

SMD Power Inductors

Fixed Inductor for Surface Mounting

SPL12080

(Ni Type)

Construction

- Ferrite core
- Shielded construction

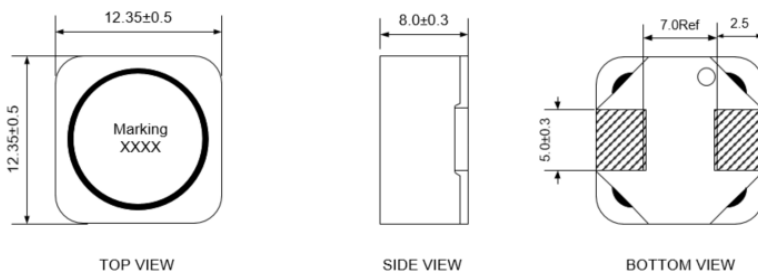
Features

- 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

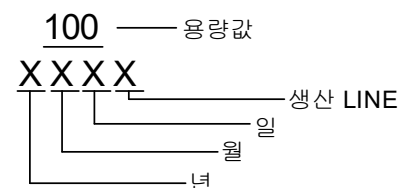
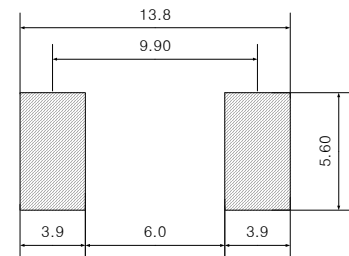
Applications

- 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,TYP)	Marking
SPL12080-1R0N	1.0±30%	6.5	27.2	26	13	1R0 XXXX
SPL12080-1R8N	1.8±30%	7.5	22.4	22.1	12.5	1R8 XXXX
SPL12080-2R2N	2.2±30%	8.5	20	19	11.1	2R2 XXXX
SPL12080-3R3N	3.3±30%	10.5	18.5	17	10	3R3 XXXX
SPL12080-4R7M	4.7±20%	12	15.2	14.5	9.5	4R7 XXXX

※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

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SPL12080-5R6M	5.6±20%	14	13.6	12.8	9.0	5R6 XXXX
SPL12080-6R8M	6.8±20%	15.5	12.2	11.5	7.8	6R8 XXXX
SPL12080-8R2M	8.2±20%	17	11.3	10.5	7.5	8R2 XXXX
SPL12080-100M	10±20%	19	11	9.9	7.2	100 XXXX
SPL12080-150M	15±20%	27	8.5	8.4	6.1	150 XXXX
SPL12080-180M	18±20%	35	7.8	7.6	6.0	180 XXXX
SPL12080-220M	22±20%	40	6.9	6.7	4.8	220 XXXX
SPL12080-330M	33±20%	55	6.0	5.8	4.3	330 XXXX
SPL12080-470M	47±20%	83	5.0	4.6	3.3	470 XXXX
SPL12080-560M	56±20%	90	4.6	4.4	3.2	560 XXXX
SPL12080-680M	68±20%	100	4.3	4.0	3.0	680 XXXX
SPL12080-820M	82±20%	114	3.7	3.5	2.9	820 XXXX
SPL12080-101M	100±20%	139	3.2	3.1	2.5	101 XXXX
SPL12080-151M	150±20%	225	2.7	2.6	2.0	151 XXXX
SPL12080-181M	180±20%	248	2.5	2.4	1.9	181 XXXX
SPL12080-221M	220±20%	280	2.2	2.1	1.8	221 XXXX
SPL12080-331M	330±20%	390	1.9	1.8	1.6	331 XXXX
SPL12080-471M	470±20%	530	1.6	1.5	1.3	471 XXXX
SPL12080-561M	560±20%	670	1.4	1.35	1.2	561 XXXX
SPL12080-681M	680±20%	935	1.3	1.2	1.1	681 XXXX
SPL12080-821M	820±20%	1140	1.2	1.1	0.86	821 XXXX
SPL12080-102M	1000±20%	1460	1.1	1.0	0.74	102 XXXX

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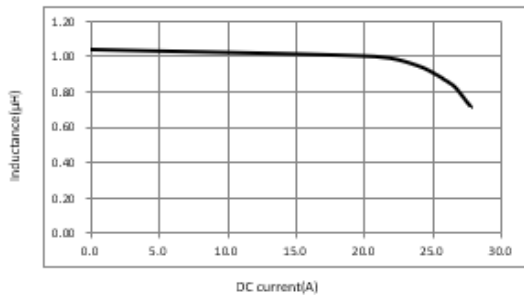
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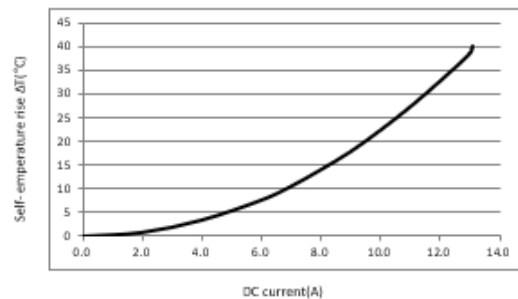
(Ni Type)

*SPL12080-1R0N

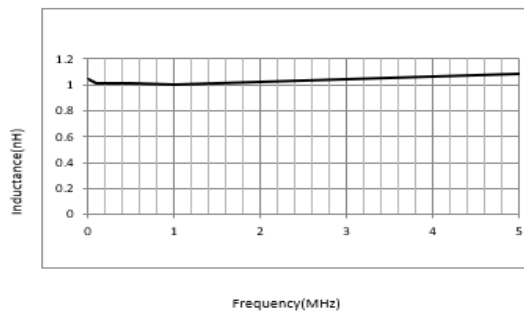
Inductance vs DC current



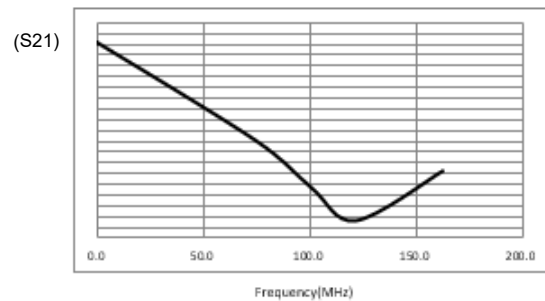
DC current vs Temperature



Inductance vs Frequency

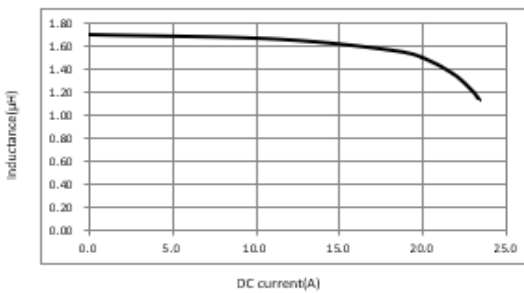


SRF(Self Resonance Frequency)

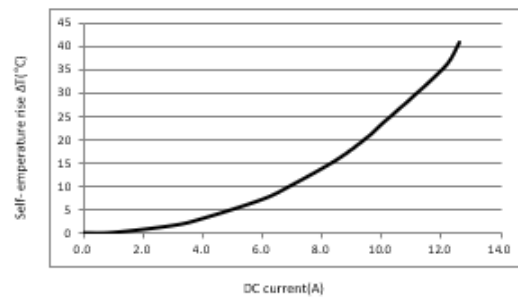


*SPL12080-1R8N

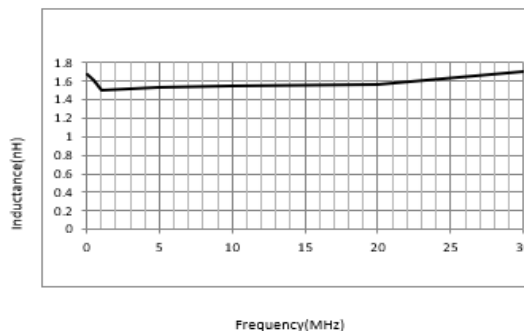
Inductance vs DC current



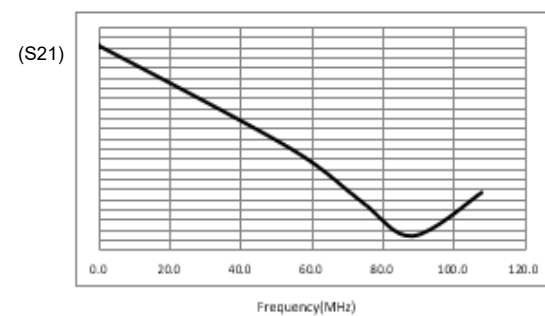
DC current vs Temperature



Inductance vs Frequency



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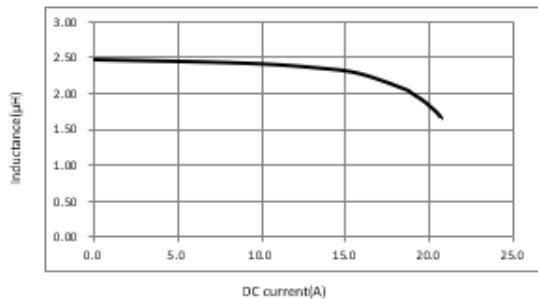
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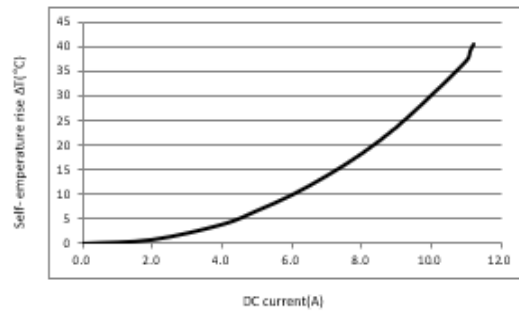
(Ni Type)

*SPL12080-2R2N

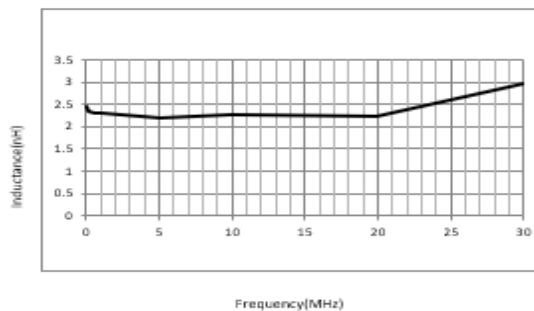
Inductance vs DC current



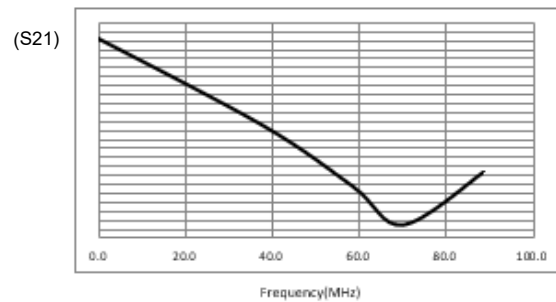
DC current vs Temperature



Inductance vs Frequency

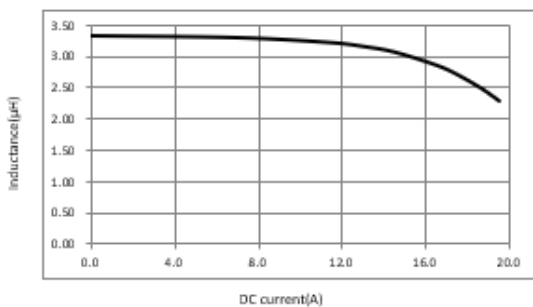


SRF(Self Resonance Frequency)

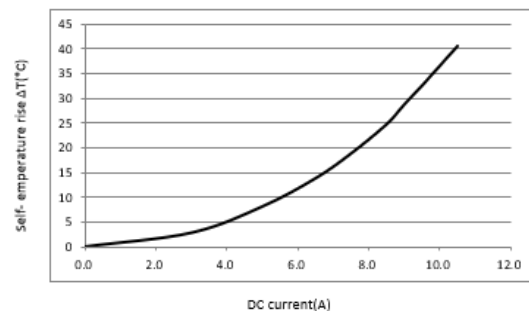


*SPL12080-3R3N

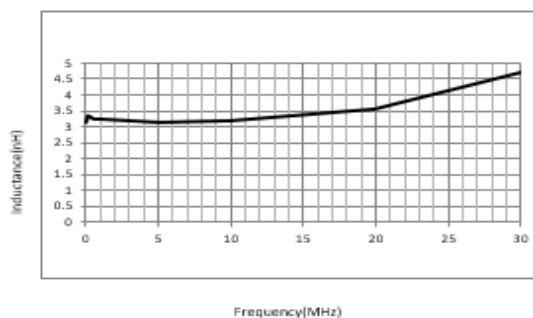
Inductance vs DC current



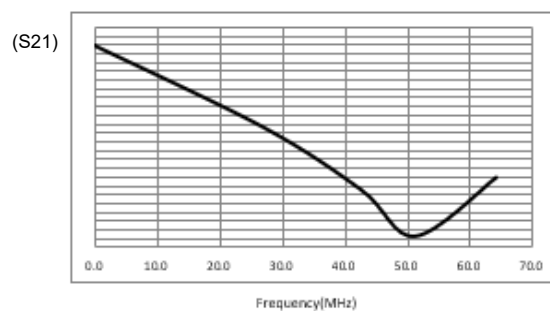
DC current vs Temperature



Inductance vs Frequency



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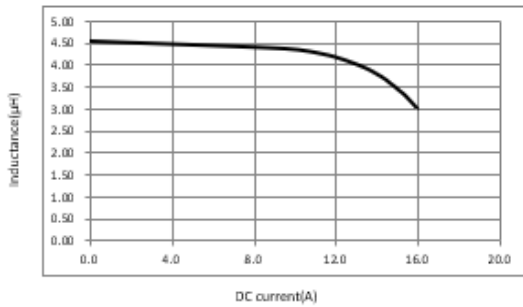
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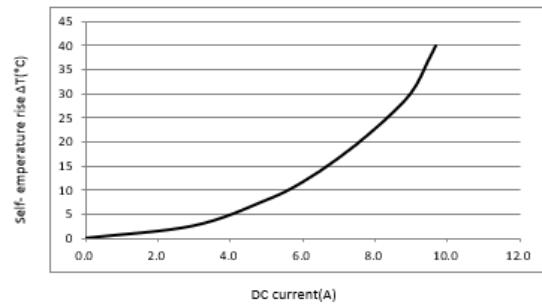
(Ni Type)

*SPL12080-4R7M

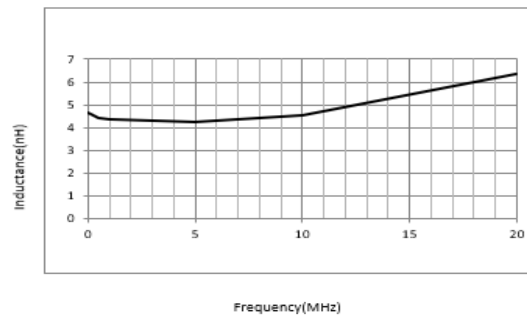
Inductance vs DC current



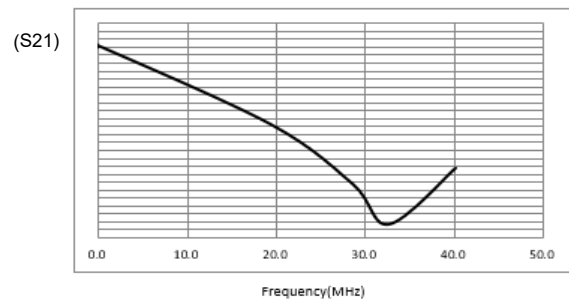
DC current vs Temperature



Inductance vs Frequency

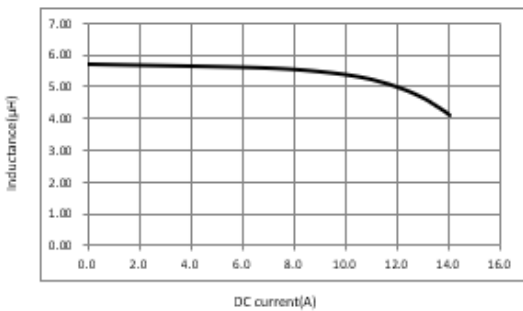


SRF(Self Resonance Frequency)

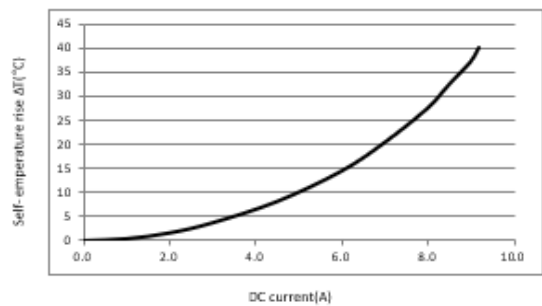


*SPL12080-5R6M

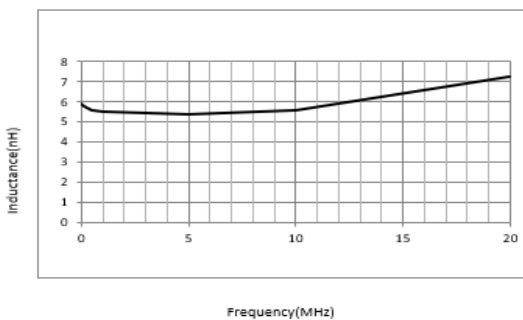
Inductance vs DC current



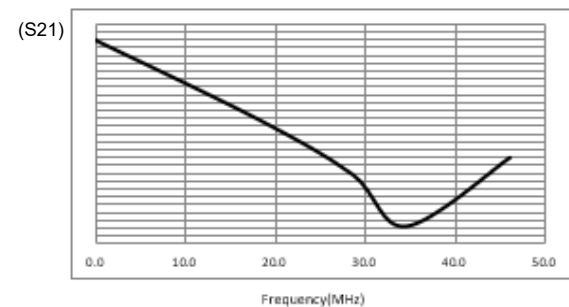
DC current vs Temperature



Inductance vs Frequency



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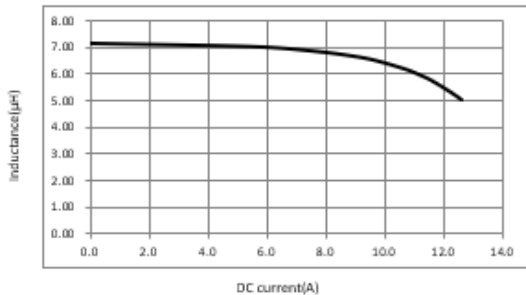
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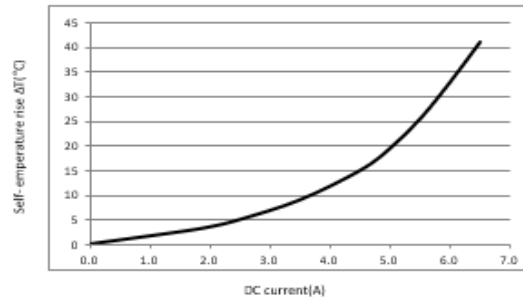
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*SPL12080-6R8M

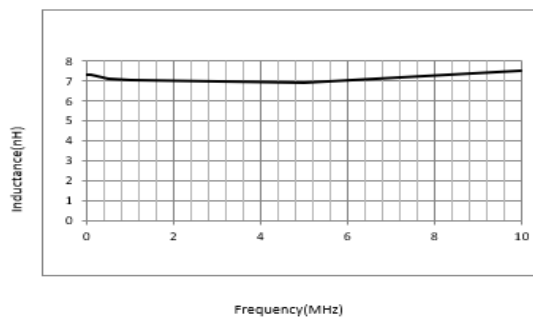
Inductance vs DC current



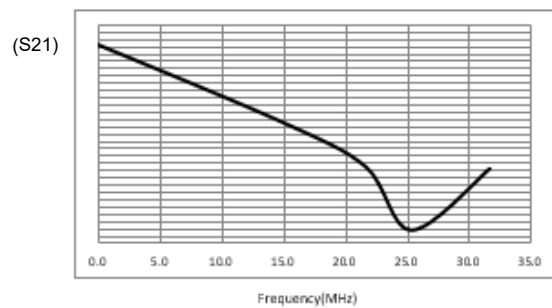
DC current vs Temperature



Inductance vs Frequency

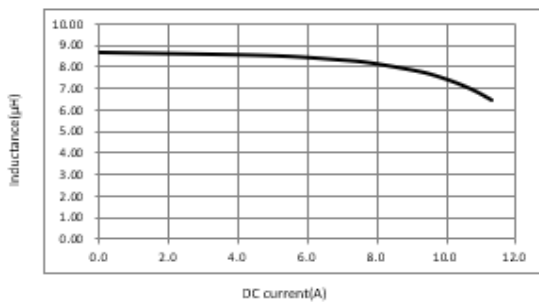


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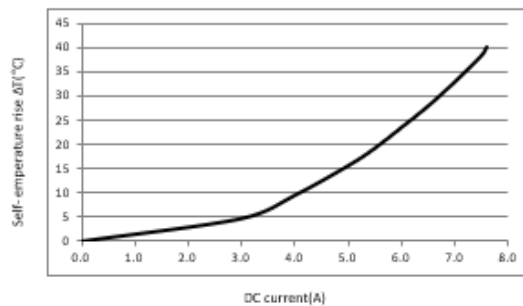


*SPL12080-8R2M

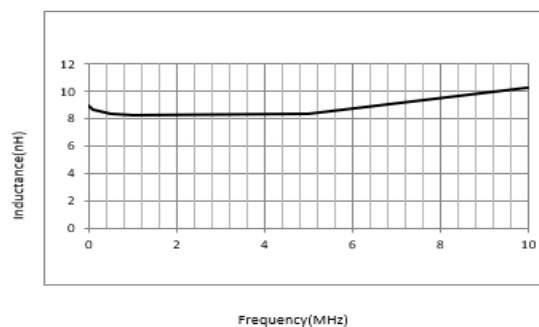
Inductance vs DC current



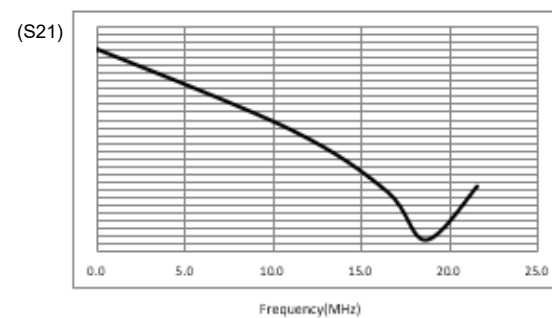
DC current vs Temperature



Inductance vs Frequency



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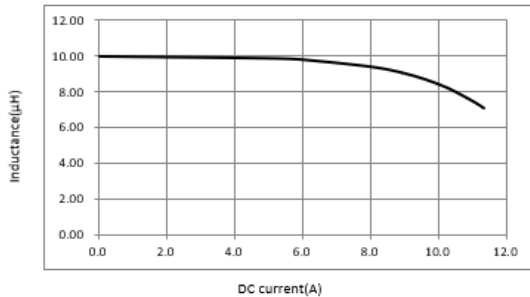
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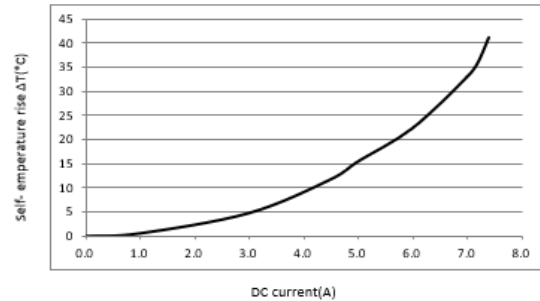
(Ni Type)

*SPL12080-100M

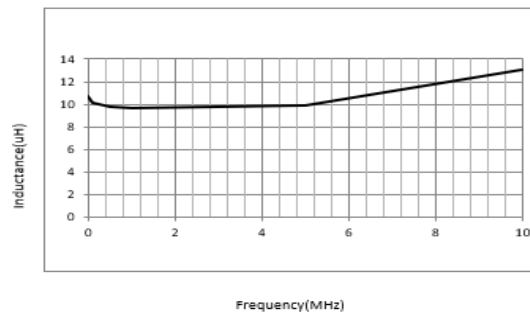
Inductance vs DC current



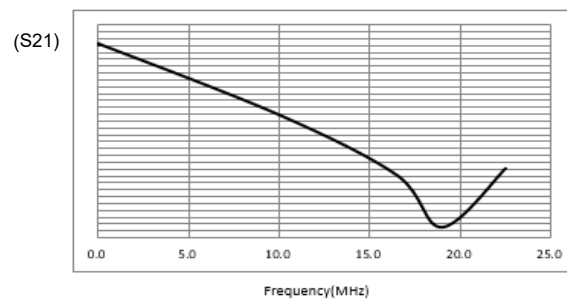
DC current vs Temperature



Inductance vs Frequency

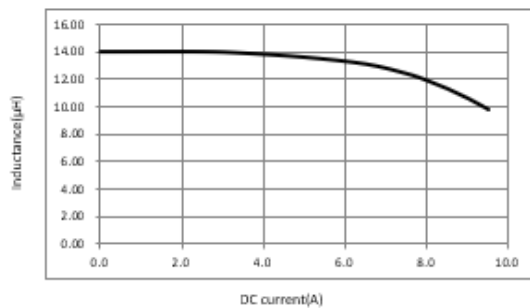


SRF(Self Resonance Frequency)

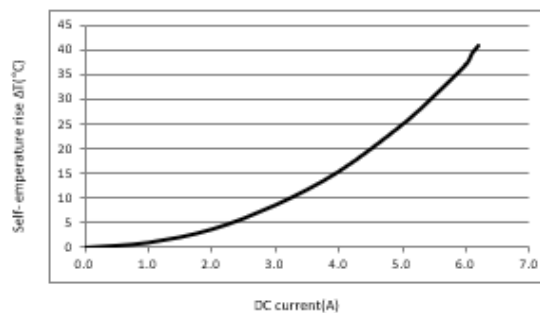


*SPL12080-150M

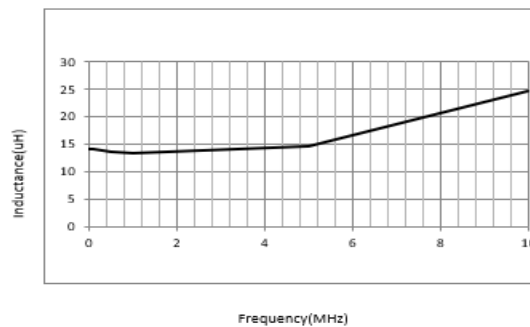
Inductance vs DC current



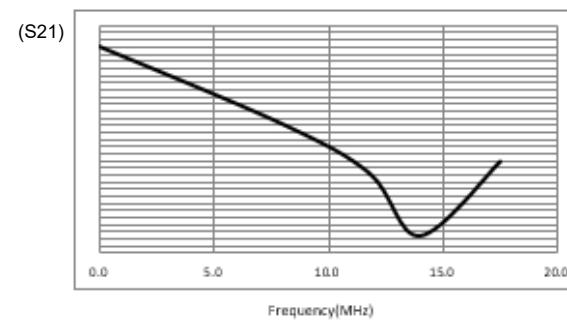
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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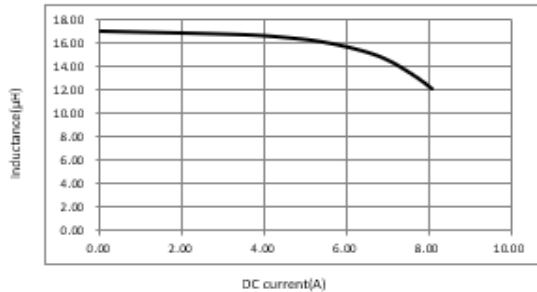
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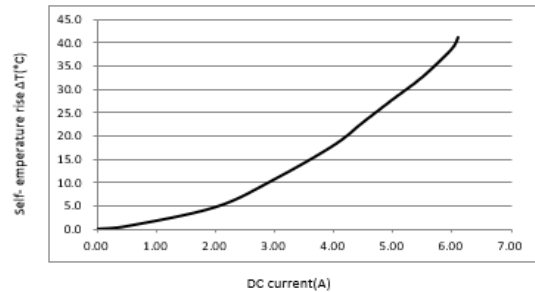
(Ni Type)

*SPL12080-180M

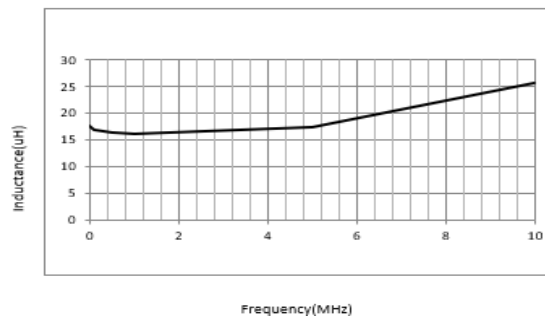
Inductance vs DC current



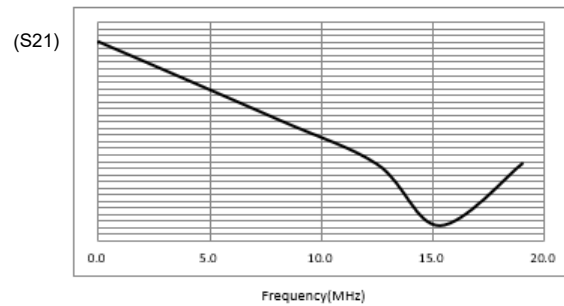
DC current vs Temperature



Inductance vs Frequency

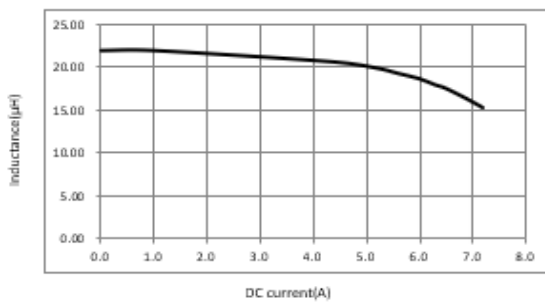


SRF(Self Resonance Frequency)

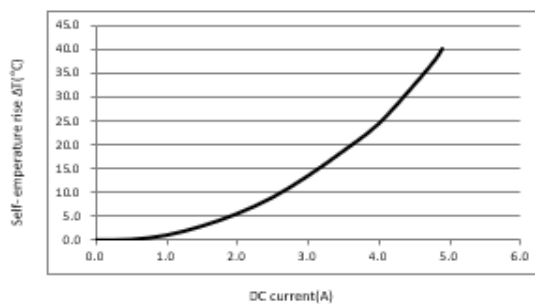


*SPL12080-220M

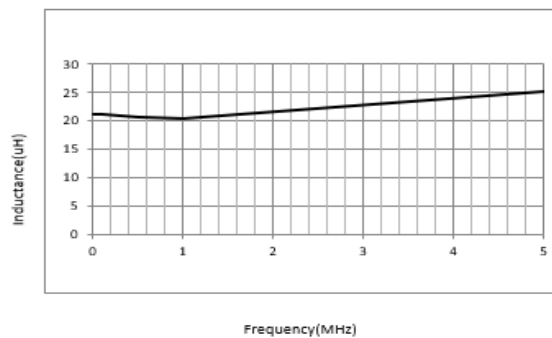
Inductance vs DC current



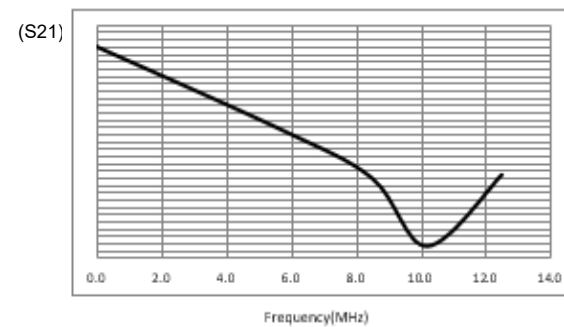
DC current vs Temperature



Inductance vs Frequency



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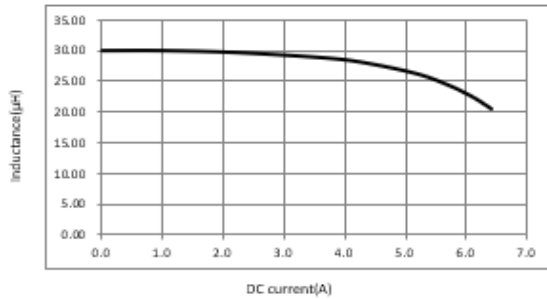
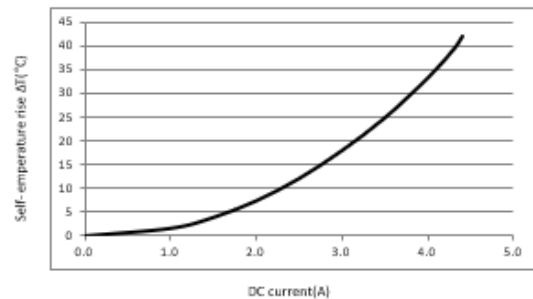
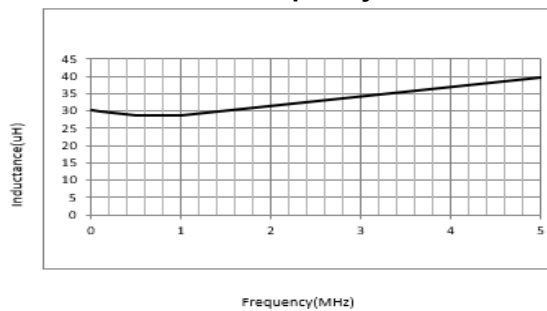
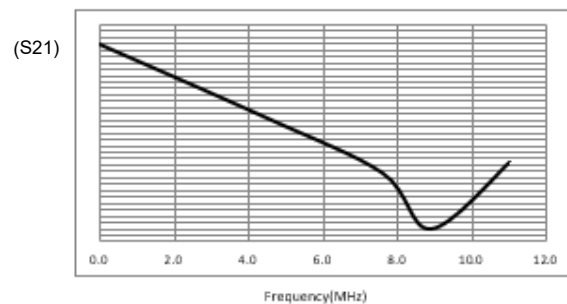
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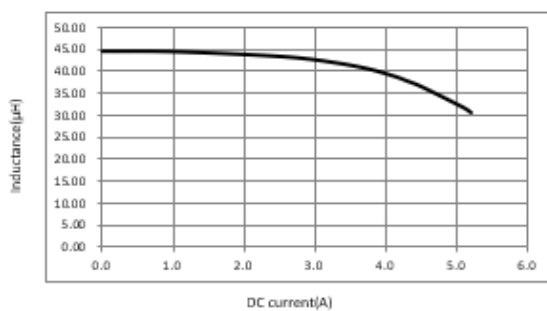
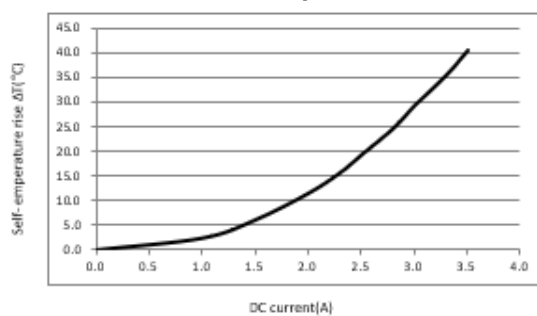
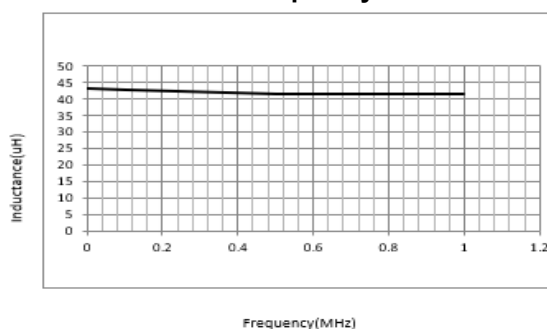
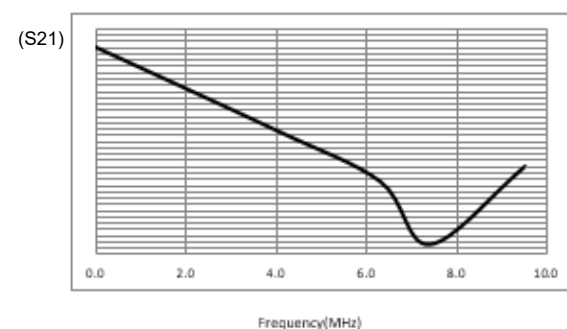
SPL12080

(Ni Type)

*SPL12080-330M

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

*SPL12080-470M

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

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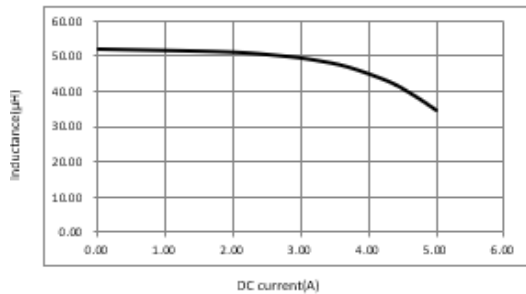
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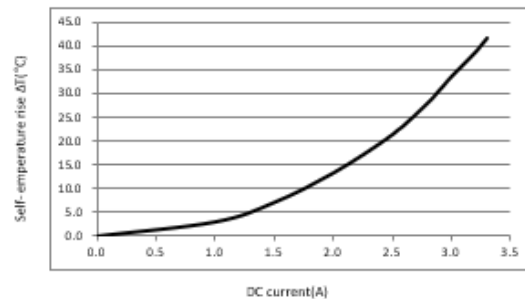
(Ni Type)

*SPL12080-560M

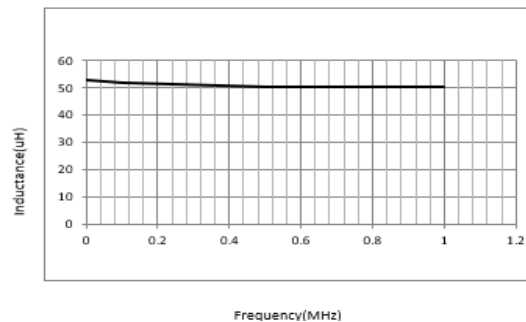
Inductance vs DC current



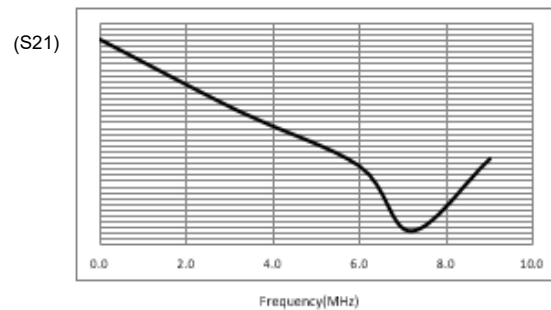
DC current vs Temperature



Inductance vs Frequency

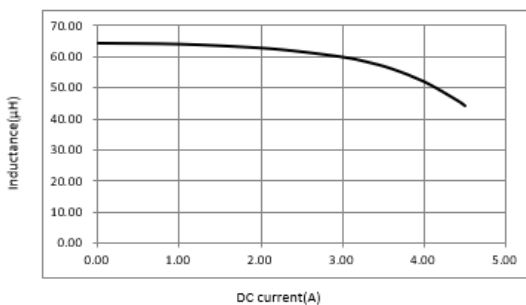


SRF(Self Resonance Frequency)

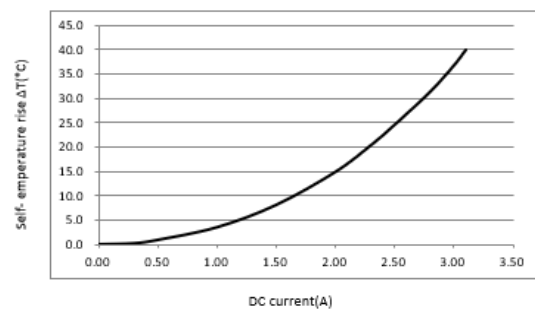


*SPL12080-680M

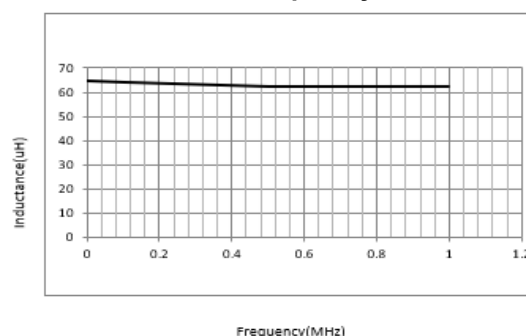
Inductance vs DC current



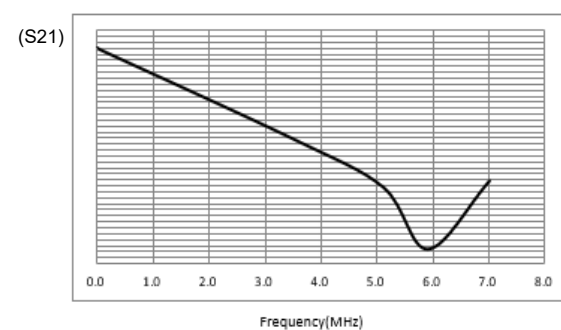
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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Revised 10/18/21

SMD Power Inductors

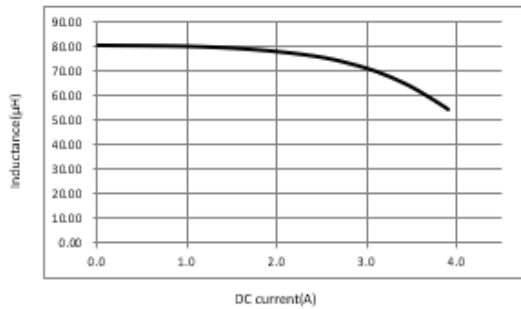
Fixed Inductor for Surface Mounting

SPL12080

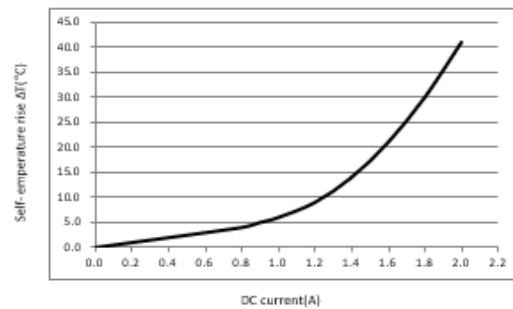
(Ni Type)

*SPL12080-820M

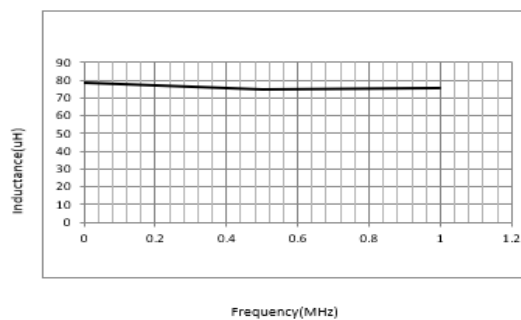
Inductance vs DC current



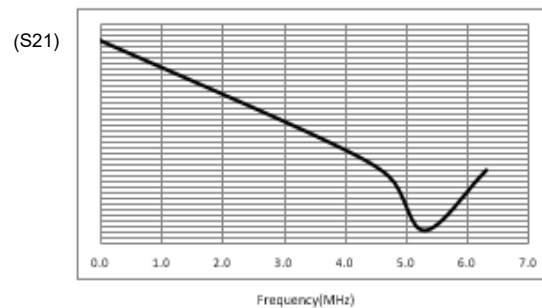
DC current vs Temperature



Inductance vs Frequency

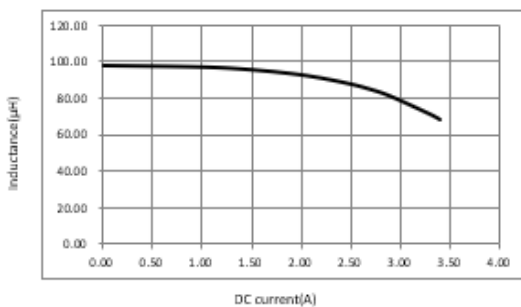


SRF(Self Resonance Frequency)

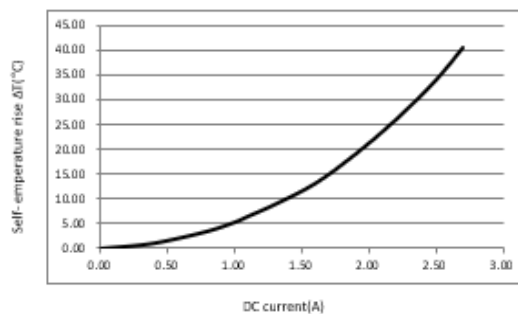


*SPL12080-101M

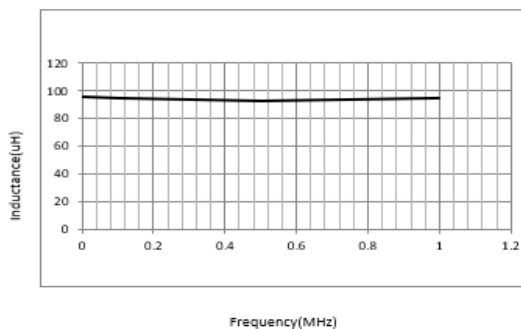
Inductance vs DC current



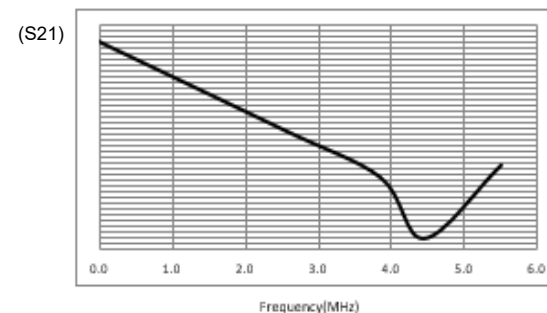
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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Revised 10/18/21

SMD Power Inductors

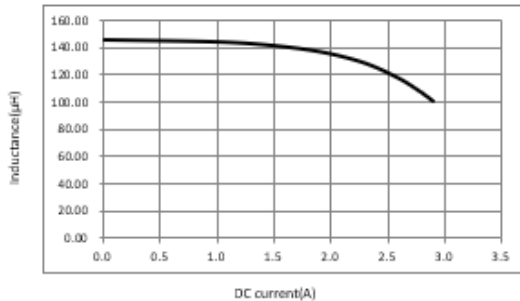
Fixed Inductor for Surface Mounting

SPL12080

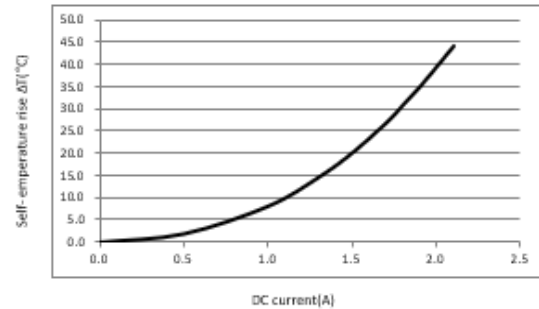
(Ni Type)

*SPL12080-151M

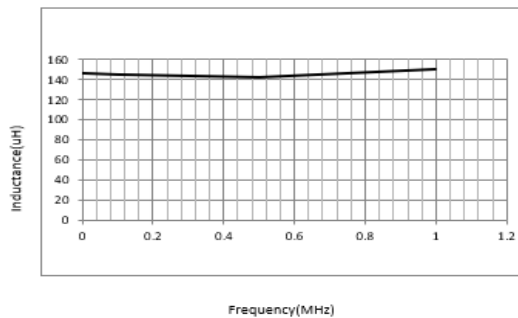
Inductance vs DC current



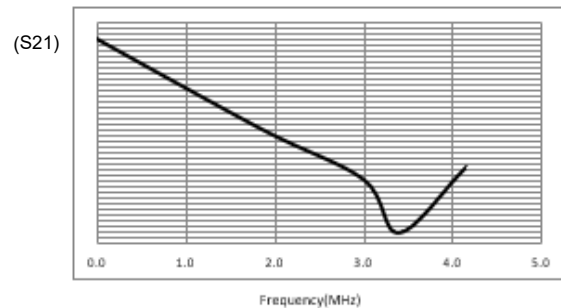
DC current vs Temperature



Inductance vs Frequency

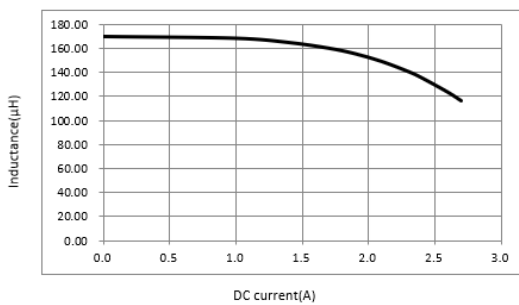


SRF(Self Resonance Frequency)

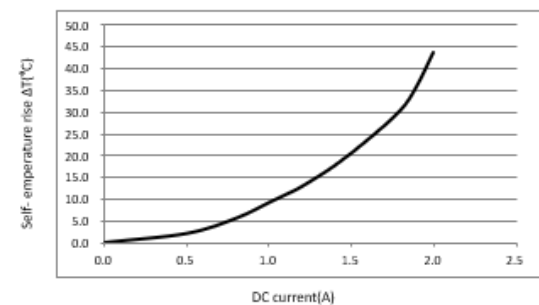


*SPL12080-181M

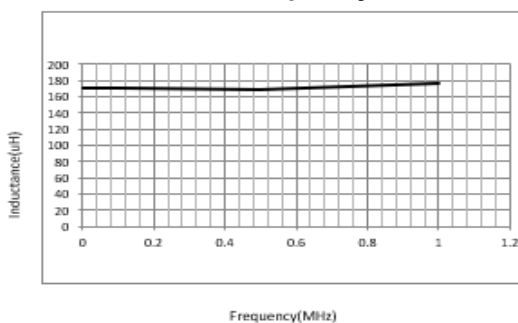
Inductance vs DC current



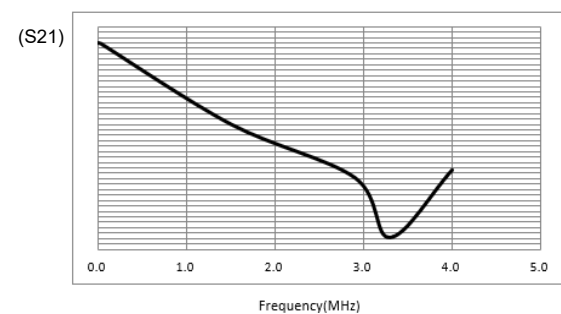
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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SMD Power Inductors

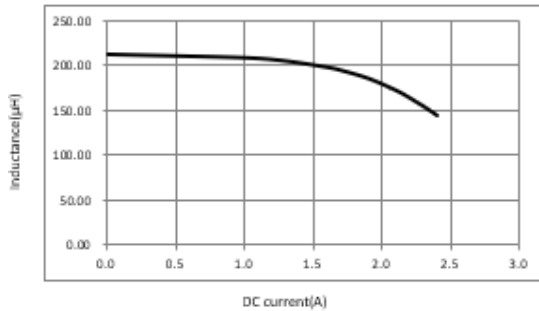
Fixed Inductor for Surface Mounting

SPL12080

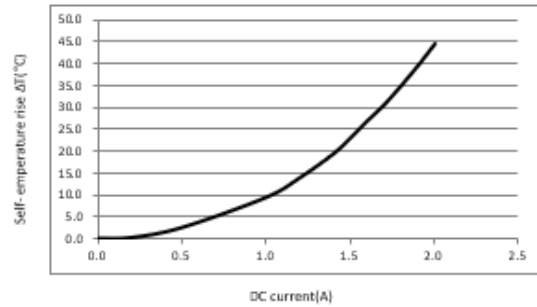
(Ni Type)

*SPL12080-221M

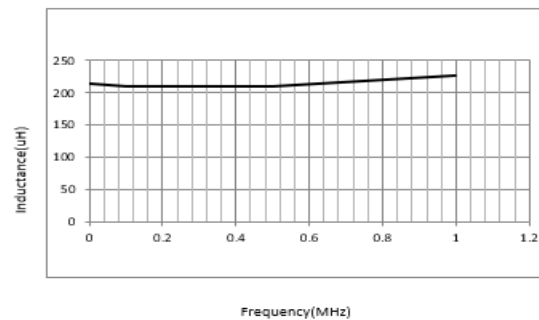
Inductance vs DC current



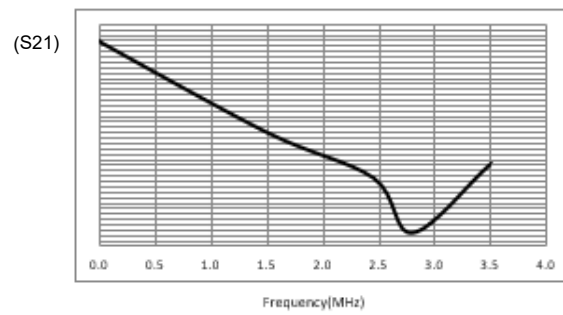
DC current vs Temperature



Inductance vs Frequency

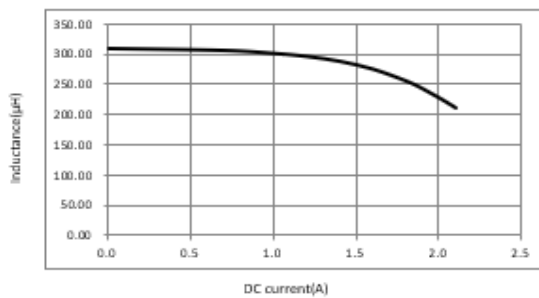


SRF(Self Resonance Frequency)

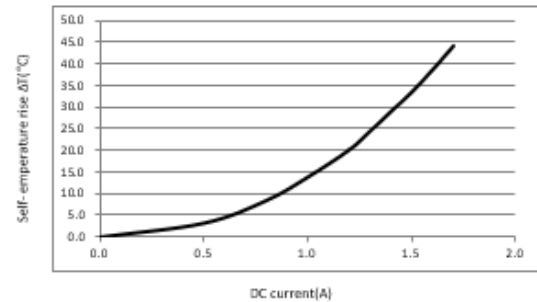


*SPL12080-331M

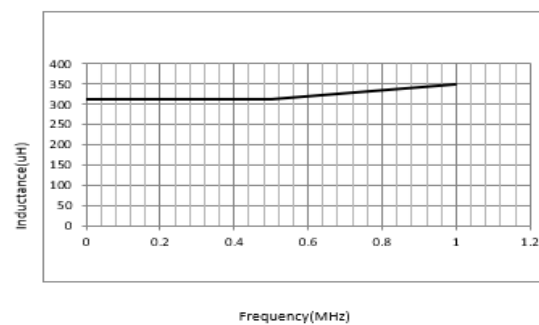
Inductance vs DC current



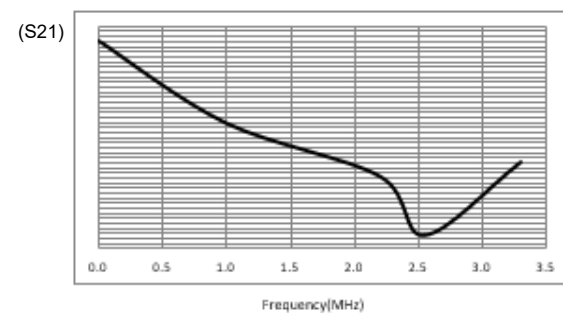
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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SMD Power Inductors

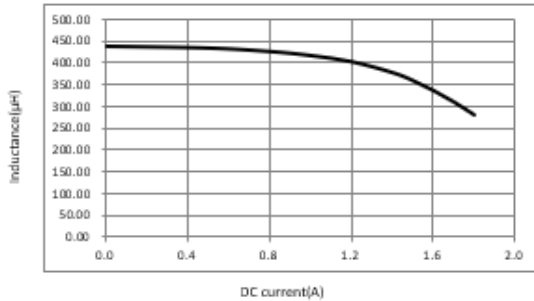
Fixed Inductor for Surface Mounting

SPL12080

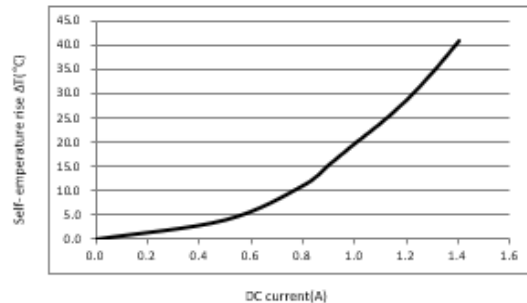
(Ni Type)

*SPL12080-471M

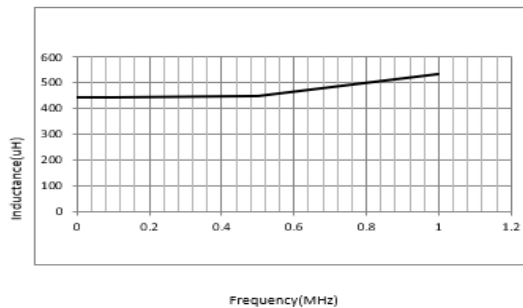
Inductance vs DC current



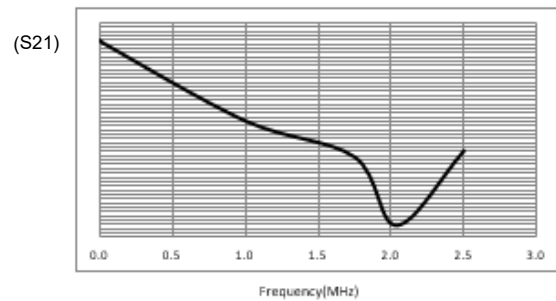
DC current vs Temperature



Inductance vs Frequency

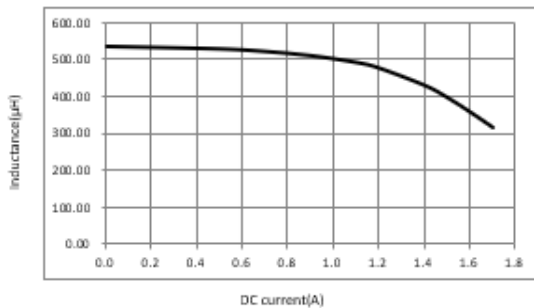


SRF(Self Resonance Frequency)

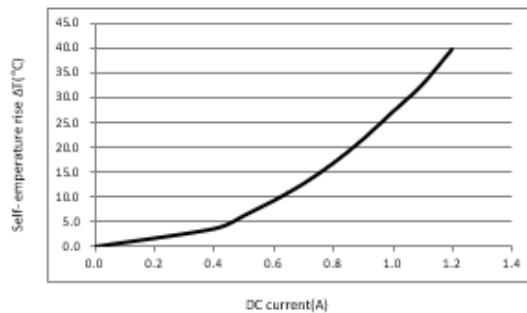


*SPL12080-561M

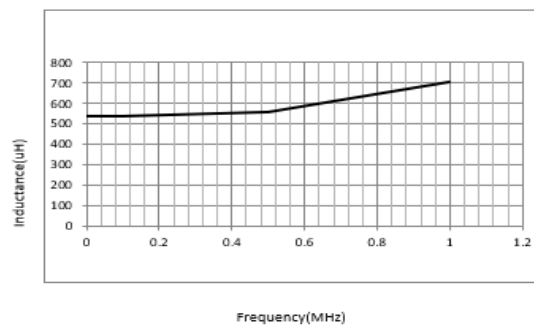
Inductance vs DC current



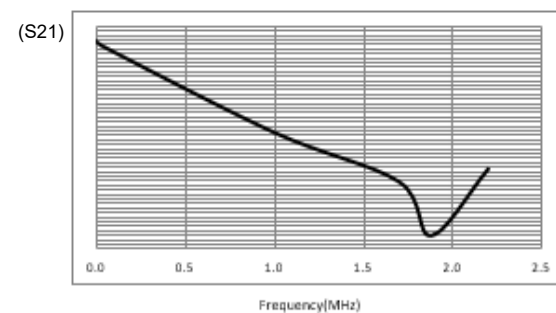
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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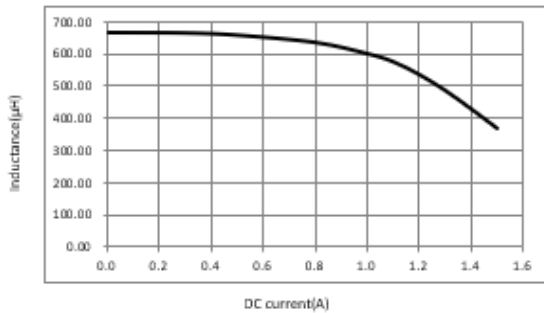
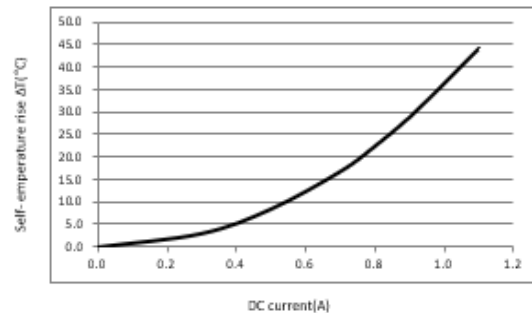
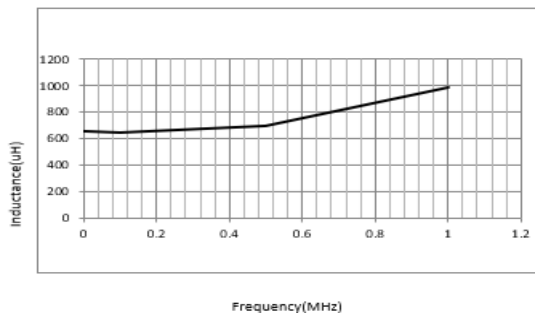
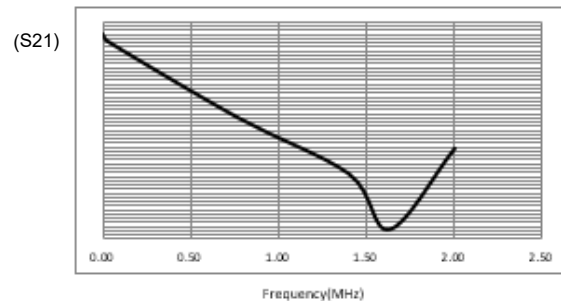
SMD Power Inductors

Fixed Inductor for Surface Mounting

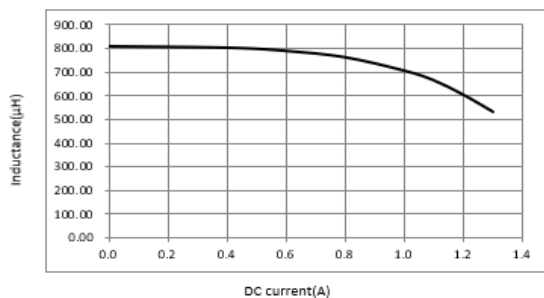
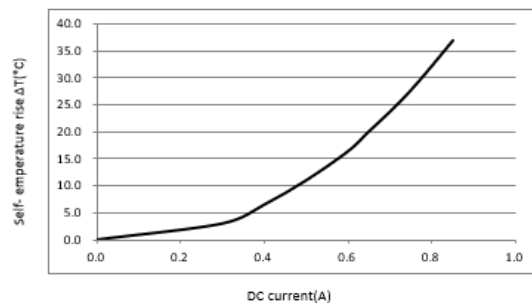
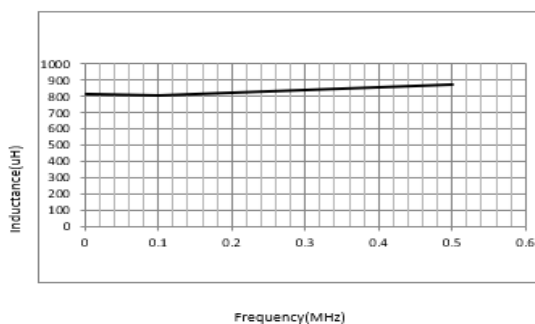
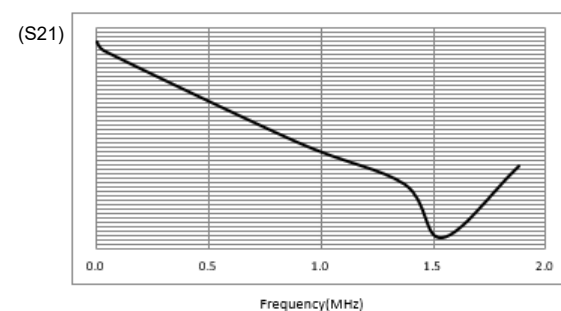
SPL12080

(Ni Type)

*SPL12080-681M

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

*SPL12080-821M

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

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SMD Power Inductors

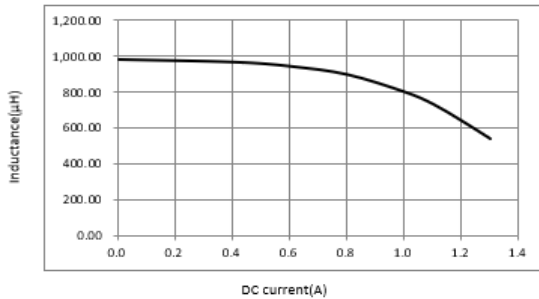
Fixed Inductor for Surface Mounting

SPL12080

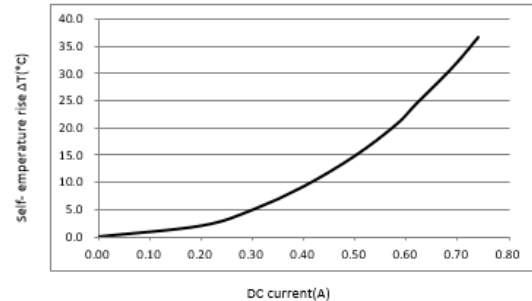
(Ni Type)

*SPL12080-102M

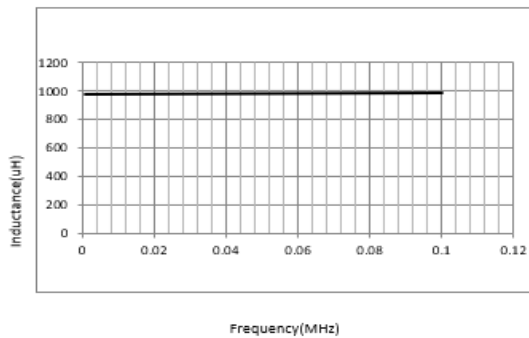
Inductance vs DC current



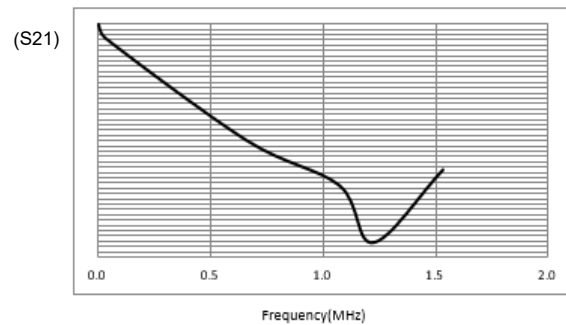
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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