

SMD Power Inductors

Fixed Inductor for Surface Mounting

SPL10080

(Mn Type)

Construction

- Ferrite core
- Shielded construction



Features

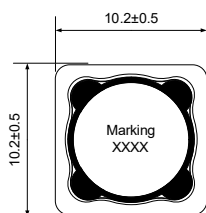
- Operating temperature -40 ~ +125°C
- Qualified to AEC-Q200
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



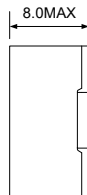
Applications

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

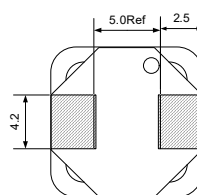
Dimensions(Unit:mm)



TOP VIEW

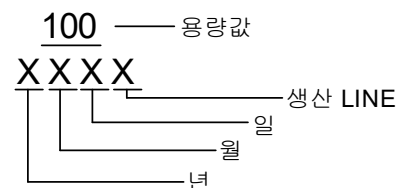
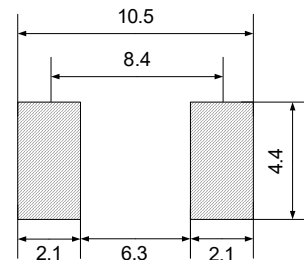


SIDE VIEW



BOTTOM VIEW

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
SPL10080-3R3N-M	3.3±30%	12.0	21.0	20.0	8.40	3R3 XXXX
SPL10080-4R7M-M	4.7±20%	15.0	17.5	16.0	7.90	4R7 XXXX
SPL10080-5R6M-M	5.6±20%	18.5	16.5	15.8	7.20	5R6 XXXX
SPL10080-6R8M-M	6.8±20%	20.0	14.8	13.2	6.85	6R8 XXXX
SPL10080-8R2M-M	8.2±20%	21.5	13.6	12.5	6.60	8R2 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

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

Revised 10/18/21

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Ordering code	Inductance range (μH)	DCR(mΩ,±30%)	Isat*1(A,TYP)	Isat*1(A,MAX)	Irms*2(A,MAX)	Marking
SPL10080-100M-M	10±20%	24.0	12.6	12.0	6.48	100 XXXX
SPL10080-150M-M	15±20%	32.0	9.8	8.8	5.50	150 XXXX
SPL10080-220M-M	22±20%	58.0	8.6	8.0	3.80	220 XXXX
SPL10080-330M-M	33±20%	75.0	7.0	6.3	3.00	330 XXXX
SPL10080-470M-M	47±20%	103	5.9	5.5	2.60	470 XXXX
SPL10080-560M-M	56±20%	129	5.5	5.1	2.35	560 XXXX
SPL10080-680M-M	68±20%	145	5.1	4.7	2.20	680 XXXX
SPL10080-820M-M	82±20%	185	4.5	4.2	2.10	820 XXXX
SPL10080-101M-M	100±20%	200	4.0	3.6	1.95	101 XXXX
SPL10080-151M-M	150±20%	310	3.3	3.0	1.46	151 XXXX
SPL10080-221M-M	220±20%	440	2.7	2.5	1.15	221 XXXX
SPL10080-331M-M	330±20%	660	2.2	2.0	1.00	331 XXXX
SPL10080-471M-M	470±20%	945	1.9	1.6	0.92	471 XXXX
SPL10080-561M-M	560±20%	1.04	1.7	1.4	0.85	561 XXXX
SPL10080-681M-M	680±20%	1.30	1.5	1.2	0.78	681 XXXX
SPL10080-821M-M	820±20%	1.55	1.3	1.1	0.68	821 XXXX
SPL10080-102M-M	1,000±20%	2.07	1.2	0.95	0.50	102 XXXX

※Test Equipment

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SMD Power Inductors

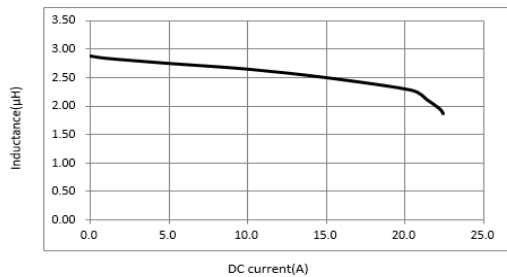
Fixed Inductor for Surface Mounting

SPL10080

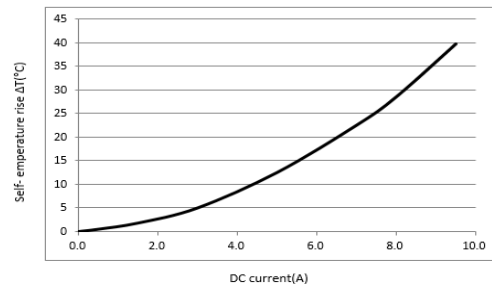
(Mn Type)

*SPL10080-3R3N-M

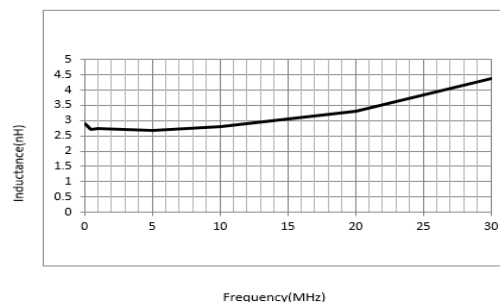
Inductance vs DC current



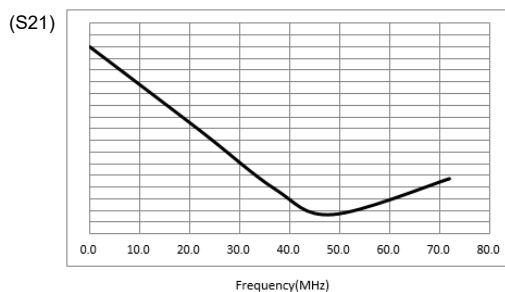
DC current vs Temperature



Inductance vs Frequency

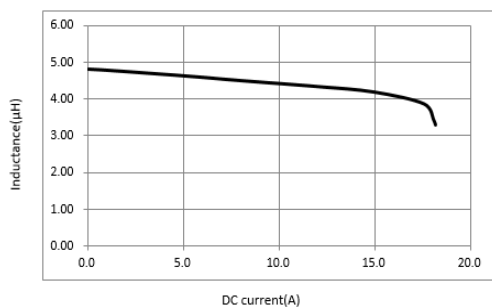


SRF(Self Resonance Frequency)

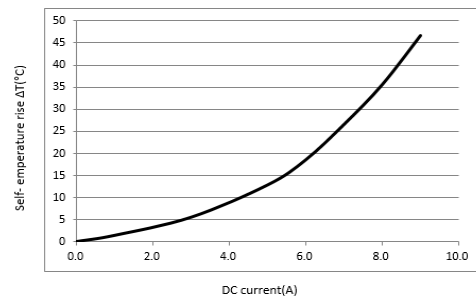


*SPL10080-4R7M-M

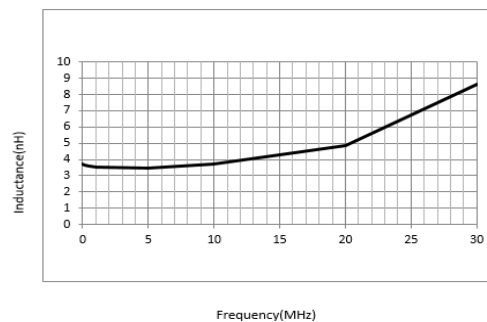
Inductance vs DC current



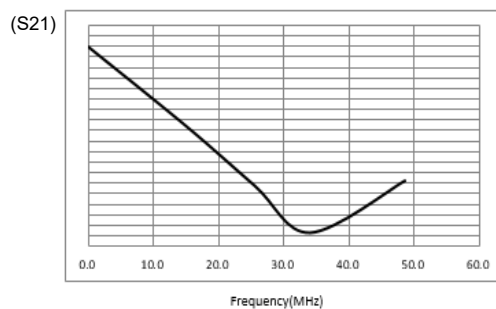
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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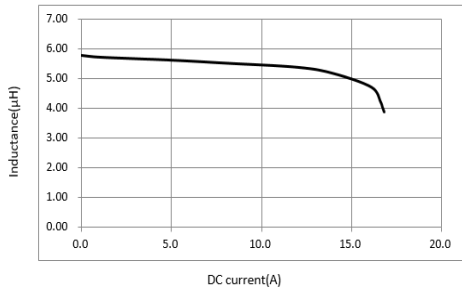
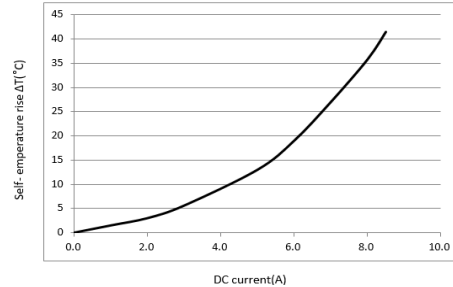
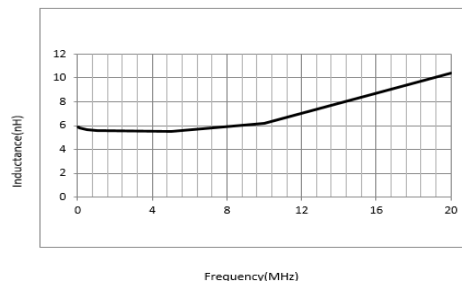
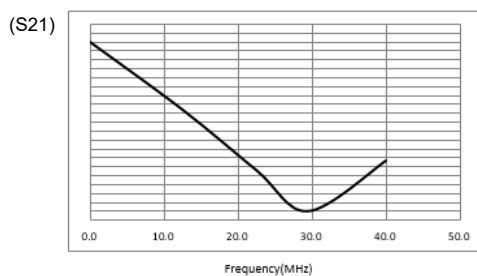
SMD Power Inductors

Fixed Inductor for Surface Mounting

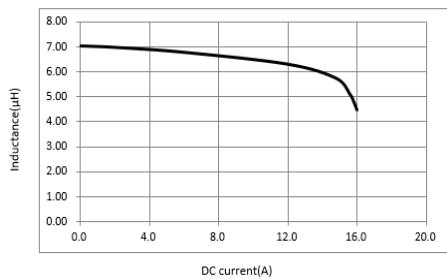
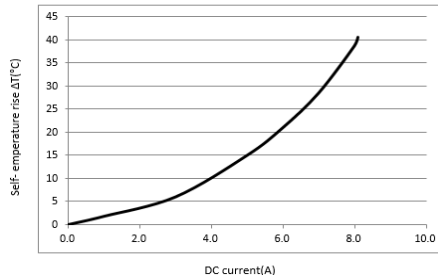
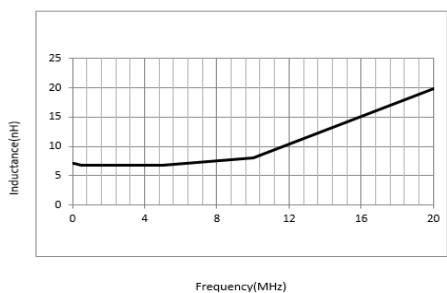
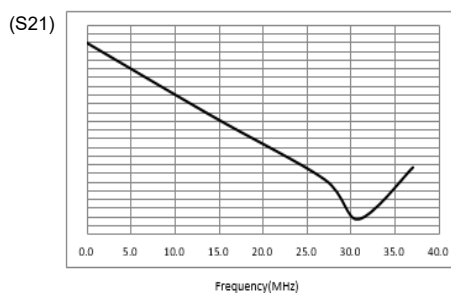
SPL10080

(Mn Type)

*SPL10080-5R6M-M

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

*SPL10080-6R8M-M

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

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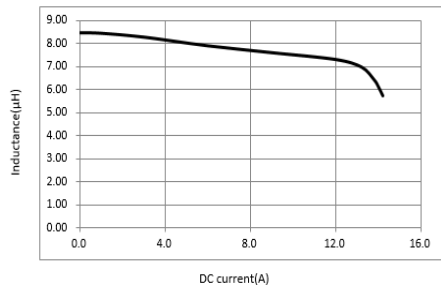
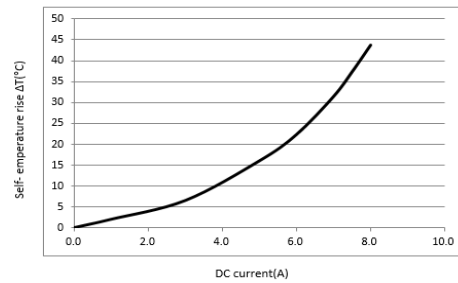
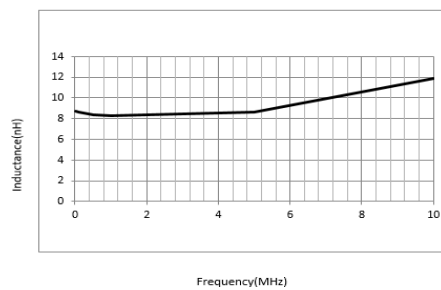
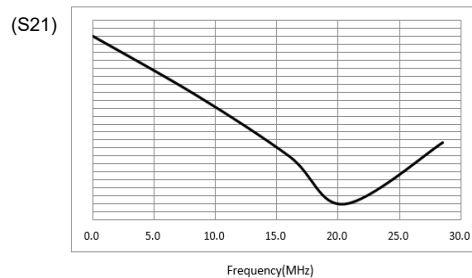
SMD Power Inductors

Fixed Inductor for Surface Mounting

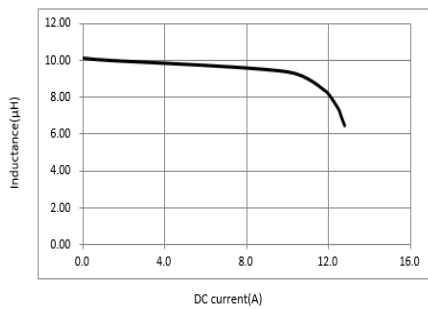
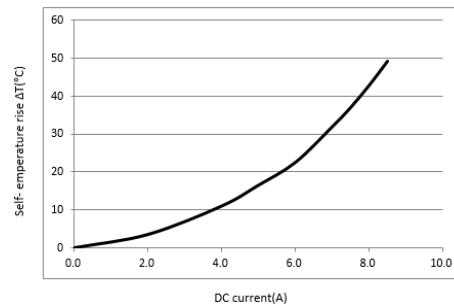
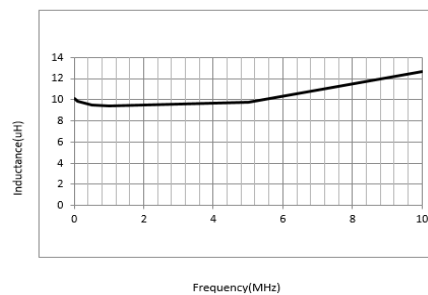
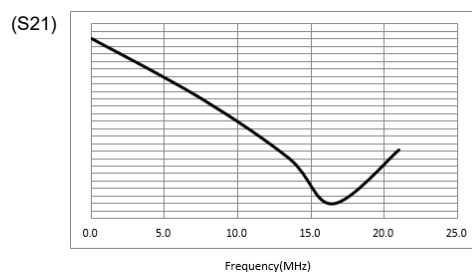
SPL10080

(Mn Type)

*SPL10080-8R2M-M

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

*SPL10080-100M-M

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

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SMD Power Inductors

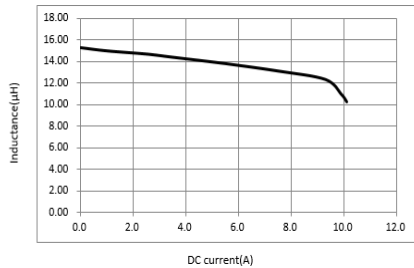
Fixed Inductor for Surface Mounting

SPL10080

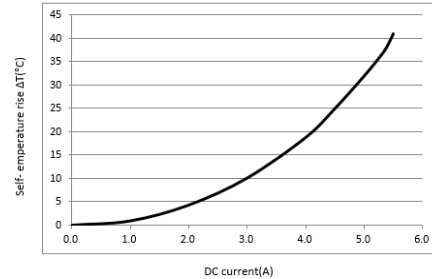
(Mn Type)

*SPL10080-150M-M

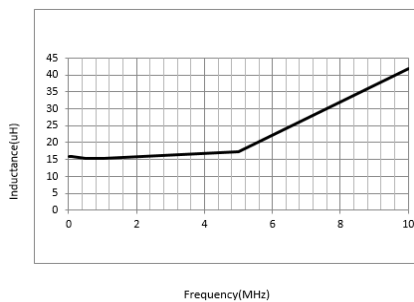
Inductance vs DC current



DC current vs Temperature

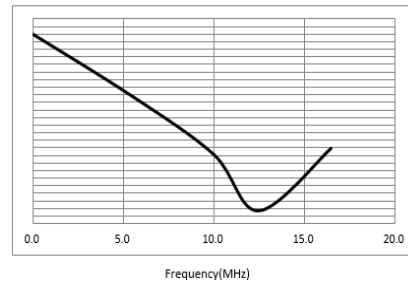


Inductance vs Frequency



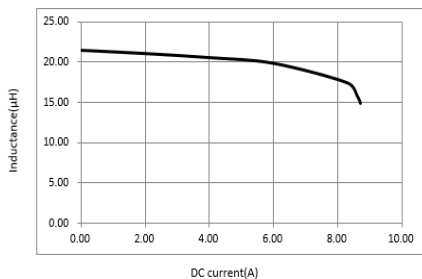
SRF(Self Resonance Frequency)

(S21)

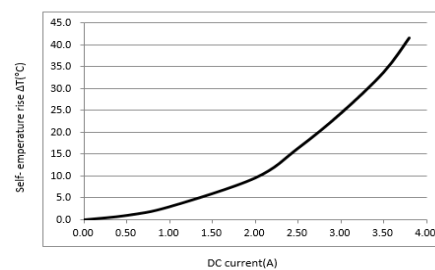


*SPL10080-220M-M

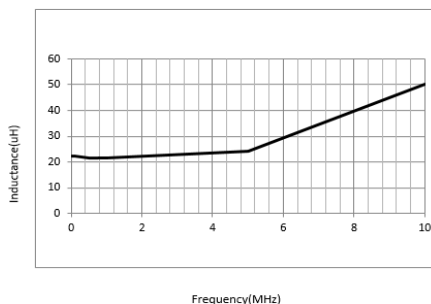
Inductance vs DC current



DC current vs Temperature

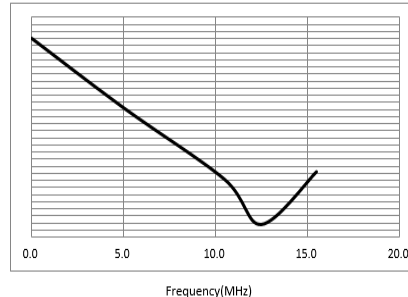


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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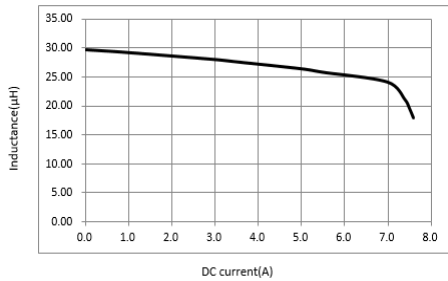
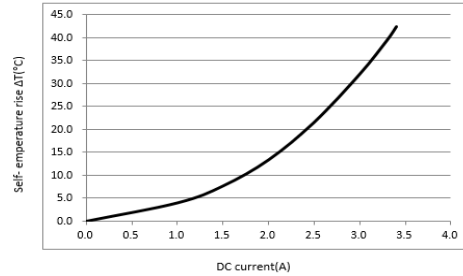
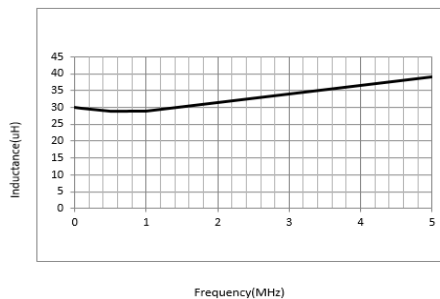
SMD Power Inductors

Fixed Inductor for Surface Mounting

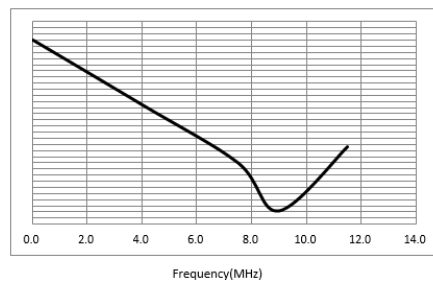
SPL10080

(Mn Type)

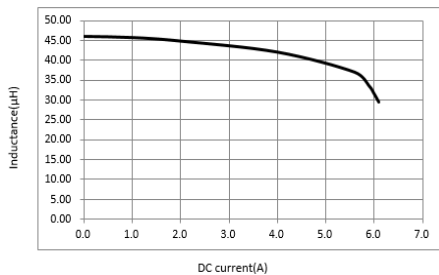
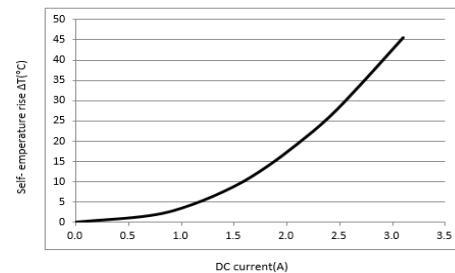
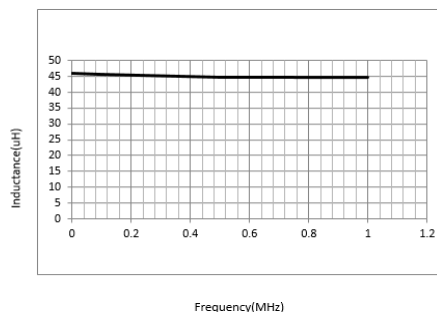
*SPL10080-330M-M

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

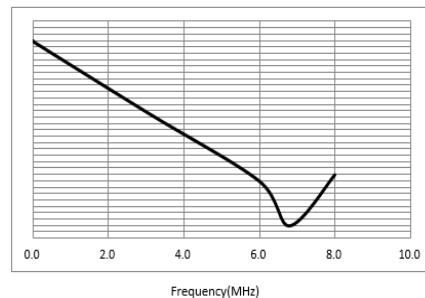
(S21)



*SPL10080-470M-M

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

(S21)



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Revised 10/18/21

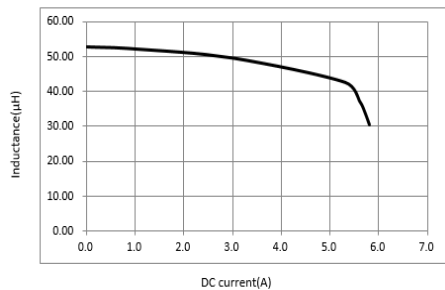
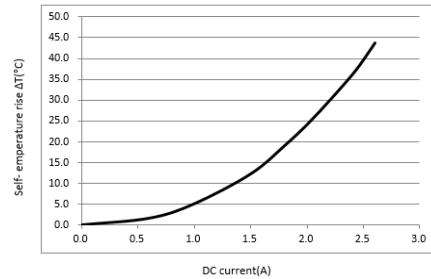
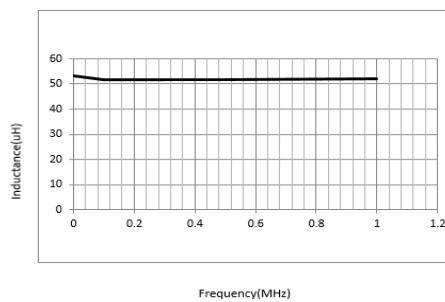
SMD Power Inductors

Fixed Inductor for Surface Mounting

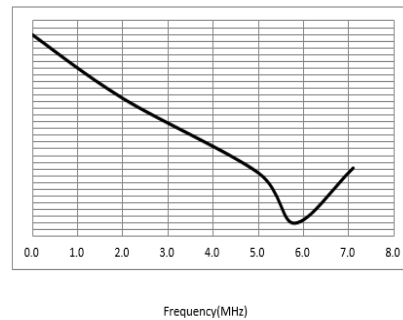
SPL10080

(Mn Type)

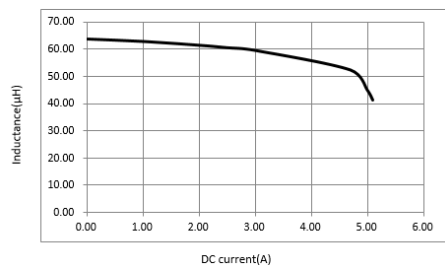
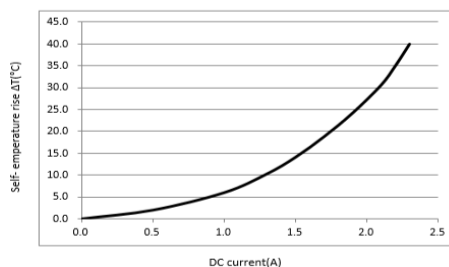
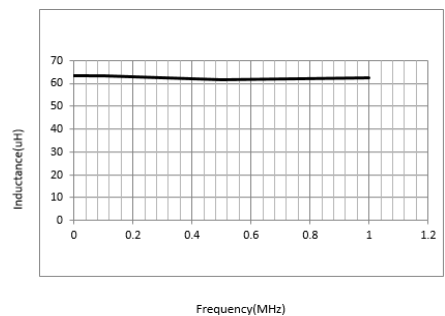
*SPL10080-560M-M

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

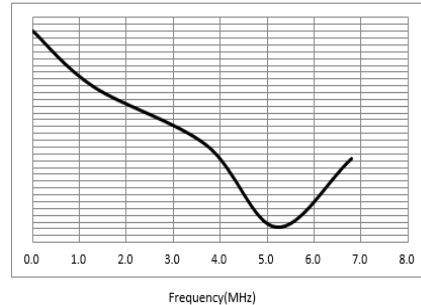
(S21)



*SPL10080-680M-M

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

(S21)



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Revised 10/18/21

SMD Power Inductors

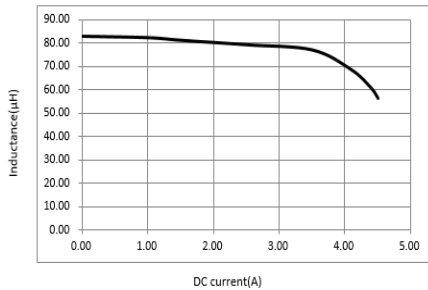
Fixed Inductor for Surface Mounting

SPL10080

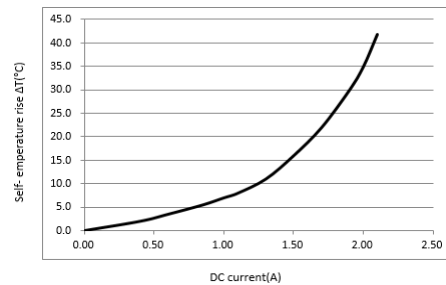
(Mn Type)

*SPL10080-820M-M

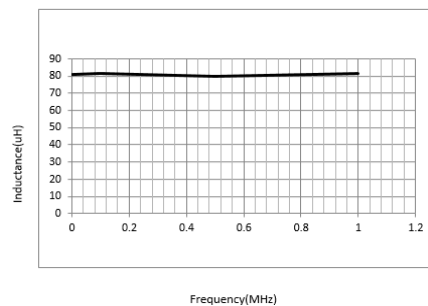
Inductance vs DC current



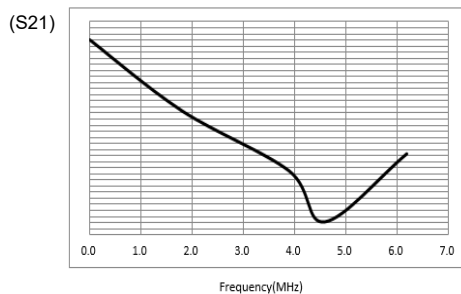
DC current vs Temperature



Inductance vs Frequency

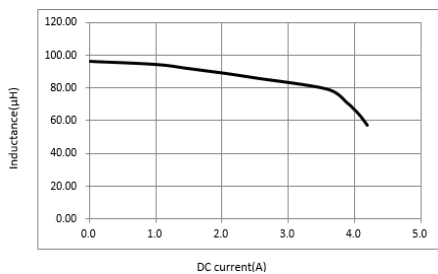


SRF(Self Resonance Frequency)

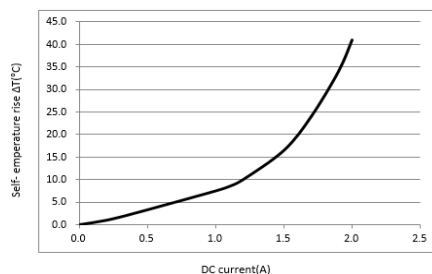


*SPL10080-101M-M

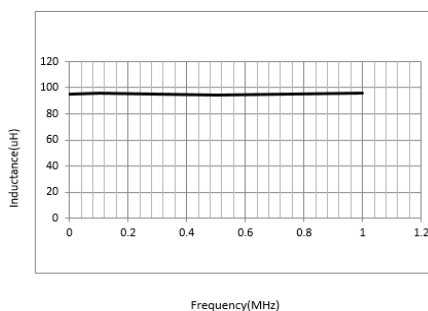
Inductance vs DC current



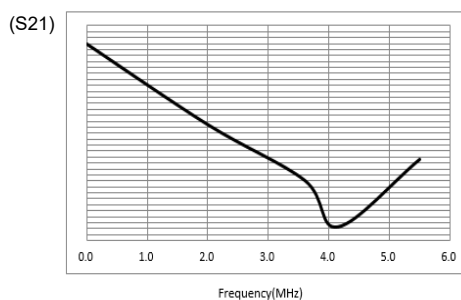
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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Revised 10/18/21

SMD Power Inductors

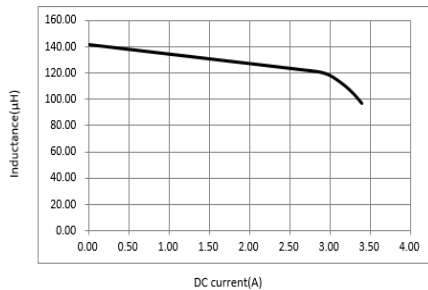
Fixed Inductor for Surface Mounting

SPL10080

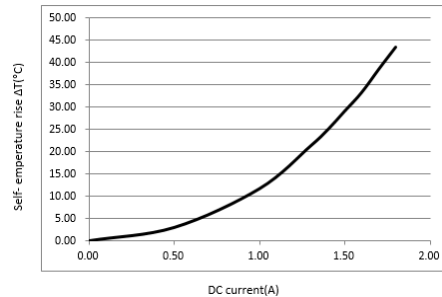
(Mn Type)

*SPL10080-151M-M

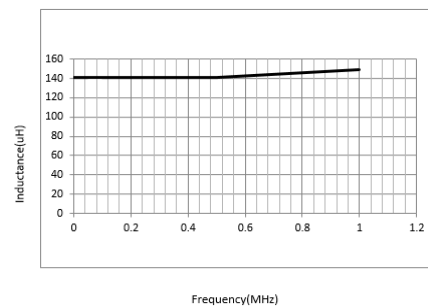
Inductance vs DC current



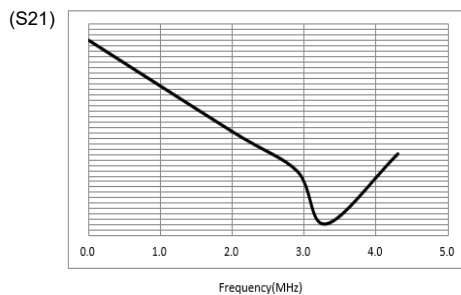
DC current vs Temperature



Inductance vs Frequency

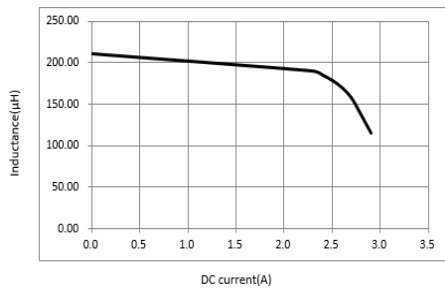


SRF(Self Resonance Frequency)

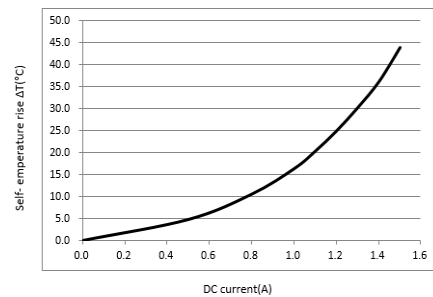


*SPL10080-221M-M

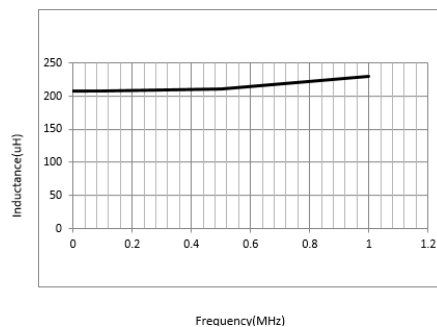
Inductance vs DC current



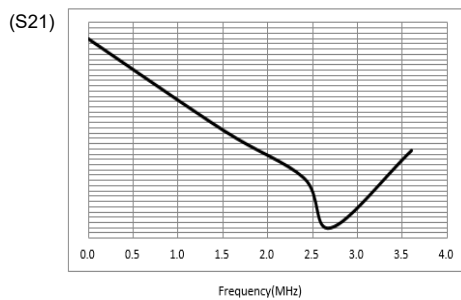
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

SMD Power Inductors

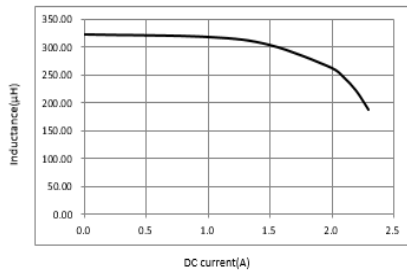
Fixed Inductor for Surface Mounting

SPL10080

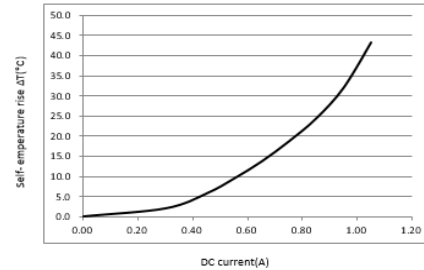
(Mn Type)

*SPL10080-331M-M

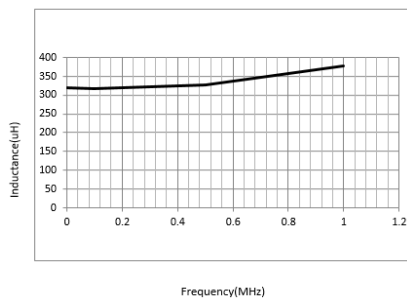
Inductance vs DC current



DC current vs Temperature

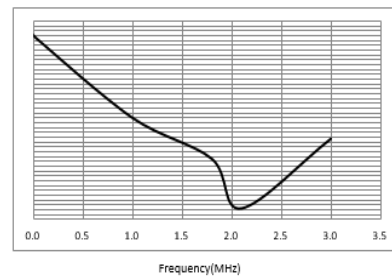


Inductance vs Frequency



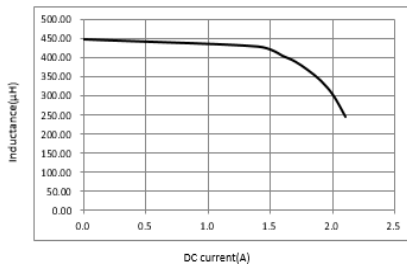
SRF(Self Resonance Frequency)

(S21)

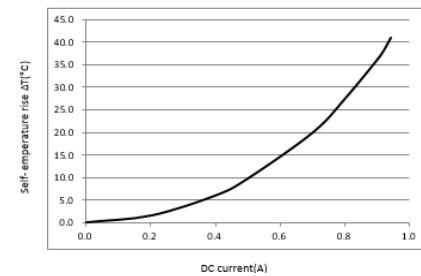


*SPL10080-471M-M

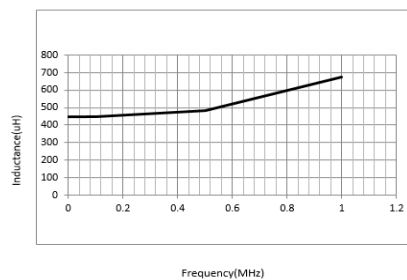
Inductance vs DC current



DC current vs Temperature

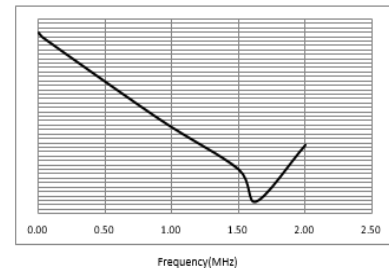


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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Revised 10/18/21

SMD Power Inductors

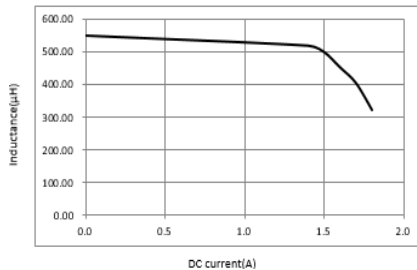
Fixed Inductor for Surface Mounting

SPL10080

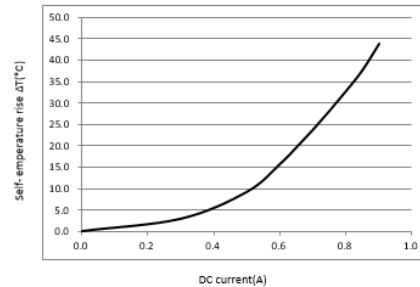
(Mn Type)

*SPL10080-561M-M

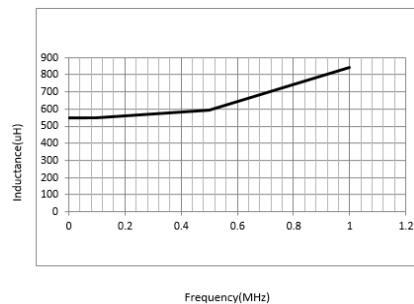
Inductance vs DC current



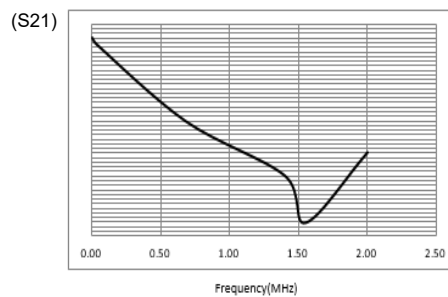
DC current vs Temperature



Inductance vs Frequency

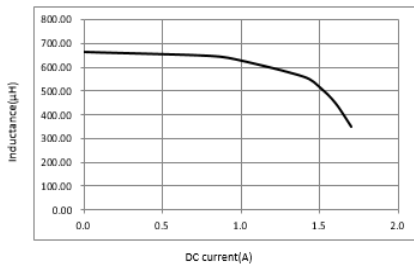


SRF(Self Resonance Frequency)

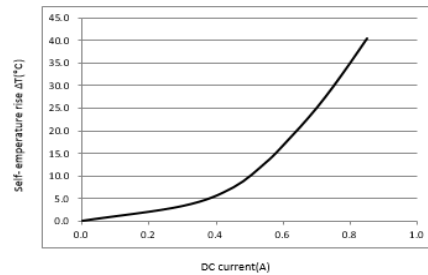


*SPL10080-681M-M

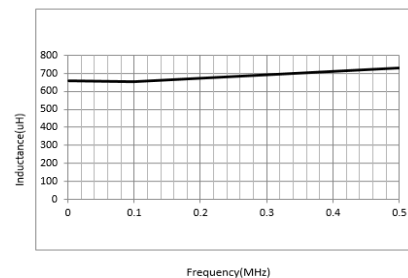
Inductance vs DC current



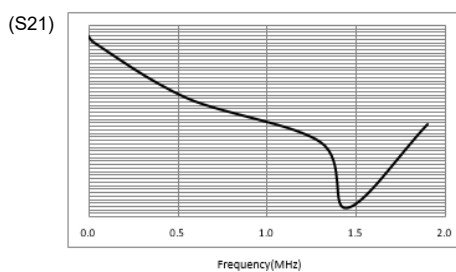
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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Revised 10/18/21

SMD Power Inductors

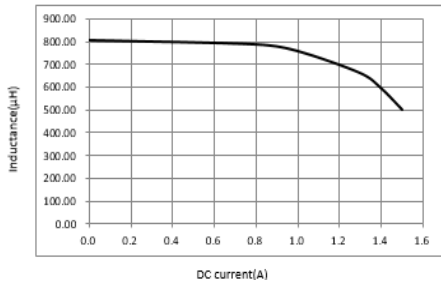
Fixed Inductor for Surface Mounting

SPL10080

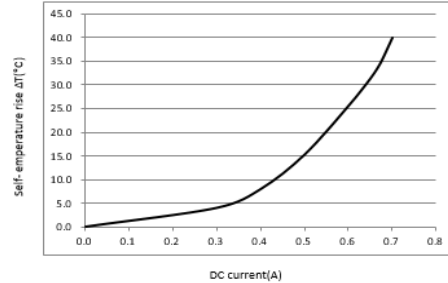
(Mn Type)

*SPL10080-821M-M

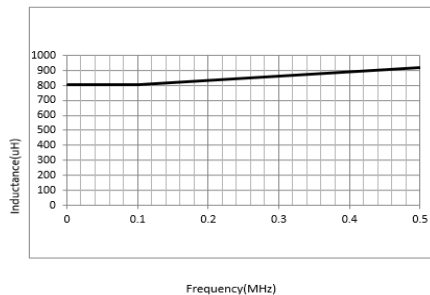
Inductance vs DC current



DC current vs Temperature

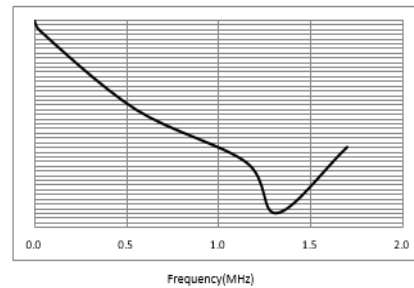


Inductance vs Frequency



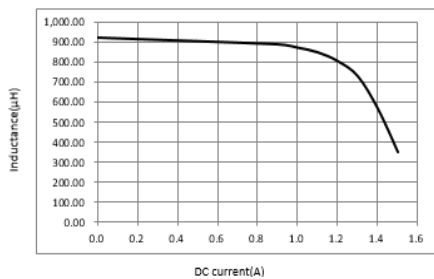
SRF(Self Resonance Frequency)

(S21)

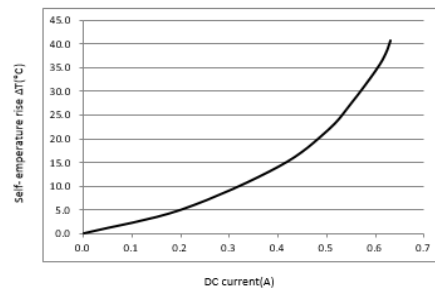


*SPL10080-102M-M

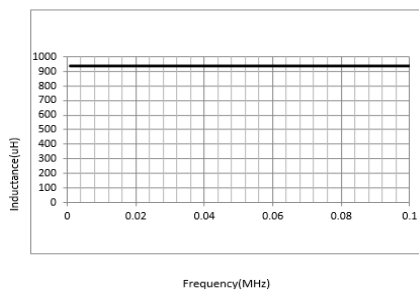
Inductance vs DC current



DC current vs Temperature

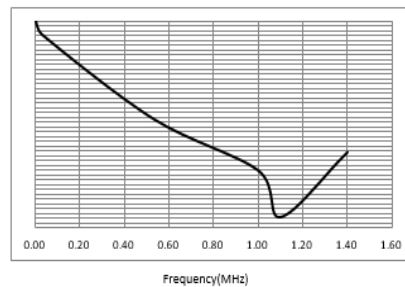


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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