

SMD Power Inductors

Fixed Inductor for Surface Mounting

SPL12080

(Mn Type)

Construction

- Ferrite core
- Shielded construction

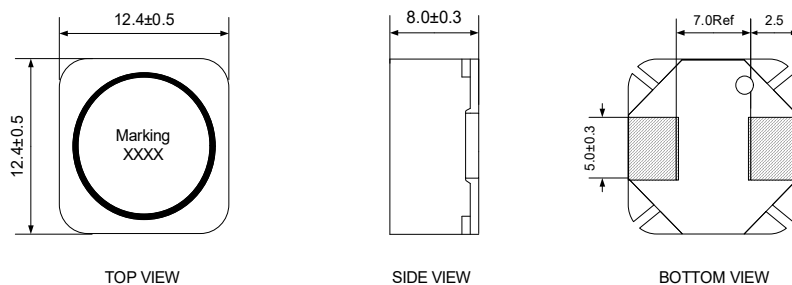
Features

- 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

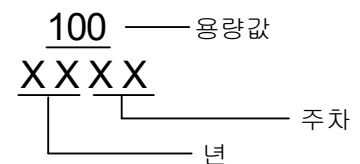
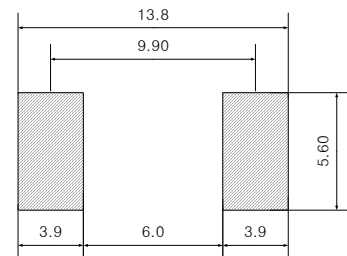
Applications

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

Dimensions(Unit:mm)



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
SPL12080-3R3N-M	3.3±30%	9.5	20.0	18.0	8.70	3R3 XXXX
SPL12080-4R7M-M	4.7±20%	10.5	18.0	16.2	7.40	4R7 XXXX
SPL12080-5R6M-M	5.6±20%	14.0	16.5	14.9	6.70	5R6 XXXX
SPL12080-6R8M-M	6.8±20%	15.0	15.3	13.7	6.30	6R8 XXXX
SPL12080-8R2M-M	8.2±20%	17.0	14.3	12.9	6.00	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

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SPL12080-100M-M	10±20%	18.5	13.1	11.8	5.80	100 XXXX
SPL12080-150M-M	15±20%	25.5	10.9	9.80	5.00	150 XXXX
SPL12080-180M-M	18±20%	35.0	9.70	8.70	4.10	180 XXXX
SPL12080-220M-M	22±20%	38.5	8.50	7.60	3.40	220 XXXX
SPL12080-330M-M	33±20%	58.0	7.40	6.70	3.30	330 XXXX
SPL12080-470M-M	47±20%	84.0	6.20	5.60	2.70	470 XXXX
SPL12080-560M-M	56±20%	95.0	5.80	5.22	2.40	560 XXXX
SPL12080-680M-M	68±20%	103	5.30	4.80	2.20	680 XXXX
SPL12080-820M-M	82±20%	118	4.80	4.30	2.10	820 XXXX
SPL12080-101M-M	100±20%	140	4.30	3.90	2.00	101 XXXX

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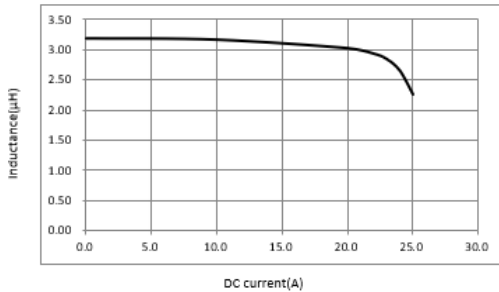
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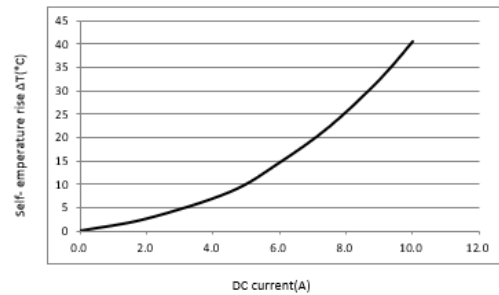
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*SPL12080-3R3N-M

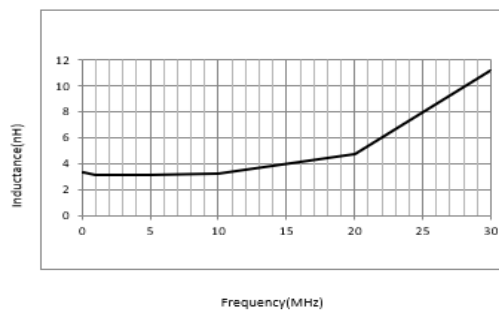
Inductance vs DC current



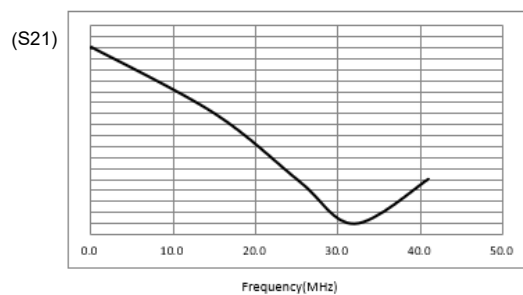
DC current vs Temperature



Inductance vs Frequency

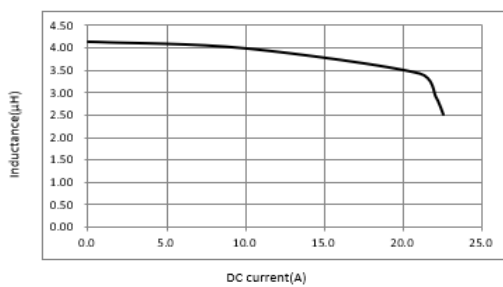


SRF(Self Resonance Frequency)

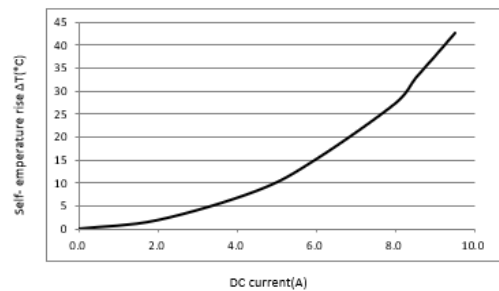


*SPL12080-4R7M-M

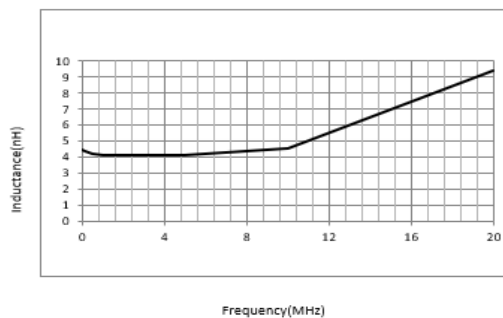
Inductance vs DC current



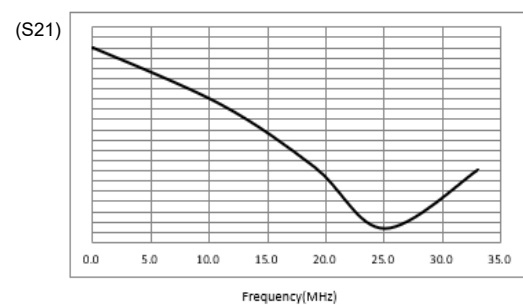
DC current vs Temperature



Inductance vs Frequency



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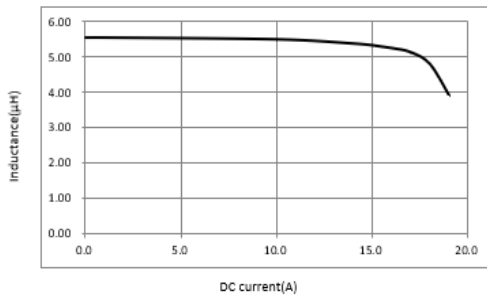
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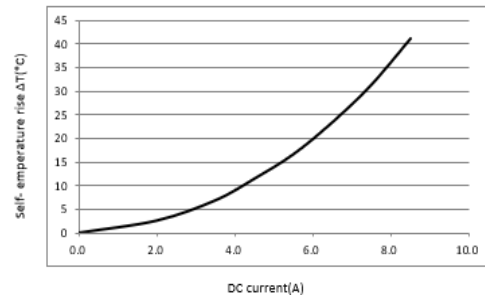
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*SPL12080-5R6M-M

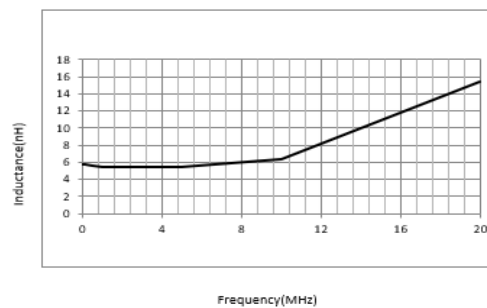
Inductance vs DC current



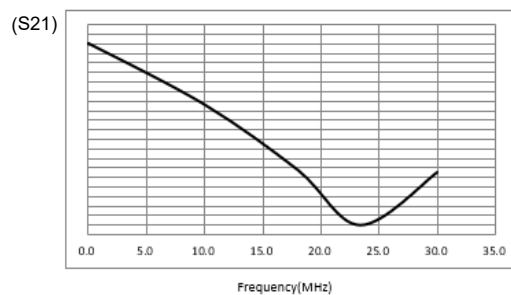
DC current vs Temperature



Inductance vs Frequency

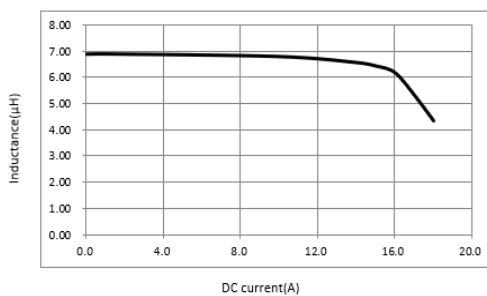


SRF(Self Resonance Frequency)

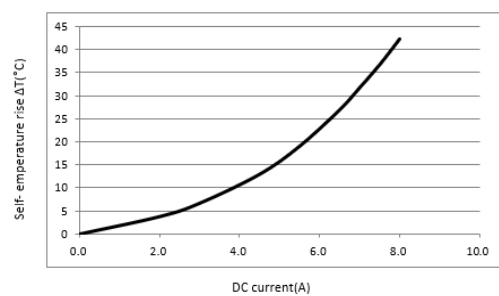


*SPL12080-6R8M-M

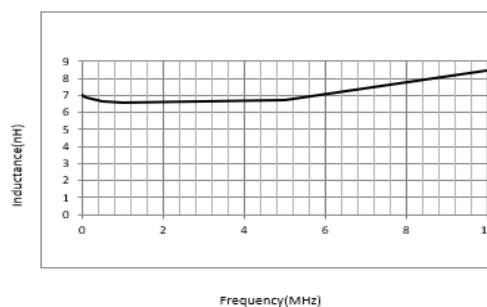
Inductance vs DC current



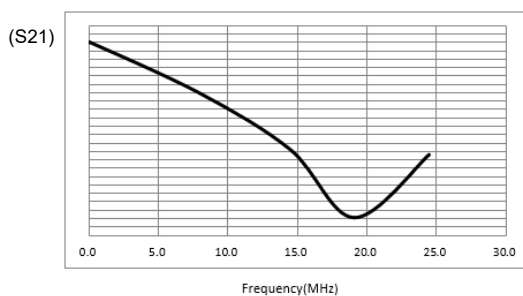
DC current vs Temperature



Inductance vs Frequency



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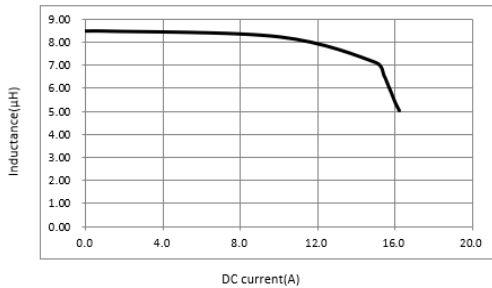
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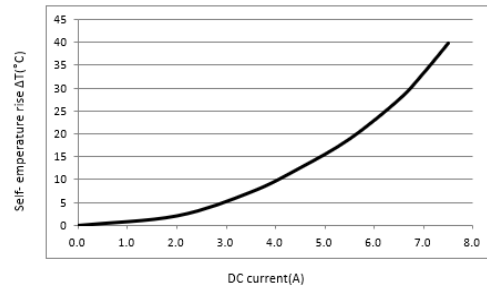
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*SPL12080-8R2M-M

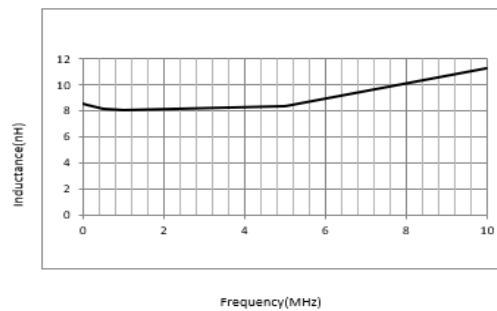
Inductance vs DC current



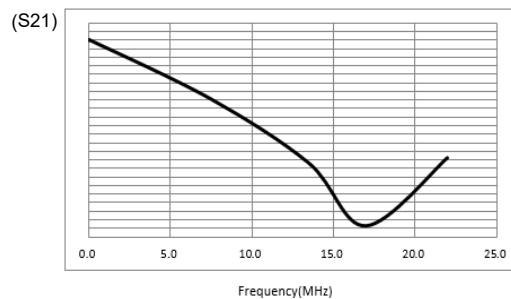
DC current vs Temperature



Inductance vs Frequency

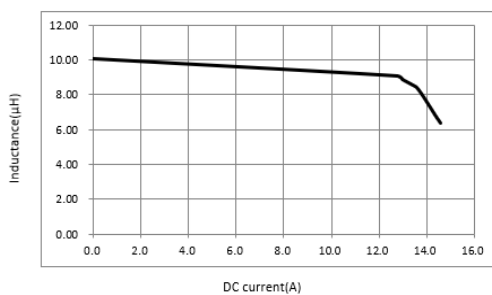


SRF(Self Resonance Frequency)

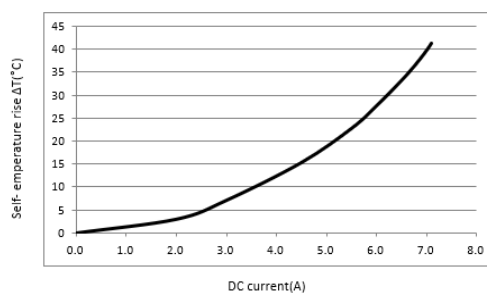


*SPL12080-100M-M

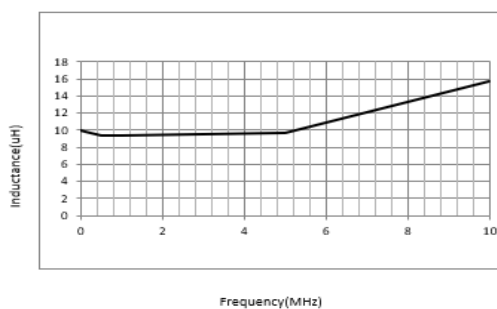
Inductance vs DC current



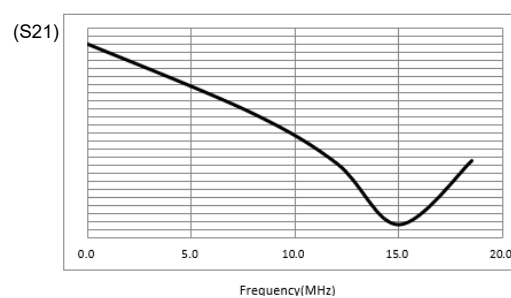
DC current vs Temperature



Inductance vs Frequency



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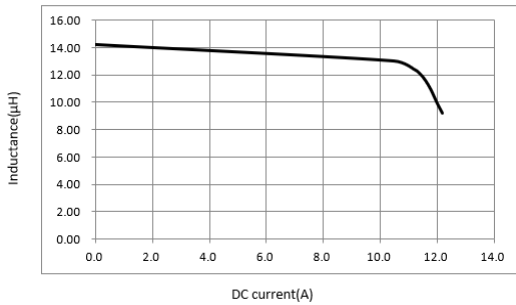
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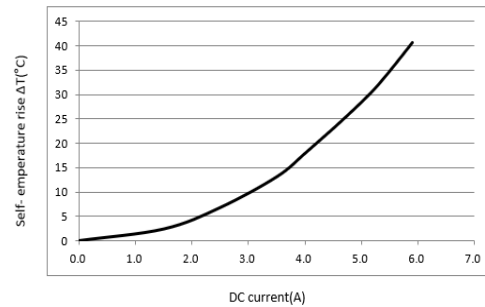
(Mn Type)

*SPL12080-150M-M

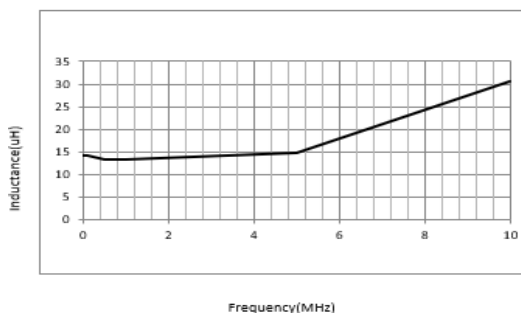
Inductance vs DC current



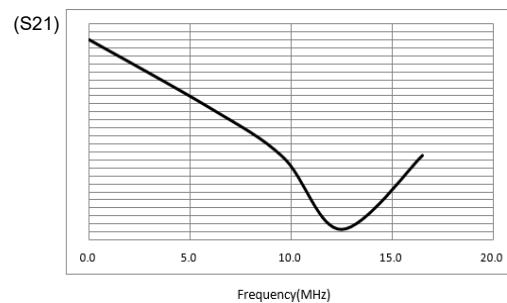
DC current vs Temperature



Inductance vs Frequency

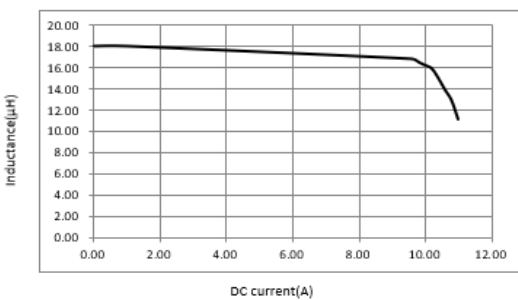


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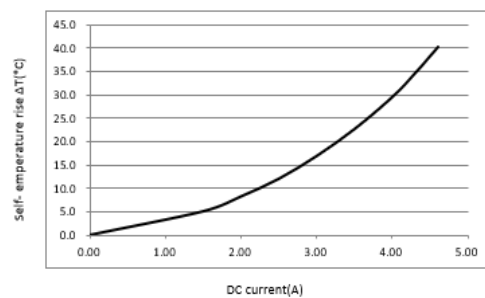


*SPL12080-180M-M

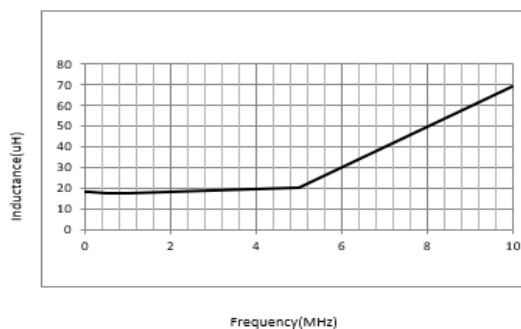
Inductance vs DC current



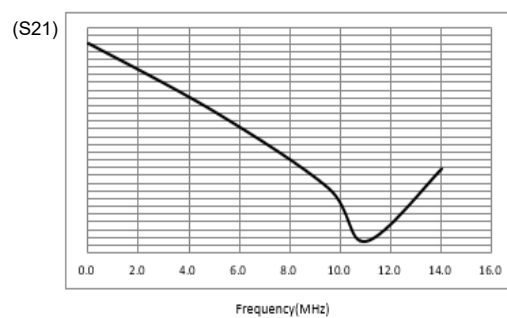
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Inductance vs Frequency



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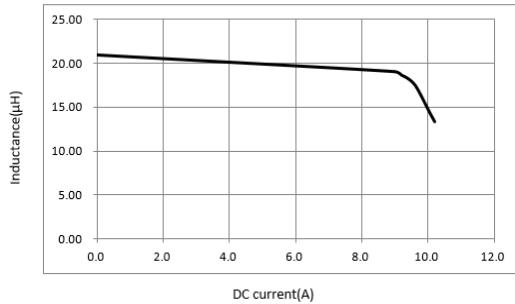
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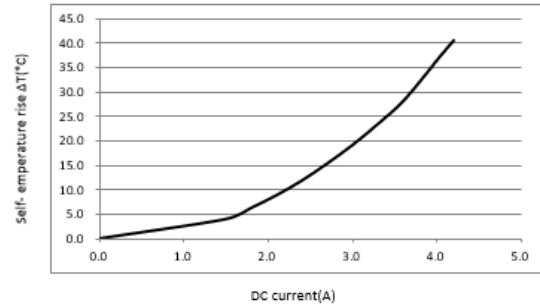
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*SPL12080-220M-M

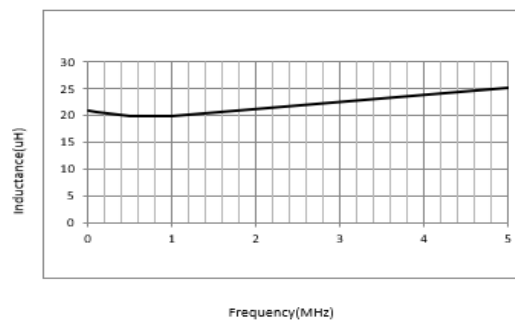
Inductance vs DC current



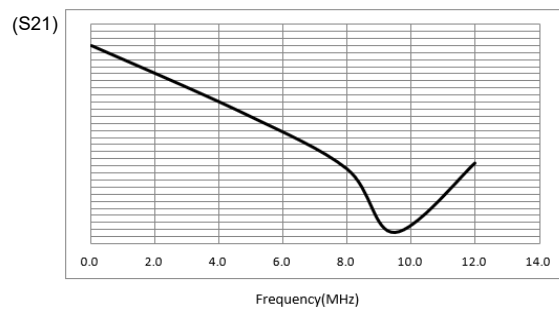
DC current vs Temperature



Inductance vs Frequency

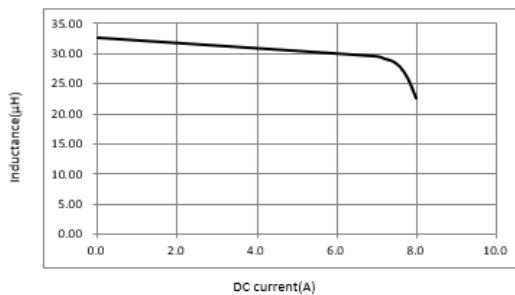


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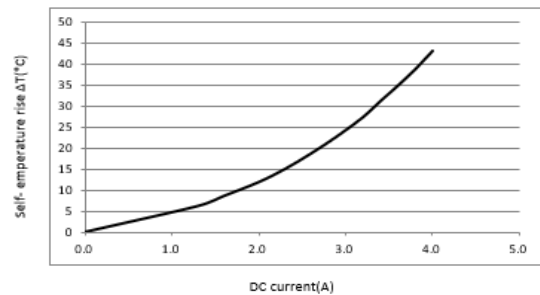


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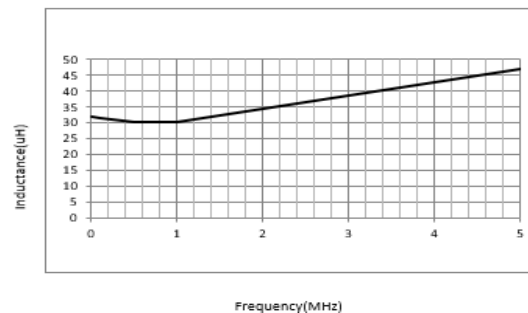
Inductance vs DC current



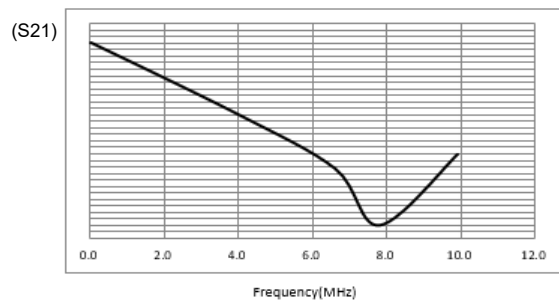
DC current vs Temperature



Inductance vs Frequency



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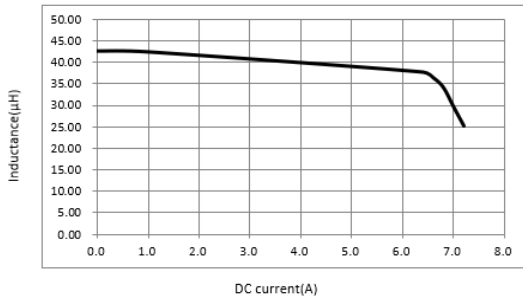
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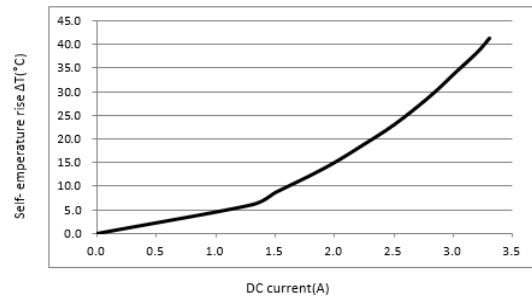
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*SPL12080-470M-M

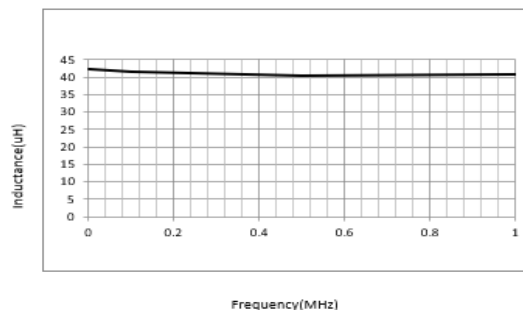
Inductance vs DC current



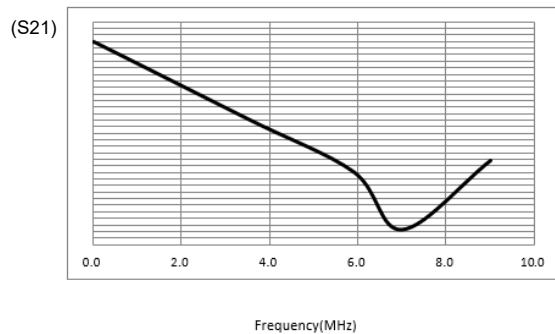
DC current vs Temperature



Inductance vs Frequency

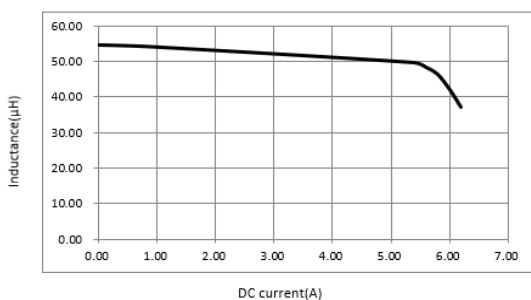


SRF(Self Resonance Frequency)

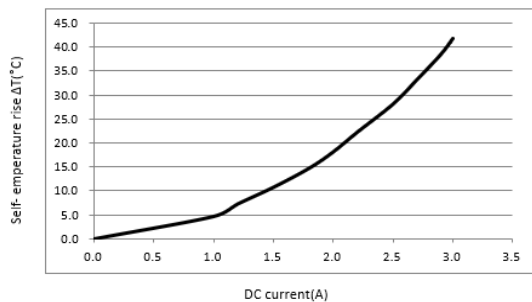


*SPL12080-560M-M

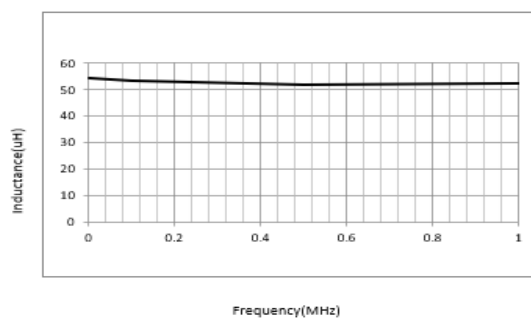
Inductance vs DC current



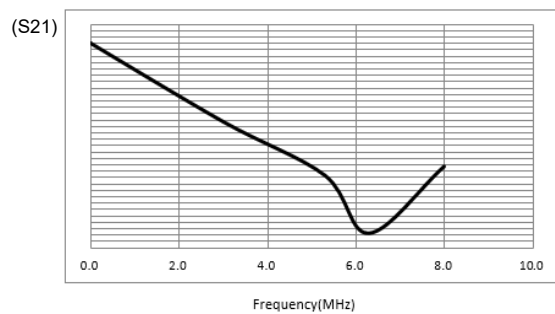
DC current vs Temperature



Inductance vs Frequency



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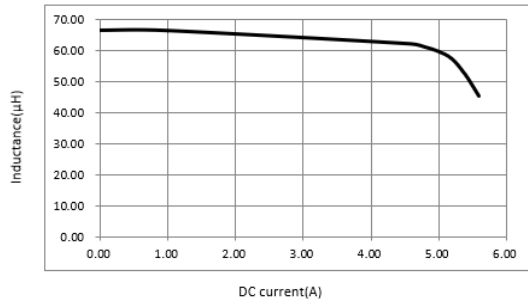
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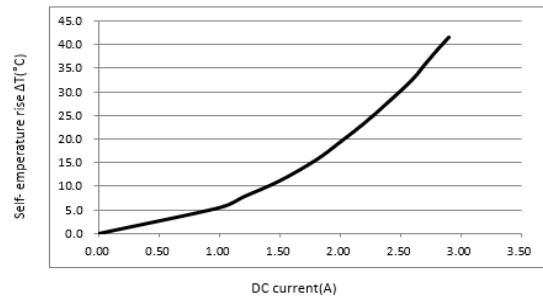
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*SPL12080-680M-M

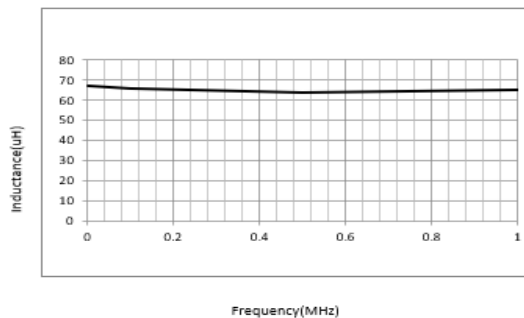
Inductance vs DC current



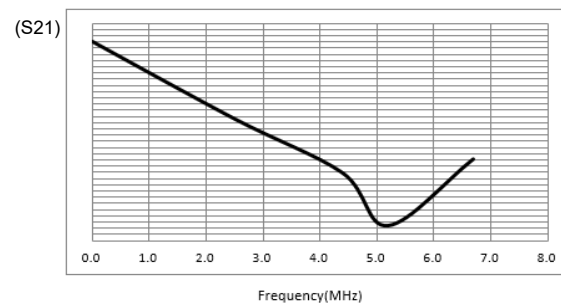
DC current vs Temperature



Inductance vs Frequency

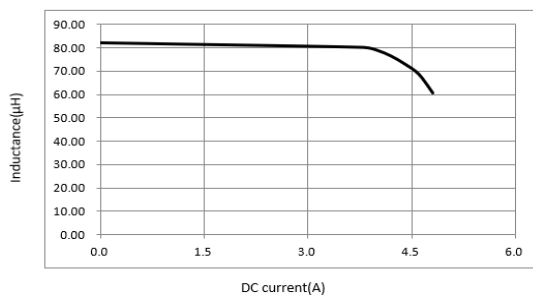


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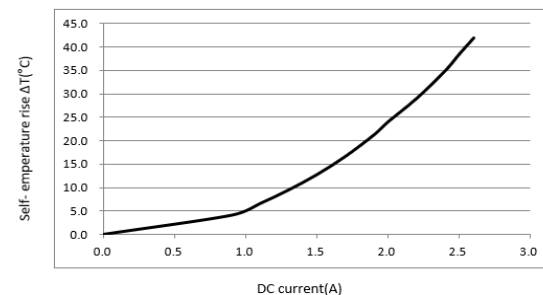


*SPL12080-820M-M

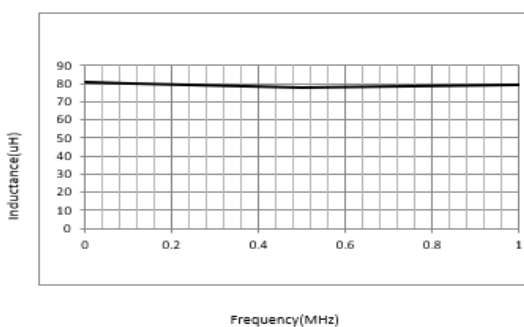
Inductance vs DC current



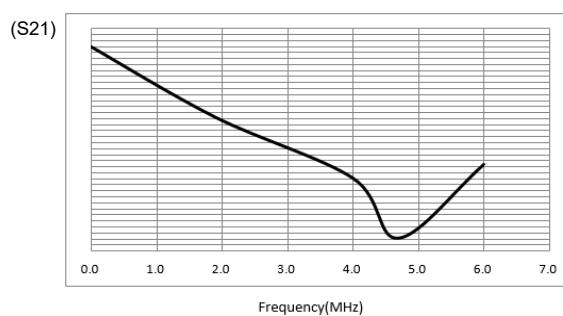
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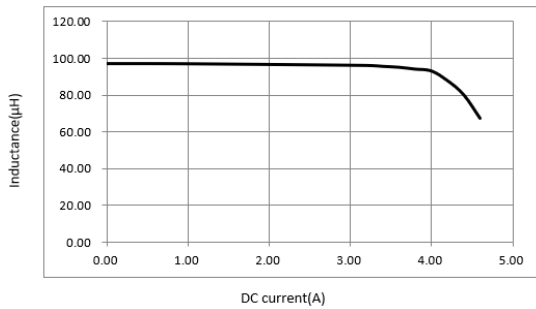
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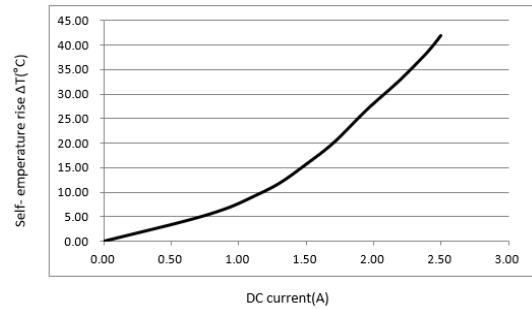
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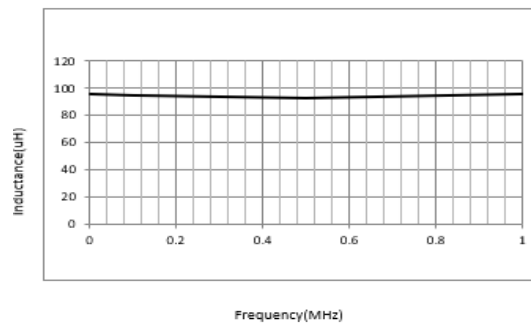
Inductance vs DC current



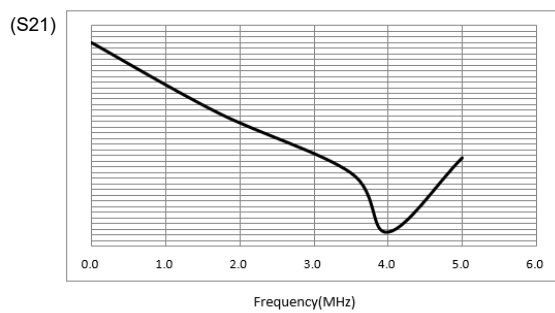
DC current vs Temperature



Inductance vs Frequency



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