

SMD Power Inductors

Fixed Inductor for Surface Mounting

SPL12080

(Mn Type)

Construction

- Ferrite core
- Shielded construction

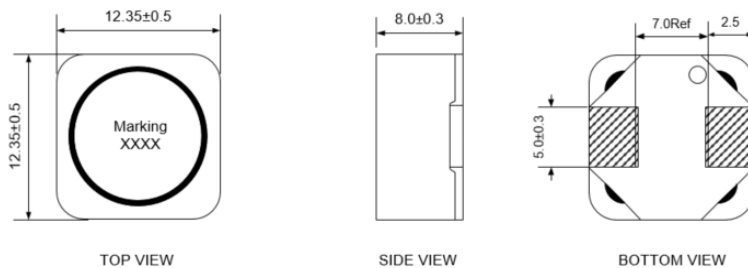
Features

- 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

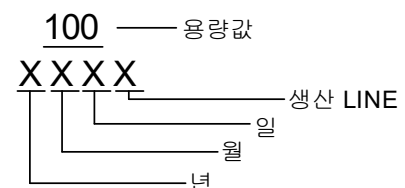
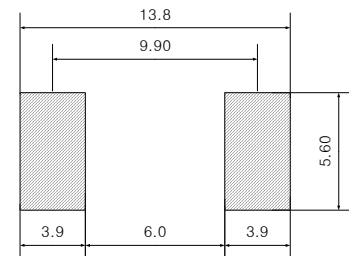
Applications

- 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,TYP)	Marking
SPL12080-3R3N-M1	3.3±30%	18.6	24.8	24.4	7.80	3R3 XXXX
SPL12080-4R7M-M1	4.7±20%	20.1	21.6	21.0	7.60	4R7 XXXX
SPL12080-5R6M-M1	5.6±20%	22.3	18.6	18.0	7.20	5R6 XXXX
SPL12080-6R8M-M1	6.8±20%	24.6	17.4	16.8	6.50	6R8 XXXX
SPL12080-8R2M-M1	8.2±20%	26.3	15.2	14.8	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-M1	10±20%	28.2	13.8	13.4	5.80	100 XXXX
SPL12080-150M-M1	15±20%	34.0	11.2	11.0	5.20	150 XXXX
SPL12080-180M-M	18±20%	35.0	10.7	10.0	4.20	180 XXXX
SPL12080-220M-M	22±20%	38.5	10.3	9.00	3.50	220 XXXX
SPL12080-330M-M	33±20%	58.0	8.20	7.50	3.30	330 XXXX
SPL12080-470M-M	47±20%	84.0	7.00	6.50	2.80	470 XXXX
SPL12080-560M-M	56±20%	95.0	6.00	5.50	2.40	560 XXXX
SPL12080-680M-M	68±20%	103	5.40	4.90	2.20	680 XXXX
SPL12080-820M-M	82±20%	118	4.80	4.50	2.10	820 XXXX
SPL12080-101M-M	100±20%	140	4.50	4.30	2.00	101 XXXX

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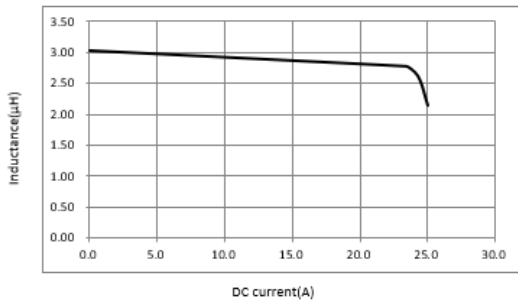
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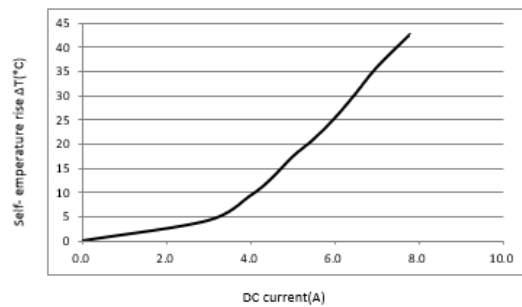
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*SPL12080-3R3N-M1

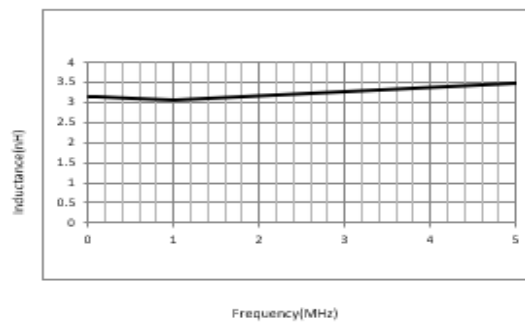
Inductance vs DC current



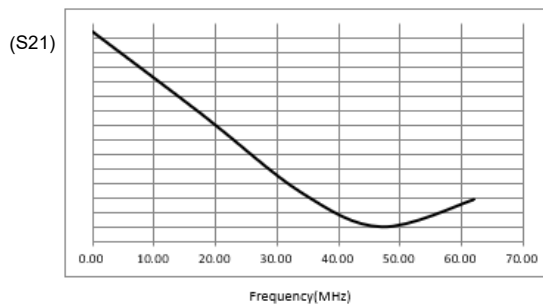
DC current vs Temperature



Inductance vs Frequency

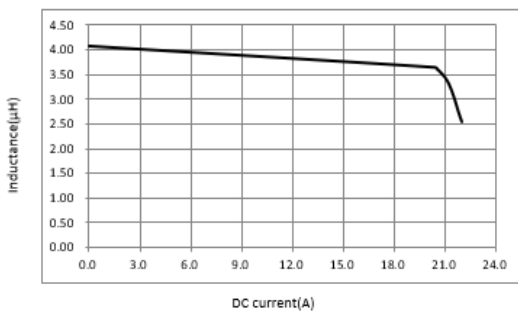


SRF(Self Resonance Frequency)

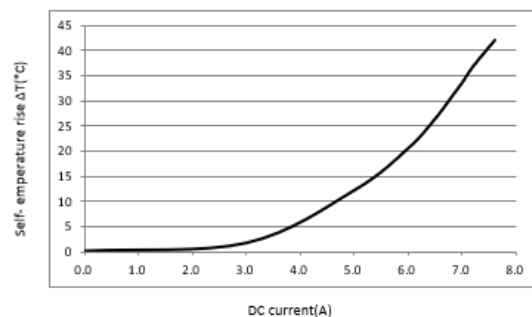


*SPL12080-4R7M-M1

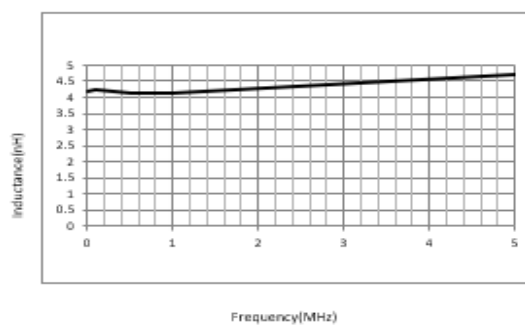
Inductance vs DC current



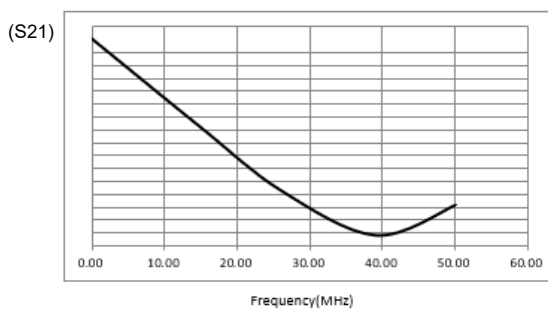
DC current vs Temperature



Inductance vs Frequency



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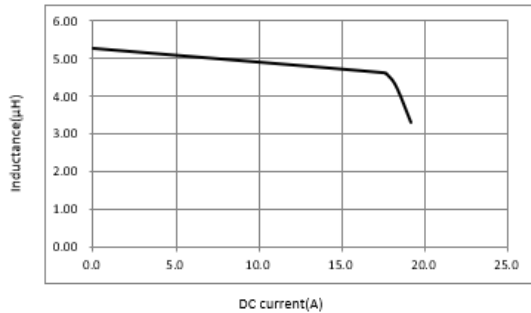
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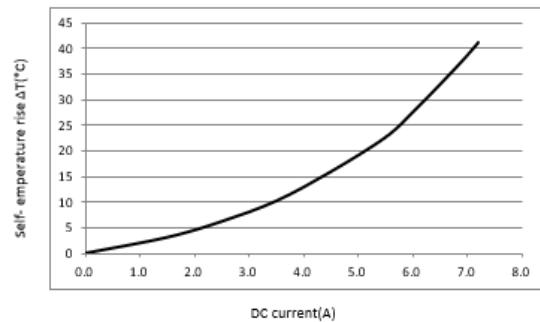
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*SPL12080-5R6M-M1

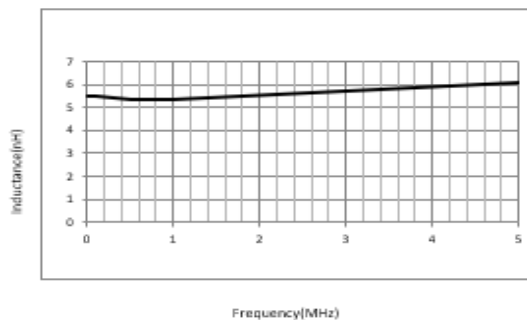
Inductance vs DC current



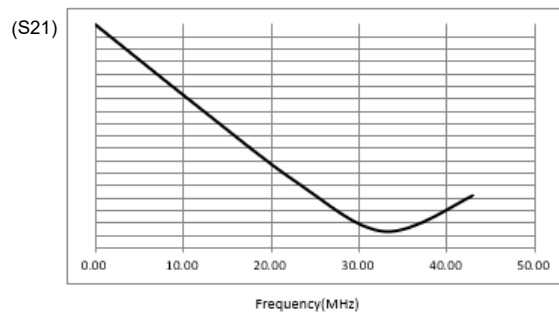
DC current vs Temperature



Inductance vs Frequency

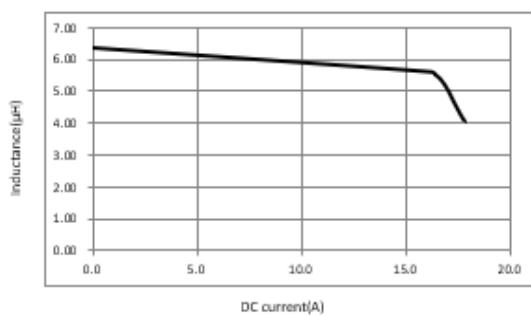


SRF(Self Resonance Frequency)

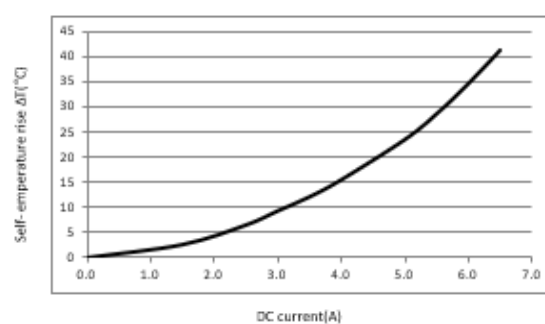


*SPL12080-6R8M-M1

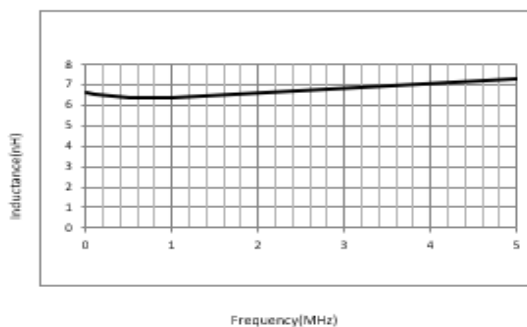
Inductance vs DC current



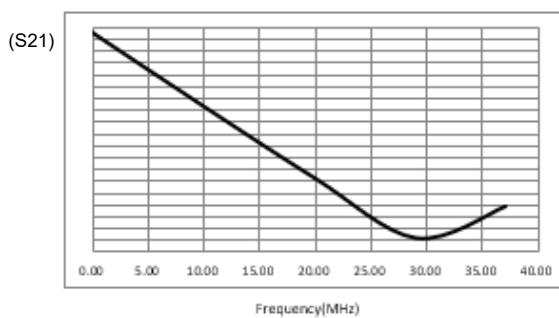
DC current vs Temperature



Inductance vs Frequency



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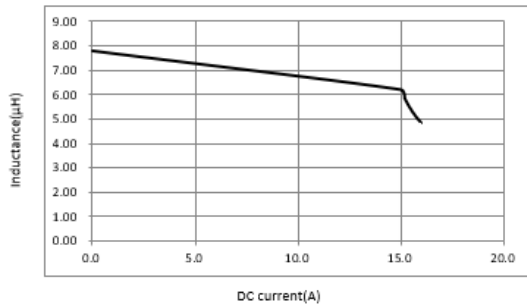
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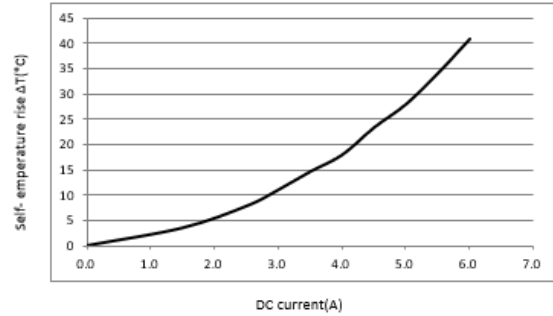
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*SPL12080-8R2M-M1

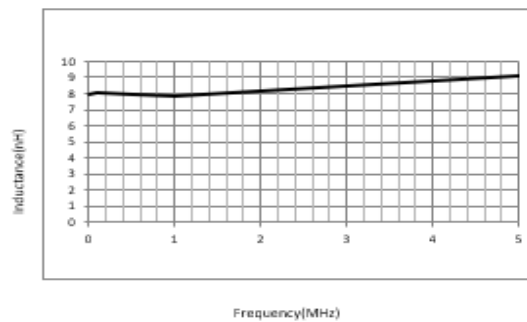
Inductance vs DC current



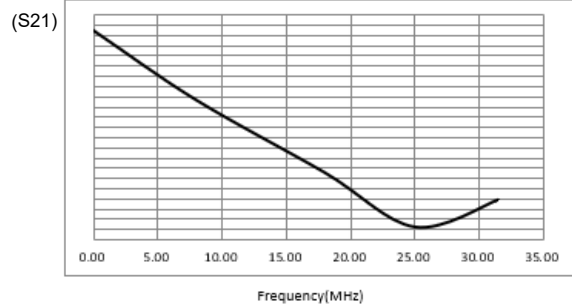
DC current vs Temperature



Inductance vs Frequency

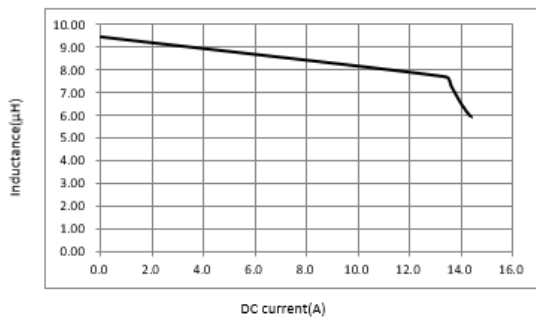


SRF(Self Resonance Frequency)

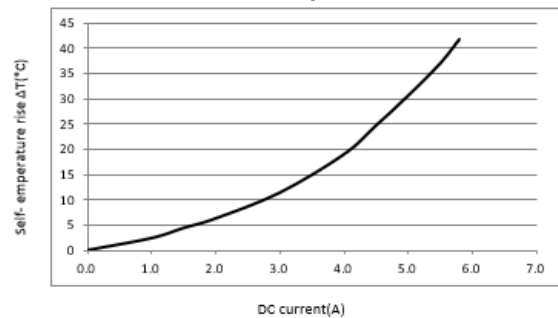


*SPL12080-100M-M1

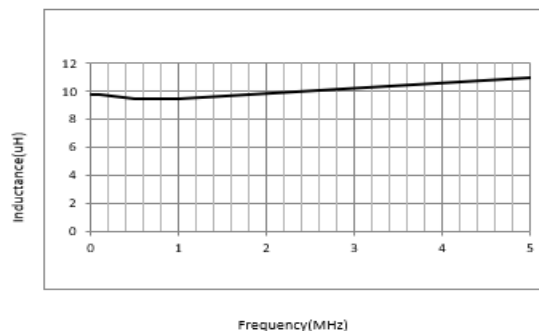
Inductance vs DC current



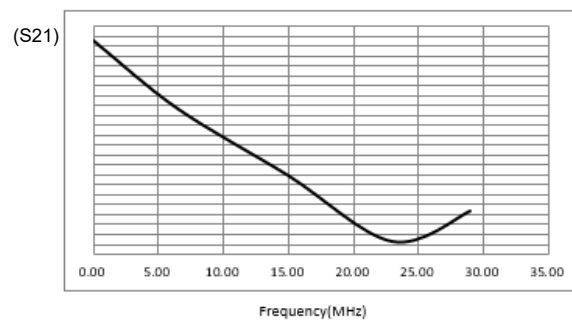
DC current vs Temperature



Inductance vs Frequency



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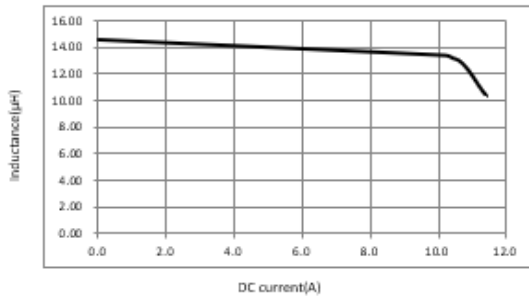
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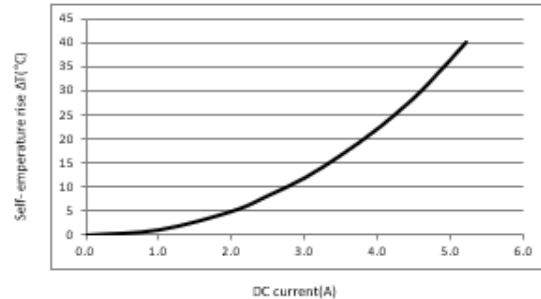
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*SPL12080-150M-M1

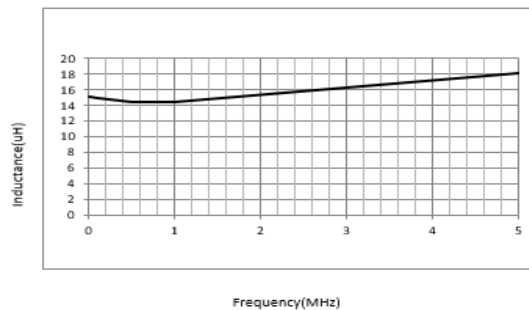
Inductance vs DC current



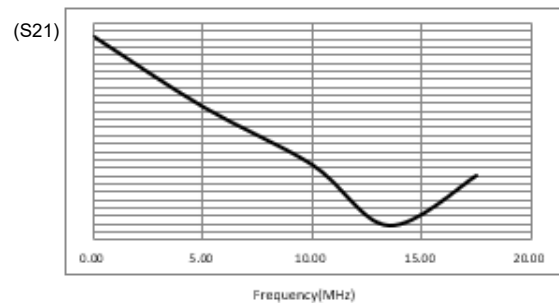
DC current vs Temperature



Inductance vs Frequency

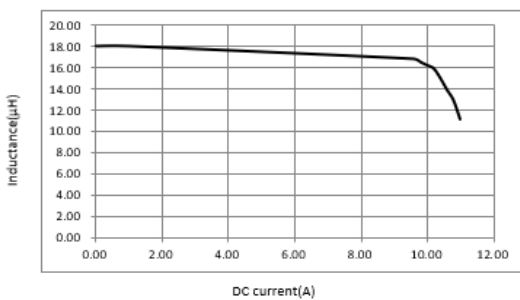


SRF(Self Resonance Frequency)

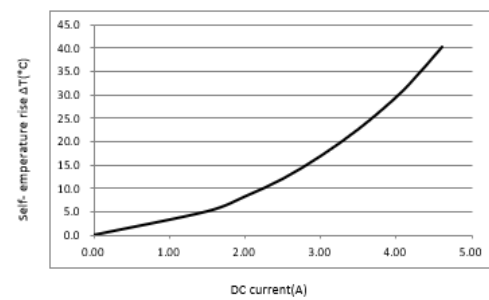


*SPL12080-180M-M

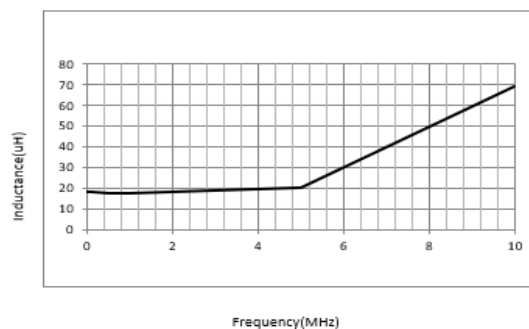
Inductance vs DC current



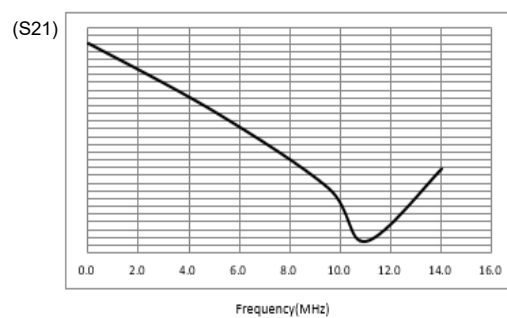
DC current vs Temperature



Inductance vs Frequency



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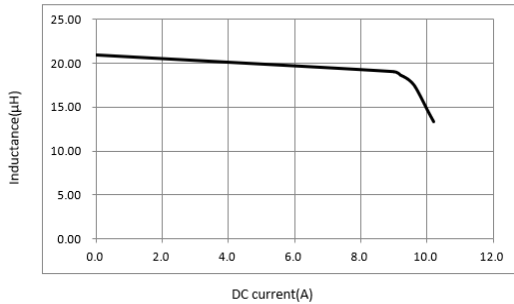
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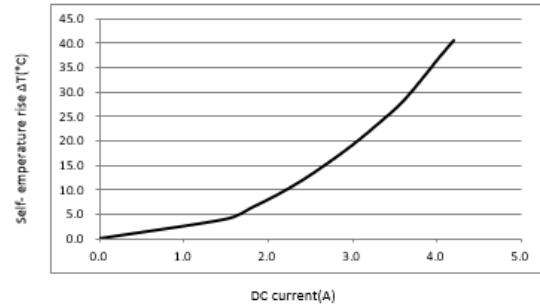
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*SPL12080-220M-M

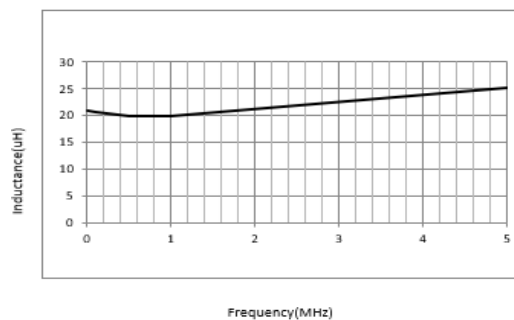
Inductance vs DC current



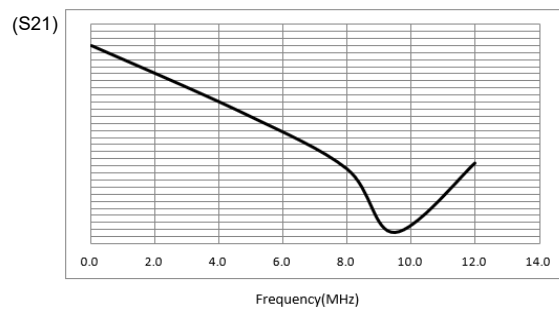
DC current vs Temperature



Inductance vs Frequency

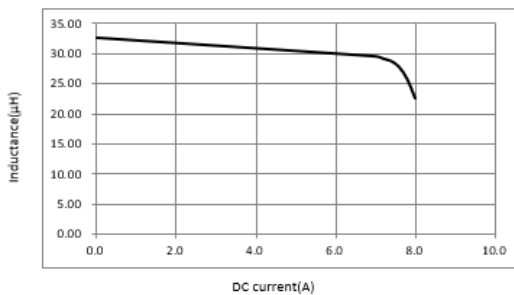


SRF(Self Resonance Frequency)

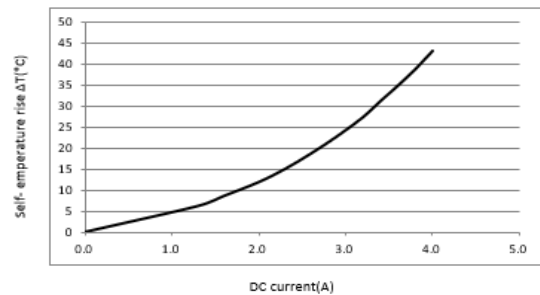


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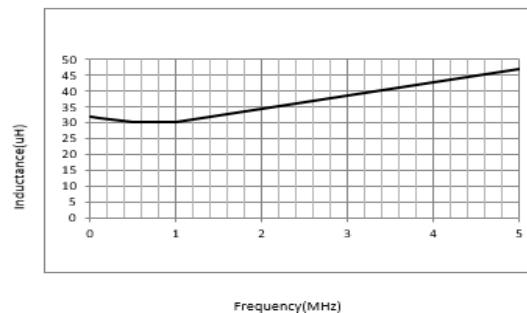
Inductance vs DC current



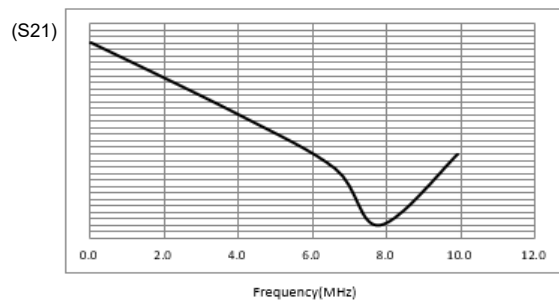
DC current vs Temperature



Inductance vs Frequency



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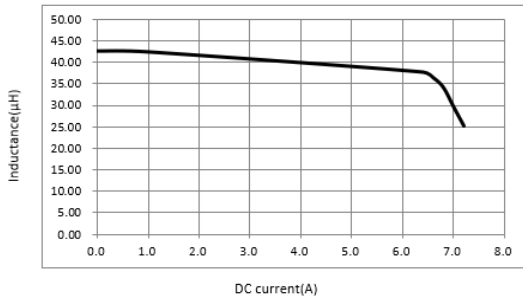
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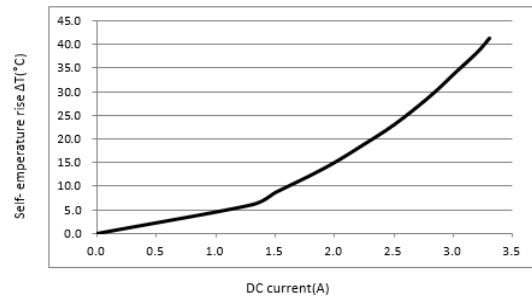
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*SPL12080-470M-M

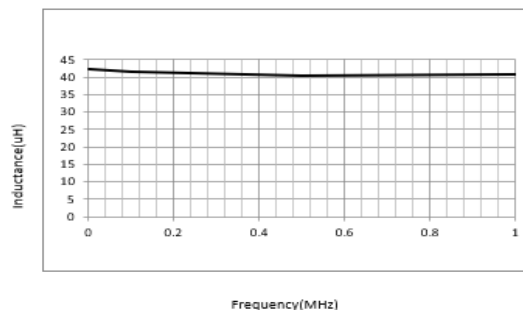
Inductance vs DC current



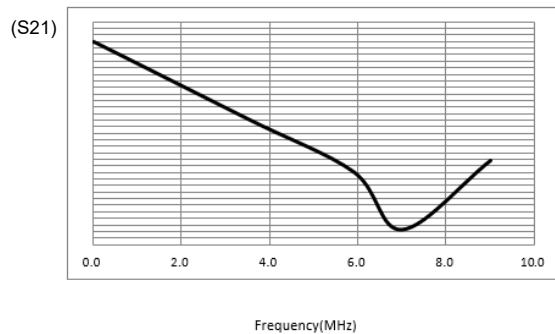
DC current vs Temperature



Inductance vs Frequency

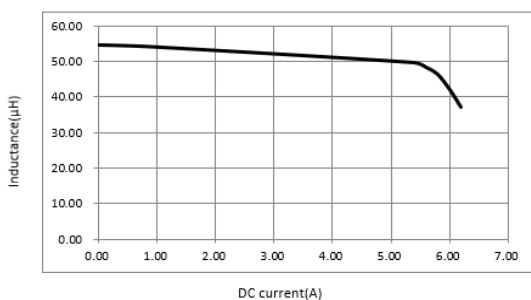


SRF(Self Resonance Frequency)

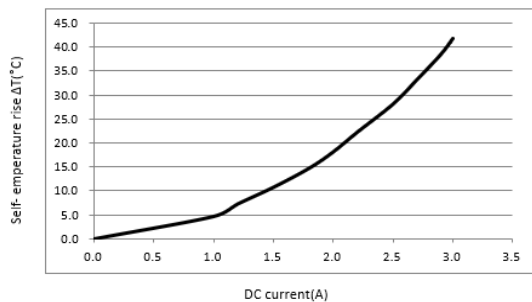


*SPL12080-560M-M

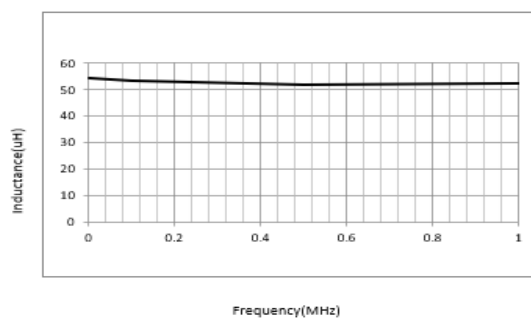
Inductance vs DC current



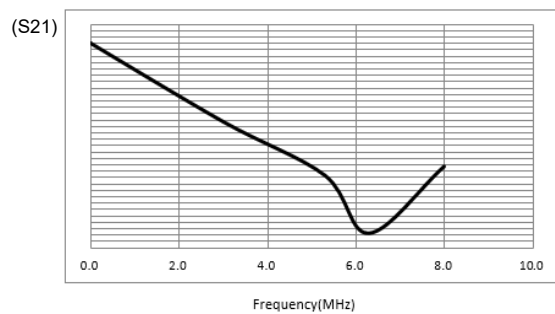
DC current vs Temperature



Inductance vs Frequency



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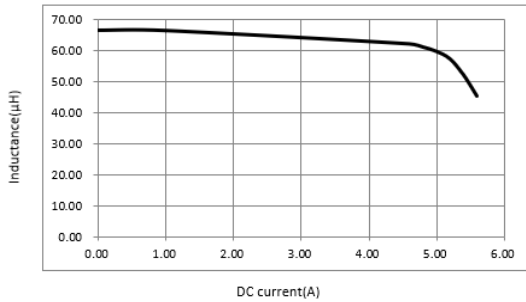
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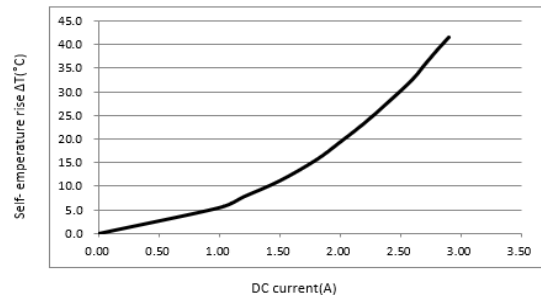
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*SPL12080-680M-M

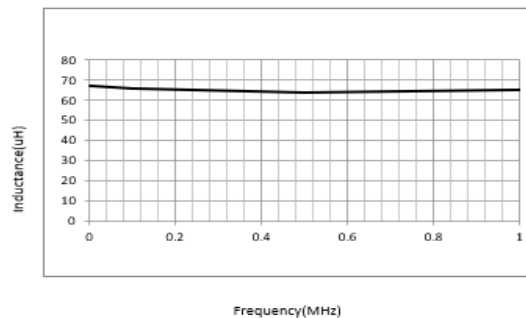
Inductance vs DC current



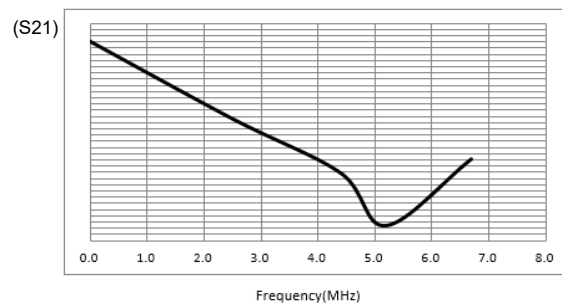
DC current vs Temperature



Inductance vs Frequency

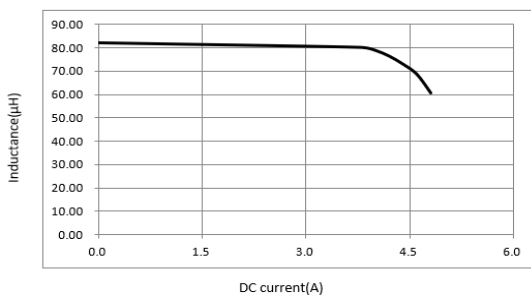


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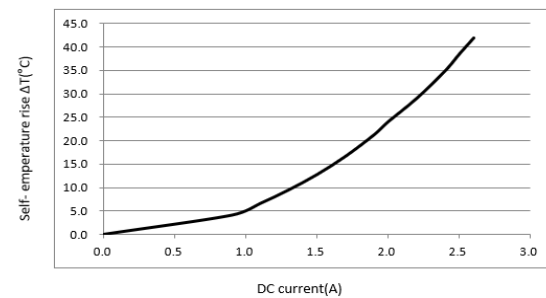


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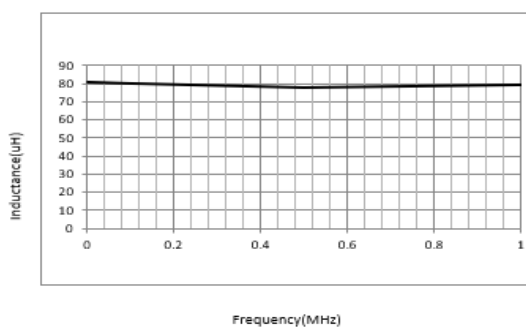
Inductance vs DC current



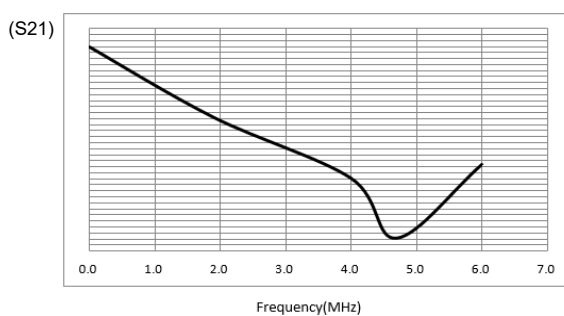
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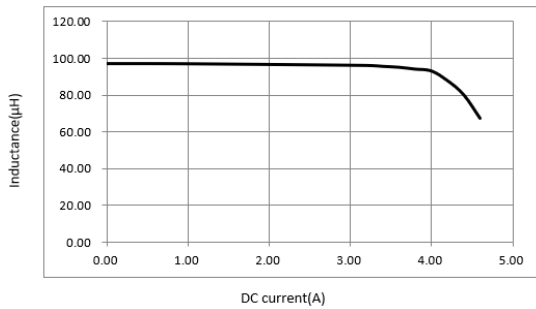
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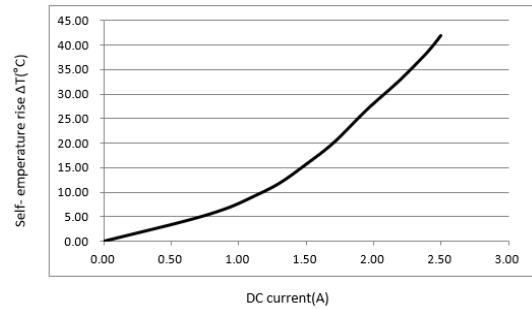
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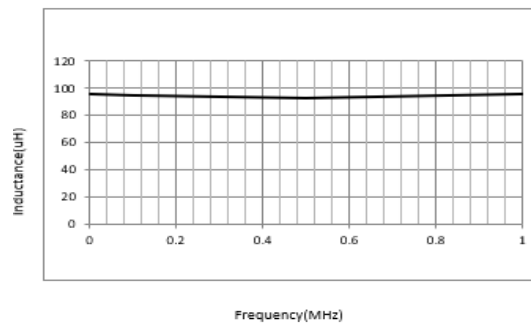
Inductance vs DC current



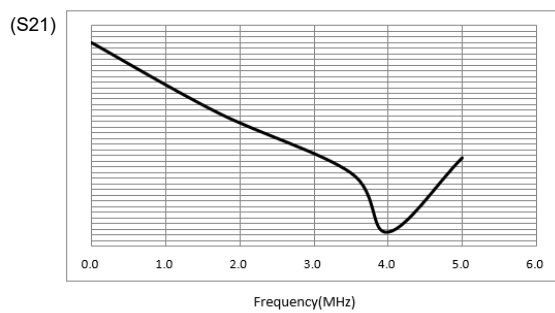
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Inductance vs Frequency



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