	1.20	1.00	1.10	820
SPL7045-101M	100 $\pm$ 20%	355	1.10	0.95	1.00	101

※Test Equipment

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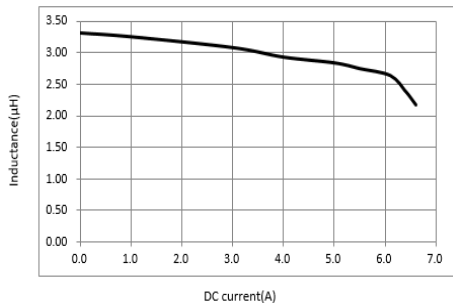
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SPL7045

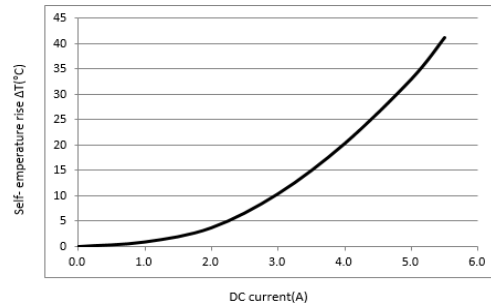
(Ni Type)

*SPL7045-3R3N

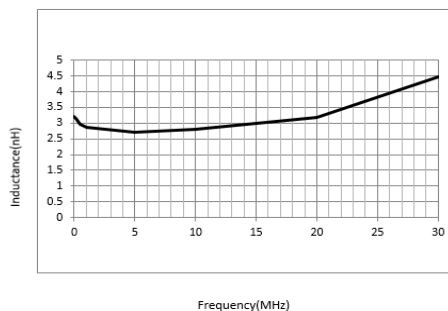
Inductance vs DC current



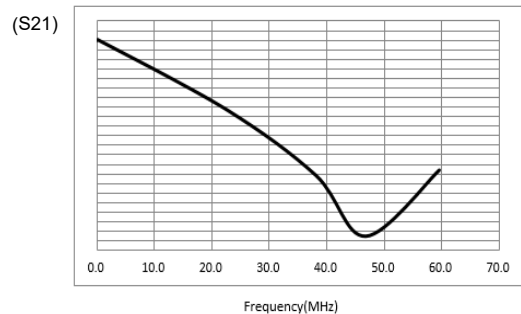
DC current vs Temperature



Inductance vs Frequency

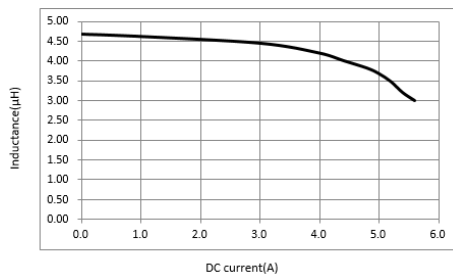


SRF(Self Resonance Frequency)

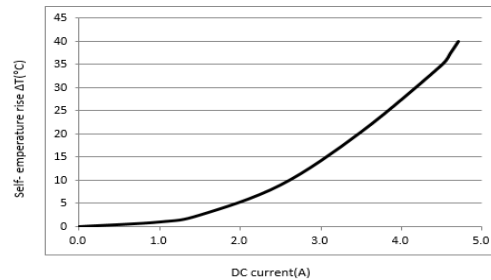


*SPL7045-4R7M

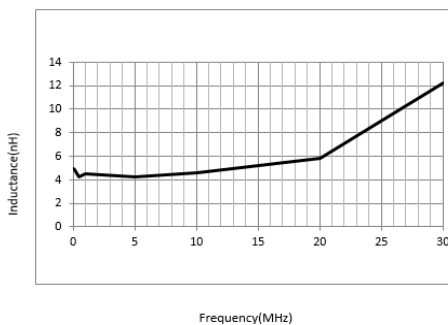
Inductance vs DC current



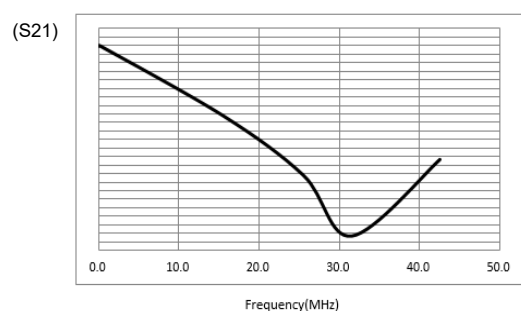
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



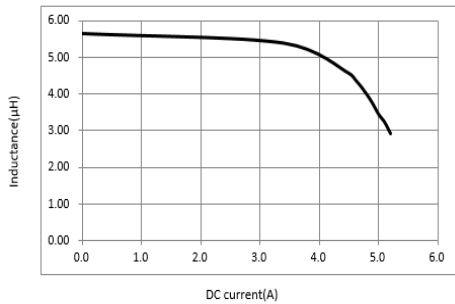
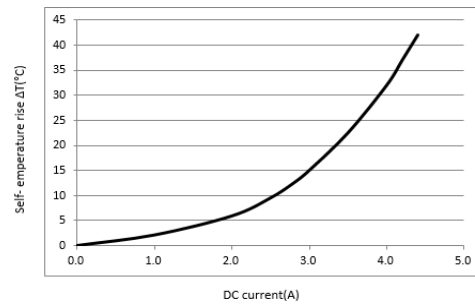
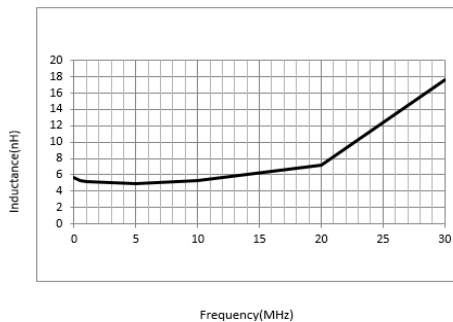
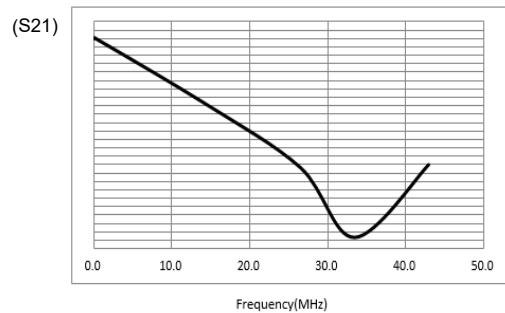
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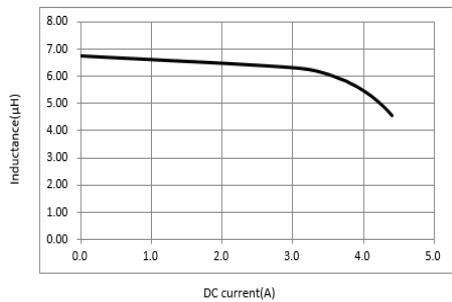
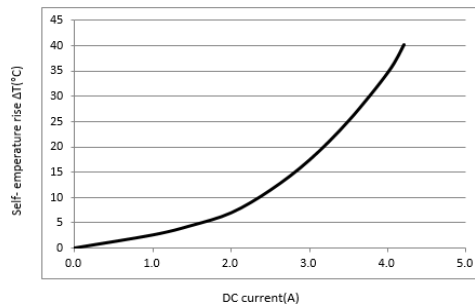
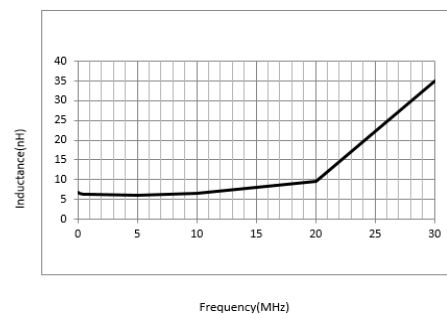
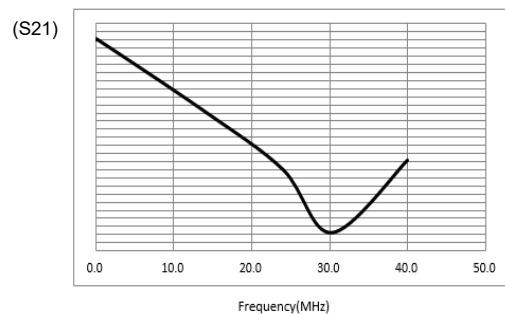
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(Ni Type)

*SPL7045-5R6M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

*SPL7045-6R8M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

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SMD Power Inductors

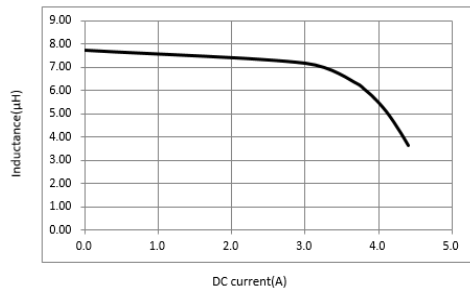
Fixed Inductor for Surface Mounting

SPL7045

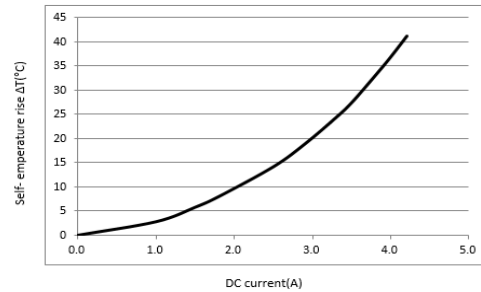
(Ni Type)

*SPL7045-8R2M

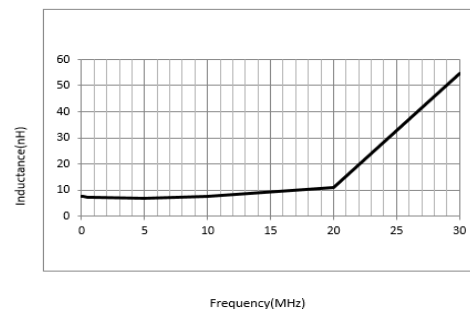
Inductance vs DC current



DC current vs Temperature

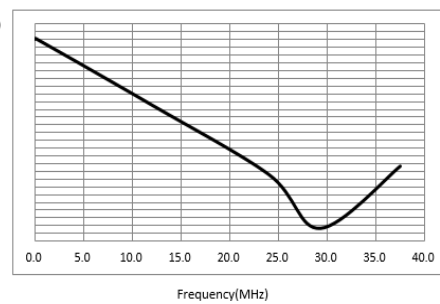


Inductance vs Frequency



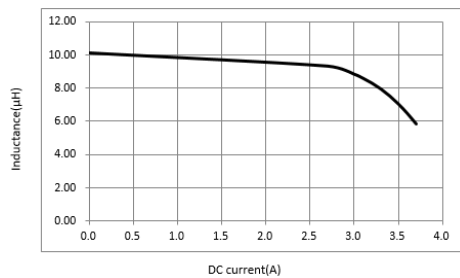
SRF(Self Resonance Frequency)

(S21)

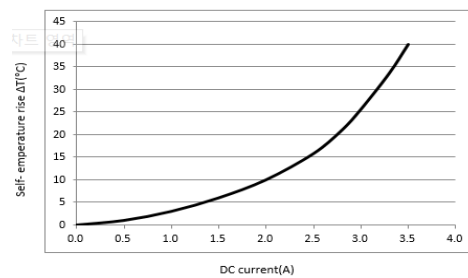


*SPL7045-100M

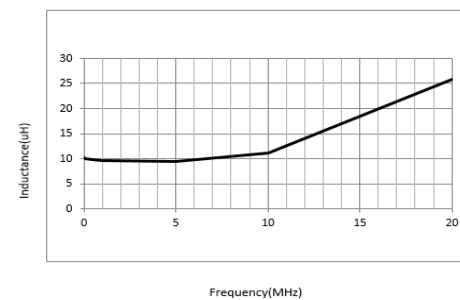
Inductance vs DC current



DC current vs Temperature

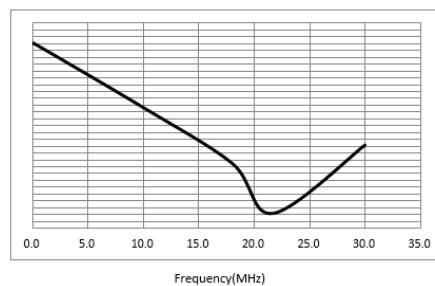


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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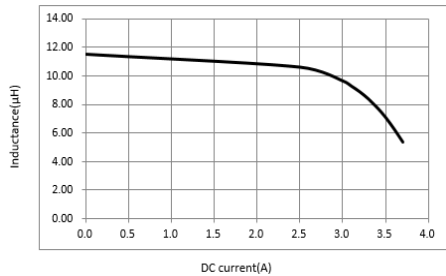
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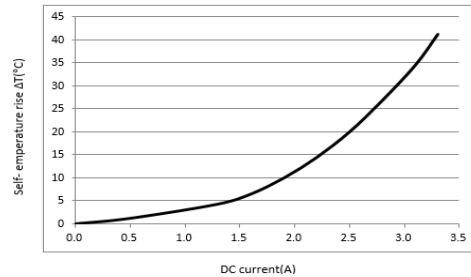
(Ni Type)

*SPL7045-120M

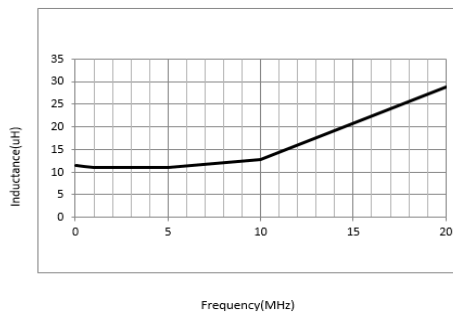
Inductance vs DC current



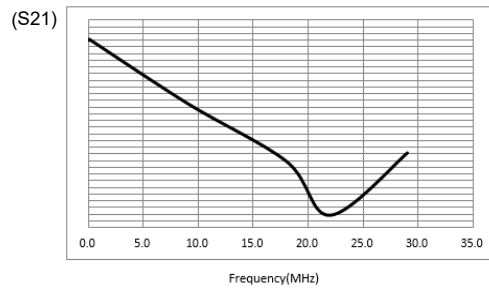
DC current vs Temperature



Inductance vs Frequency

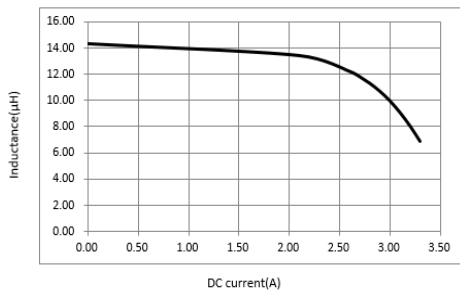


SRF(Self Resonance Frequency)

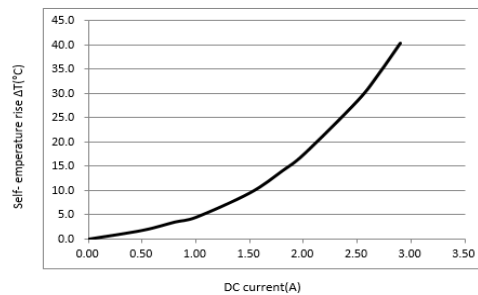


*SPL7045-150M

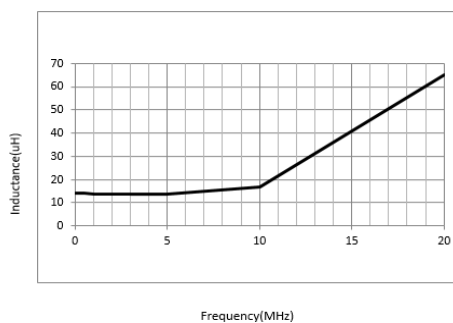
Inductance vs DC current



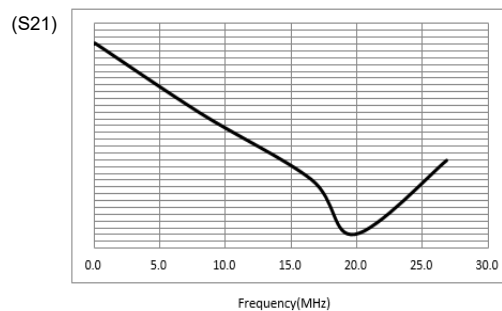
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



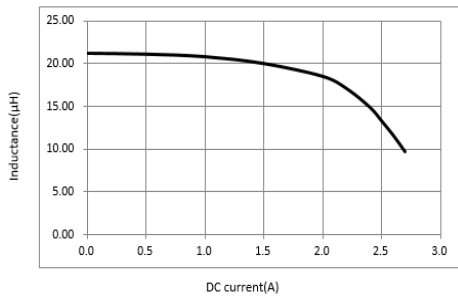
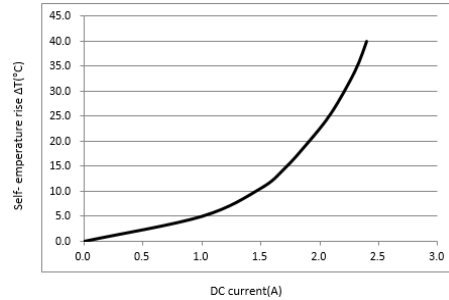
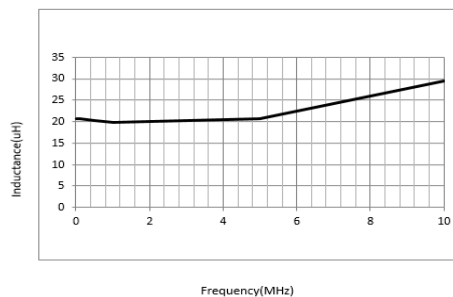
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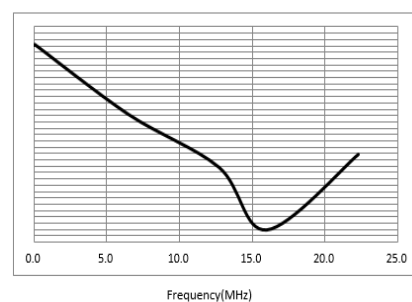
SMD Power Inductors**Fixed Inductor for Surface Mounting****SPL7045**

(Ni Type)

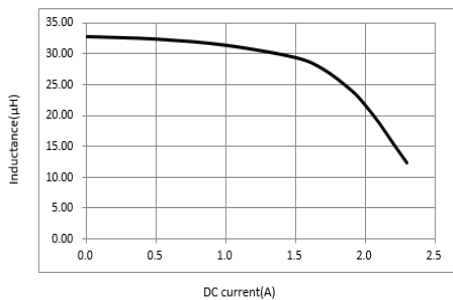
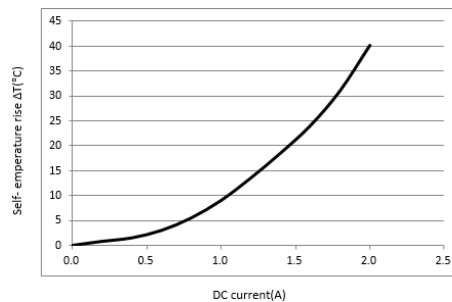
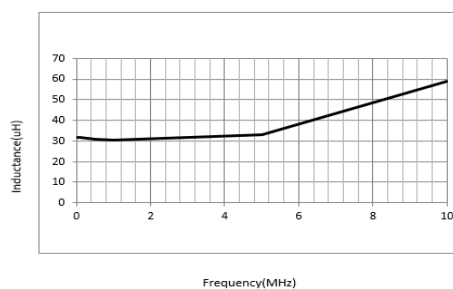
*SPL7045-220M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

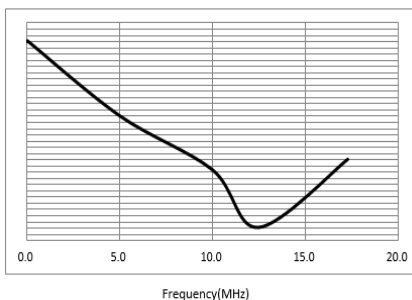
(S21)



*SPL7045-330M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

(S21)



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SMD Power Inductors

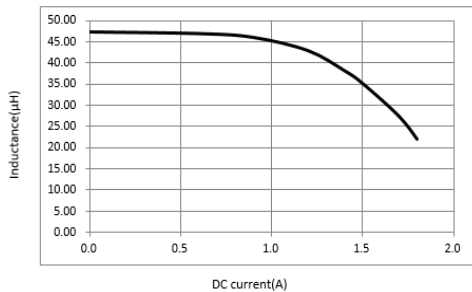
Fixed Inductor for Surface Mounting

SPL7045

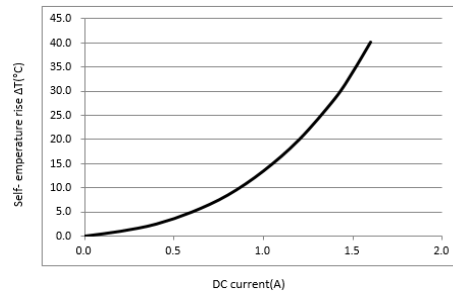
(Ni Type)

*SPL7045-470M

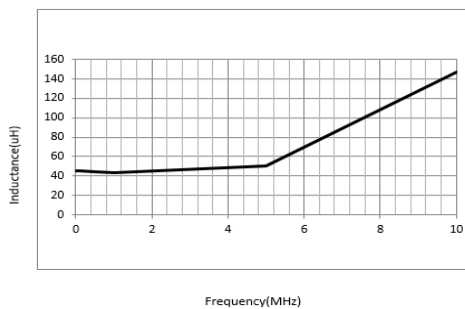
Inductance vs DC current



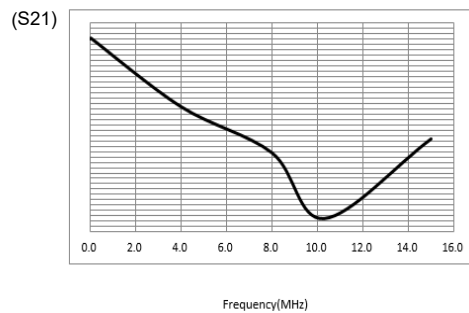
DC current vs Temperature



Inductance vs Frequency

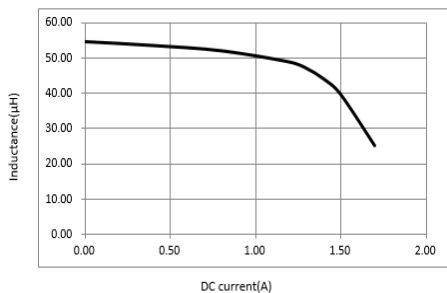


SRF(Self Resonance Frequency)

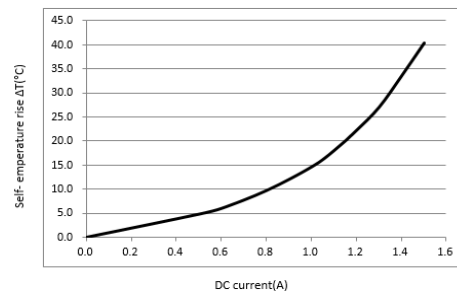


*SPL7045-560M

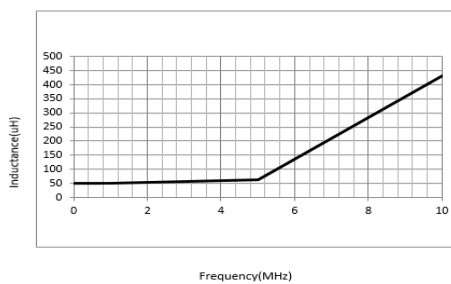
Inductance vs DC current



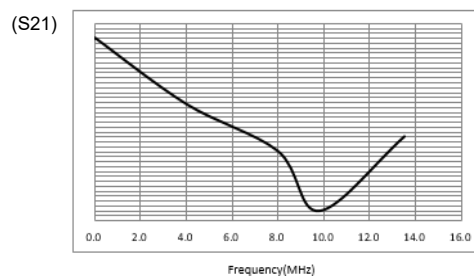
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



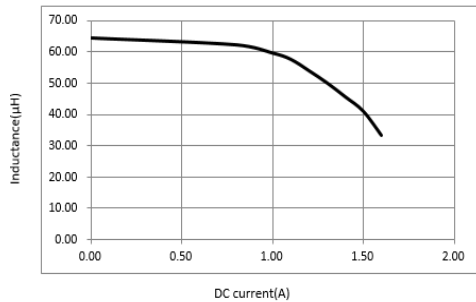
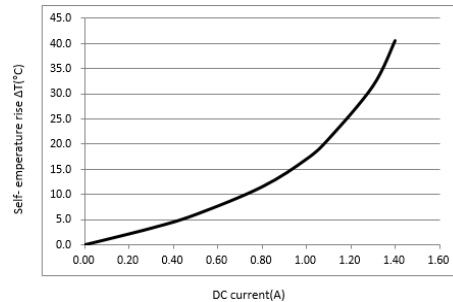
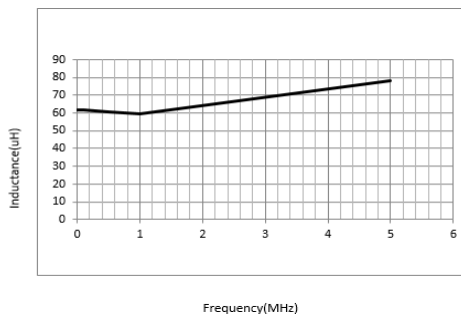
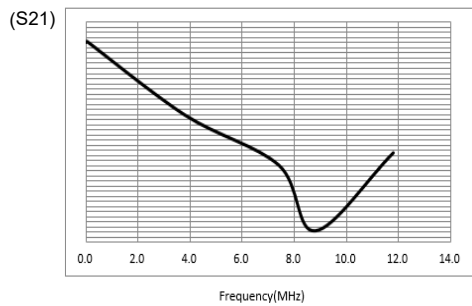
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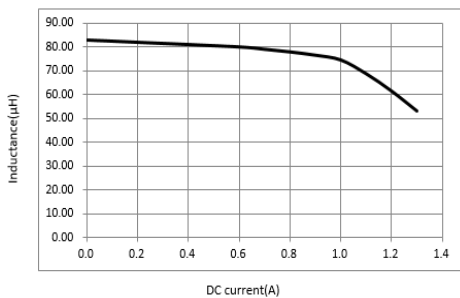
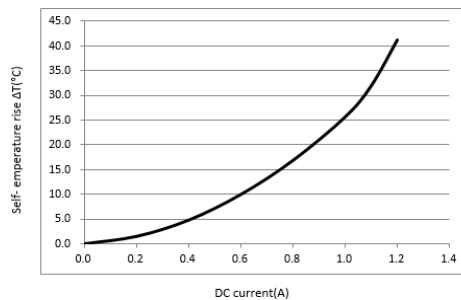
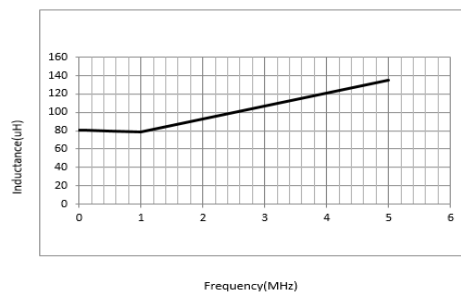
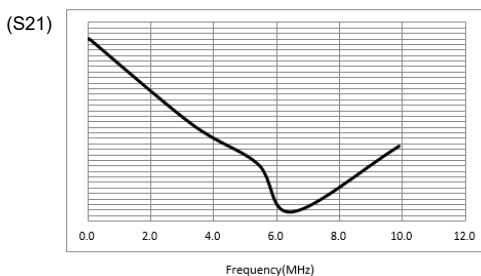
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(Ni Type)

*SPL7045-680M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

*SPL7045-820M

Inductance vs DC current**DC current vs Temperature****Inductance vs Frequency****SRF(Self Resonance Frequency)**

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SMD Power Inductors

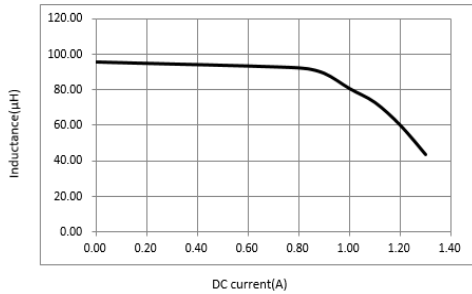
Fixed Inductor for Surface Mounting

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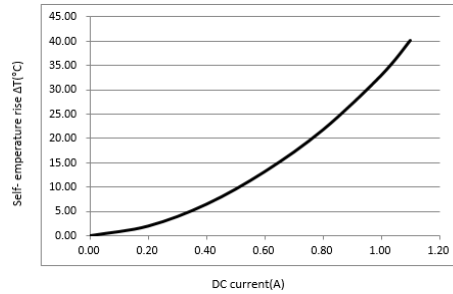
(Ni Type)

*SPL7045-101M

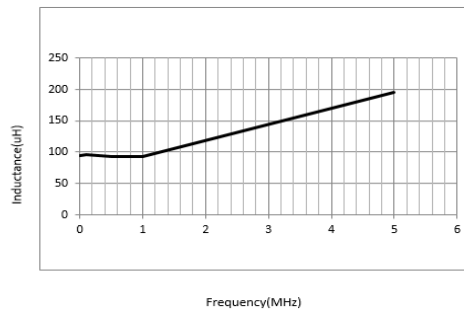
Inductance vs DC current



DC current vs Temperature

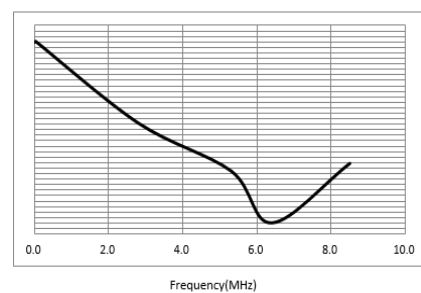


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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