

# SMD Power Inductors

## Fixed Inductor for Surface Mounting

SPL12060

### Construction

- Ferrite core
- Shielded construction



### Features

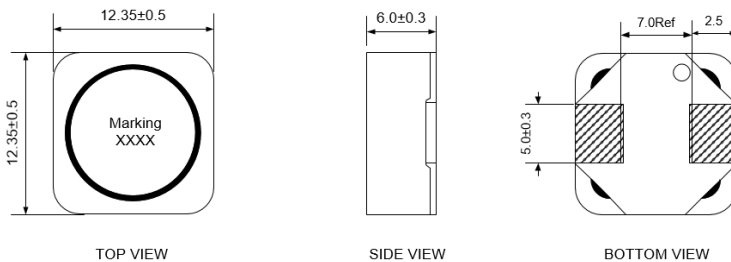
- Operating temperature -40 ~ +125°C
- Qualified to AEC-Q200
- Solder reflow temperature 260°C peak
- Low buzz noise
- High saturation current
- Suitable for lead-free reflow soldering



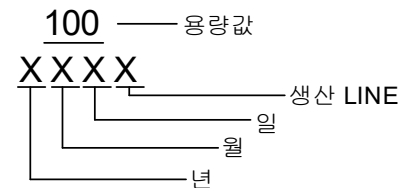
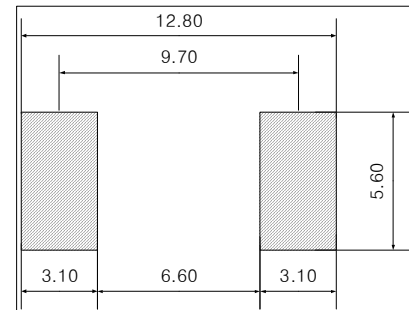
### Applications

- 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
SPL12060-1R0N1	1.0±30%	12.4	26.0	22.0	15.7	1R0 XXXX
SPL12060-1R5N1	1.5±30%	13.7	20.0	17.0	15.5	1R5 XXXX
SPL12060-2R2N1	2.2±30%	15.8	16.5	15.0	14.9	2R2 XXXX
SPL12060-3R3N1	3.3±30%	17.7	14.0	12.0	13.2	3R3 XXXX
SPL12060-4R7M1	4.7±20%	19.7	12.5	10.0	11.0	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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SPL12060-5R6M1	5.6 $\pm$ 20%	22	10.5	9	10.5	5R6 XXXX
SPL12060-6R8M1	6.8 $\pm$ 20%	23.4	9.5	8	8.5	6R8 XXXX
SPL12060-8R2M1	8.2 $\pm$ 20%	25.9	9.0	7	8.2	8R2 XXXX
SPL12060-100M1	10 $\pm$ 20%	28.2	8.0	6.5	7.8	100 XXXX
SPL12060-150M1	15 $\pm$ 20%	31.5	6.5	6.0	6.0	150 XXXX
SPL12060-180M	18 $\pm$ 20%	33	6.0	5.5	5.8	180 XXXX
SPL12060-220M	22 $\pm$ 20%	38	5.5	5.0	5.7	220 XXXX
SPL12060-330M	33 $\pm$ 20%	60	4.5	4.0	4.1	330 XXXX
SPL12060-470M	47 $\pm$ 20%	80	3.8	3.3	3.7	470 XXXX
SPL12060-560M	56 $\pm$ 20%	101	3.5	3.0	3.1	560 XXXX
SPL12060-680M	68 $\pm$ 20%	120	3.2	2.8	3.0	680 XXXX
SPL12060-820M	82 $\pm$ 20%	136	2.9	2.4	2.8	820 XXXX
SPL12060-101M	100 $\pm$ 20%	177	2.5	2.2	2.2	101 XXXX
SPL12060-151M	150 $\pm$ 20%	251	2.1	1.8	1.9	151 XXXX
SPL12060-181M	180 $\pm$ 20%	306	1.9	1.7	1.7	181 XXXX
SPL12060-221M	220 $\pm$ 20%	345	1.7	1.5	1.5	221 XXXX
SPL12060-331M	330 $\pm$ 20%	507	1.4	1.2	1.4	331 XXXX
SPL12060-471M	470 $\pm$ 20%	767	1.2	1.0	1.3	471 XXXX
SPL12060-561M	560 $\pm$ 20%	940	1.1	0.80	1.1	561 XXXX
SPL12060-681M	680 $\pm$ 20%	1180	1.0	0.70	1.0	681 XXXX
SPL12060-821M	820 $\pm$ 20%	1330	0.88	0.65	0.95	821 XXXX
SPL12060-102M	1000 $\pm$ 20%	1870	0.81	0.60	0.76	102 XXXX

## ※Test Equipment

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\*DCR Meter : ABM3245 (20m $\Omega$ ~2M $\Omega$ )

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snlee@lscomm.co.kr  
markyang@lscomm.co.kr  
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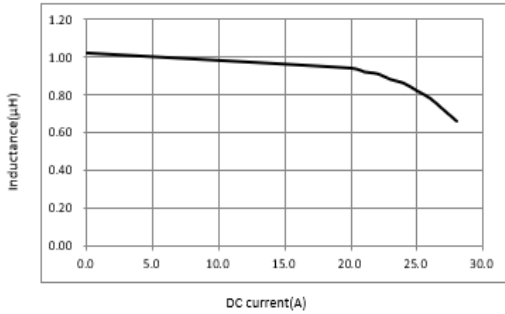
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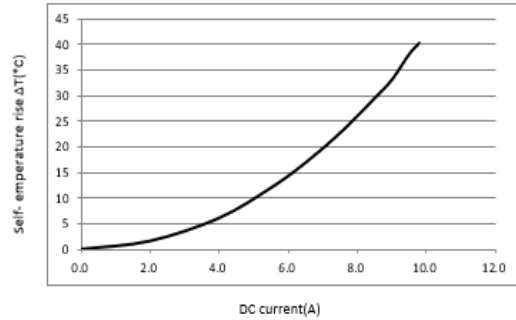
SPL12060

\*SPL12060-1R0N

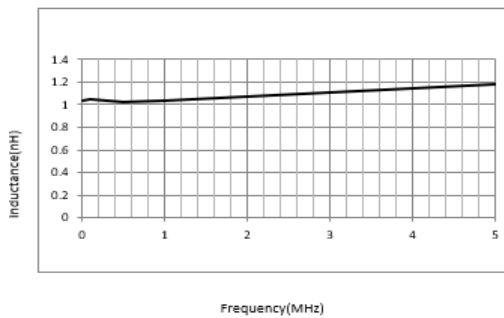
**Inductance vs DC current**



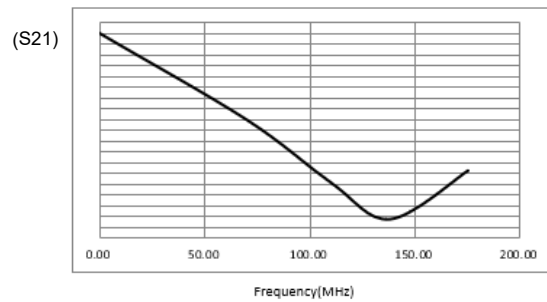
**DC current vs Temperature**



**Inductance vs Frequency**

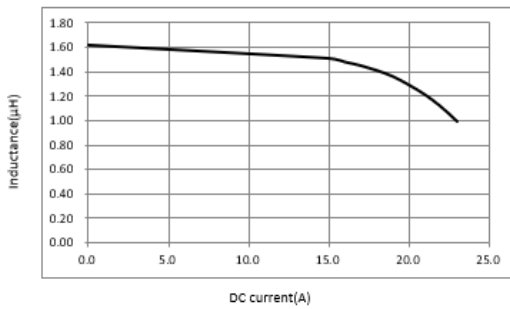


**SRF(Self Resonance Frequency)**

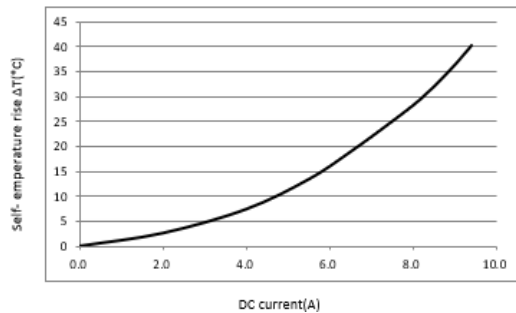


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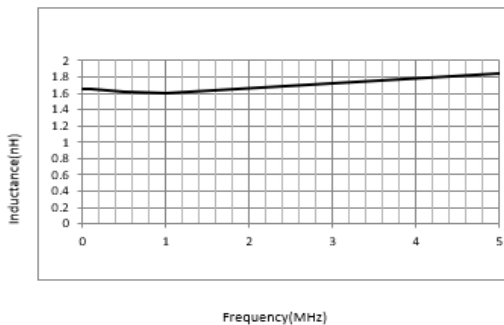
**Inductance vs DC current**



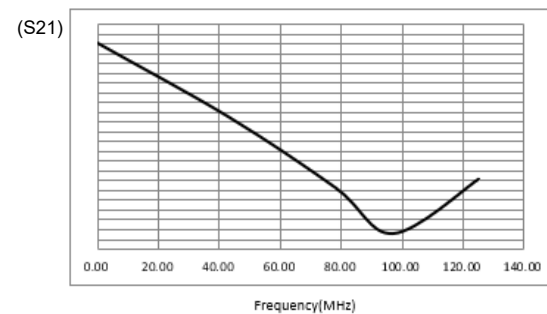
**DC current vs Temperature**



**Inductance vs Frequency**



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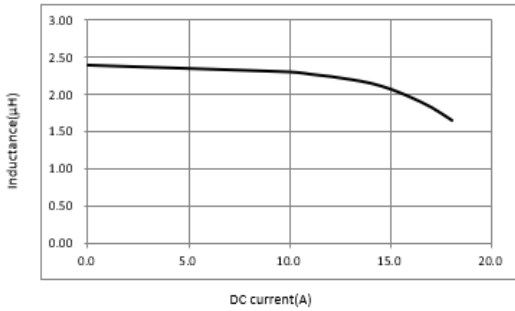
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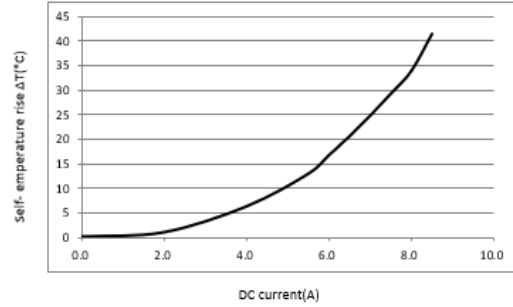
SPL12060

\*SPL12060-2R2N

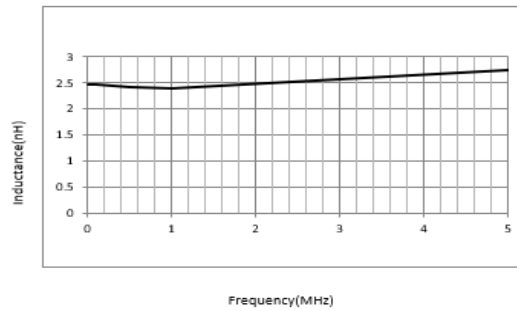
**Inductance vs DC current**



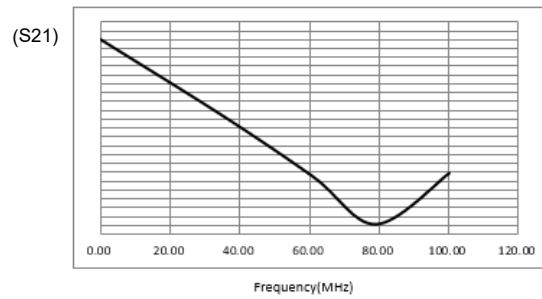
**DC current vs Temperature**



**Inductance vs Frequency**

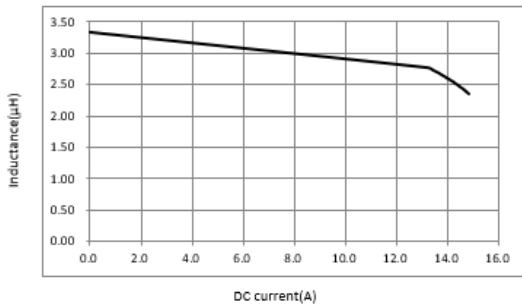


**SRF(Self Resonance Frequency)**

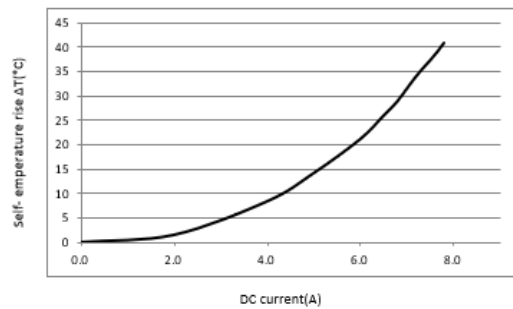


\*SPL12060-3R3N

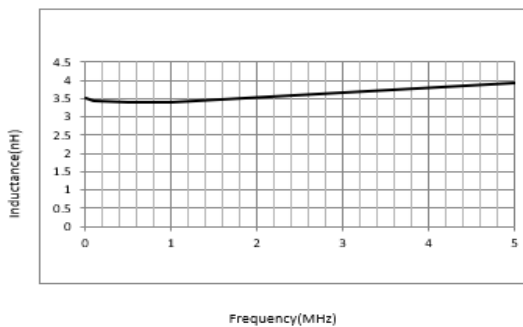
**Inductance vs DC current**



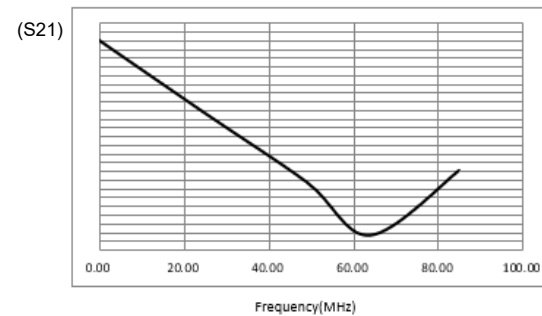
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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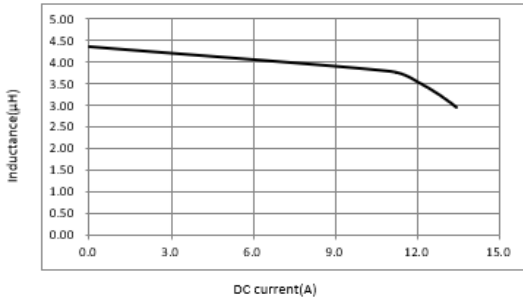
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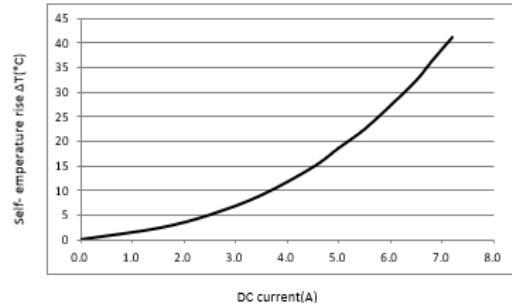
SPL12060

\*SPL12060-4R7M

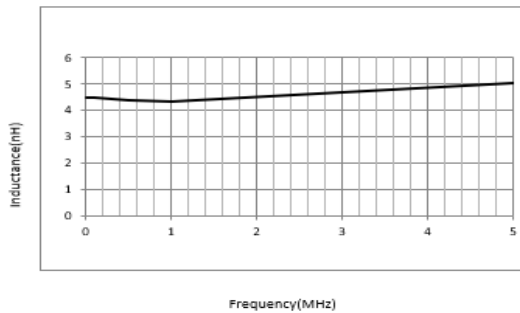
**Inductance vs DC current**



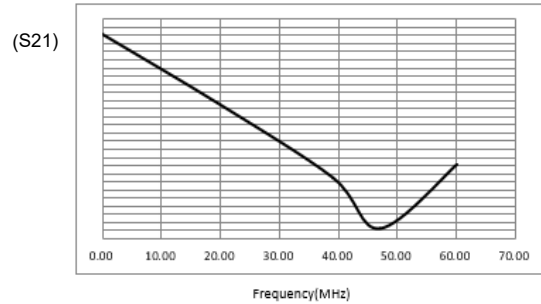
**DC current vs Temperature**



**Inductance vs Frequency**

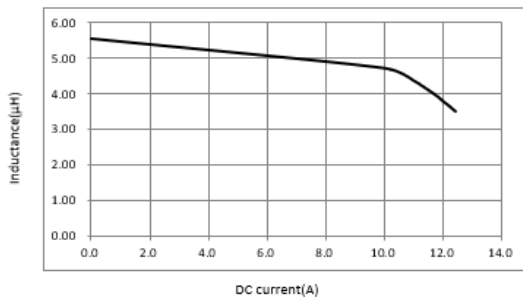


**SRF(Self Resonance Frequency)**

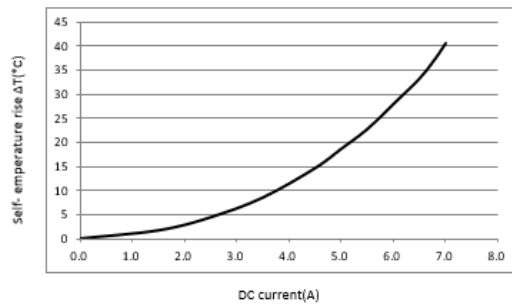


\*SPL12060-5R6M

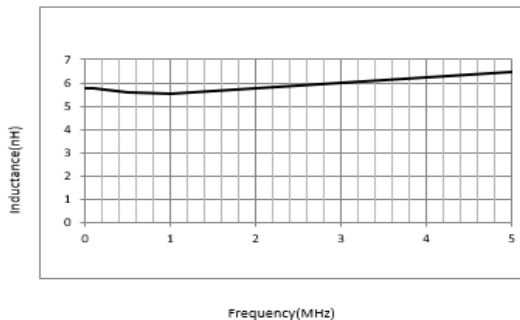
**Inductance vs DC current**



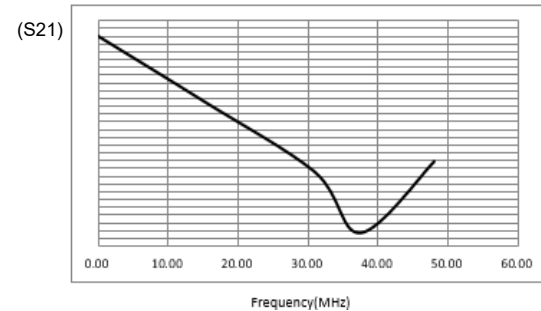
**DC current vs Temperature**



**Inductance vs Frequency**



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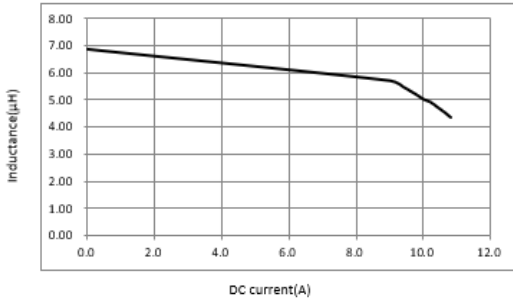
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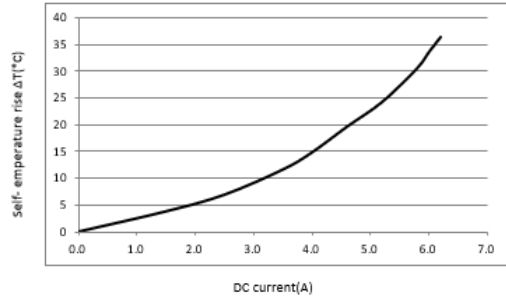
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\*SPL12060-6R8M

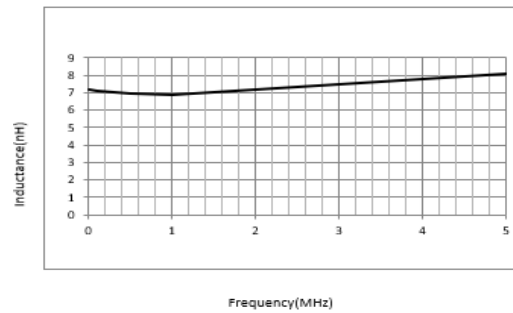
**Inductance vs DC current**



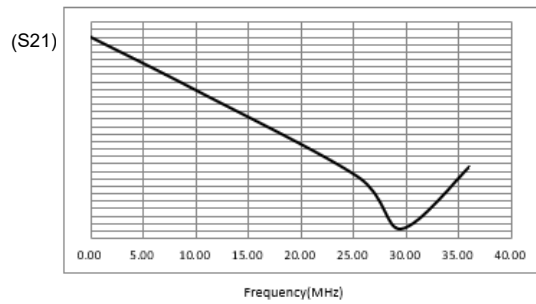
**DC current vs Temperature**



**Inductance vs Frequency**

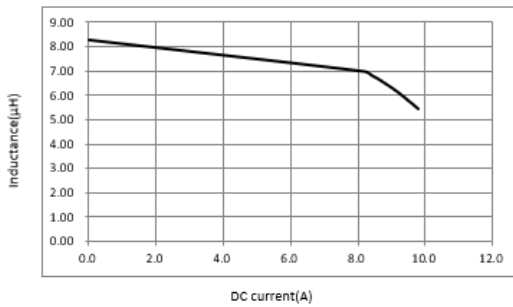


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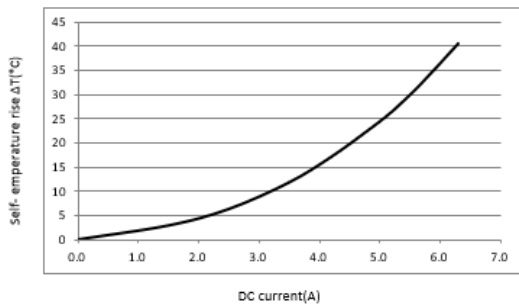


\*SPL12060-8R2M

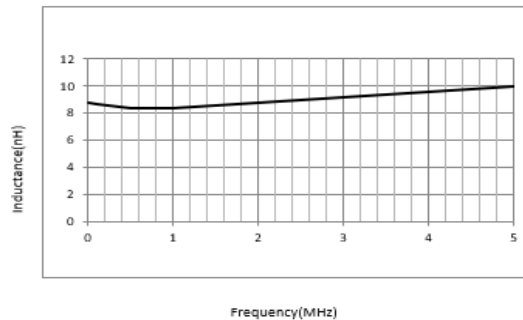
**Inductance vs DC current**



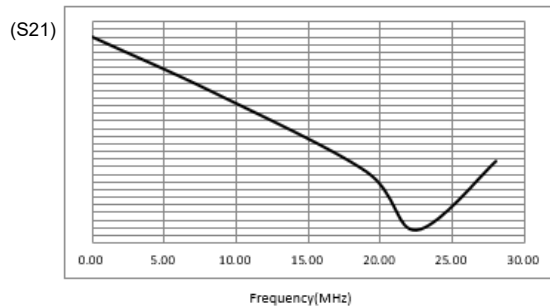
**DC current vs Temperature**



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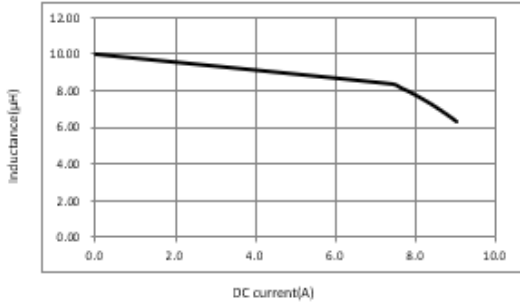
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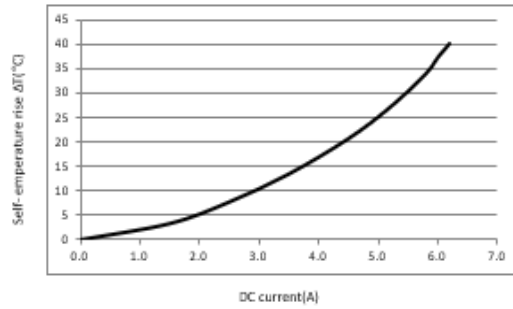
SPL12060

\*SPL12060-100M

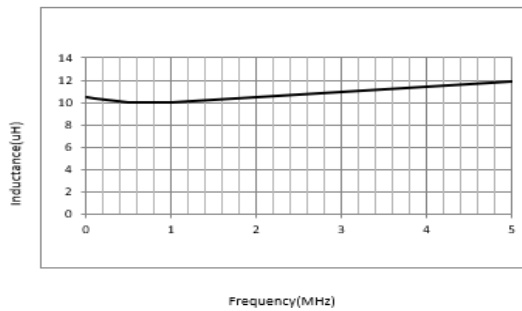
**Inductance vs DC current**



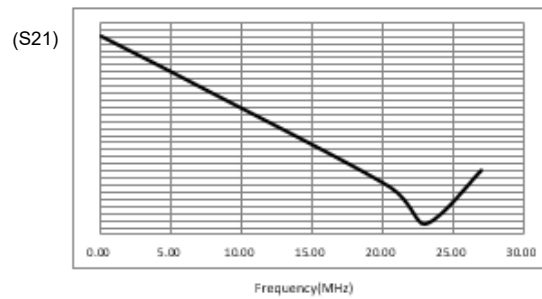
**DC current vs Temperature**



**Inductance vs Frequency**

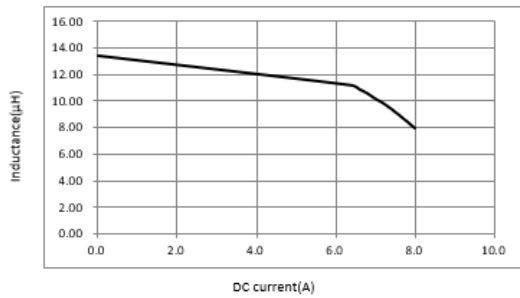


**SRF(Self Resonance Frequency)**

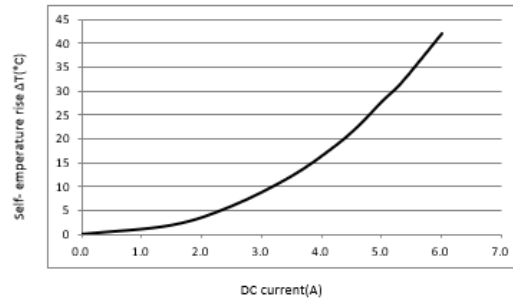


\*SPL12060-150M

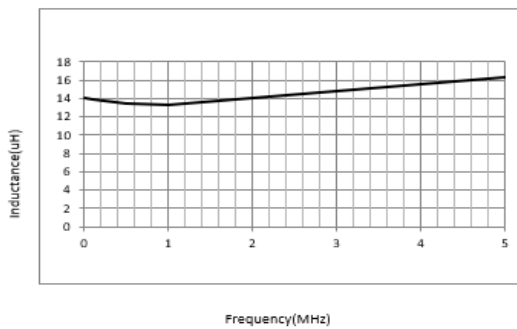
**Inductance vs DC current**



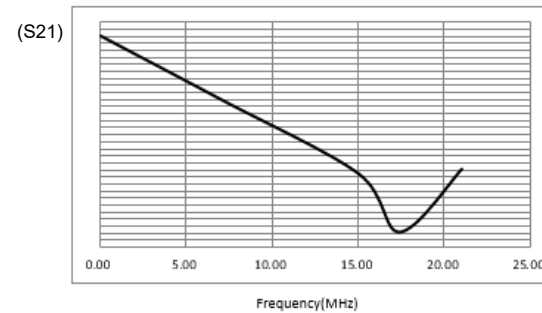
**DC current vs Temperature**



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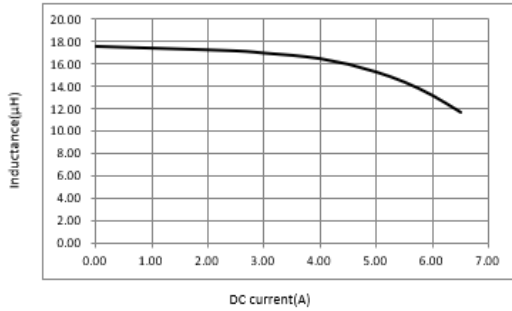
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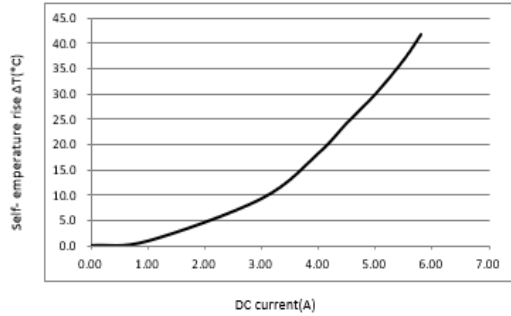
SPL12060

\*SPL12060-180M

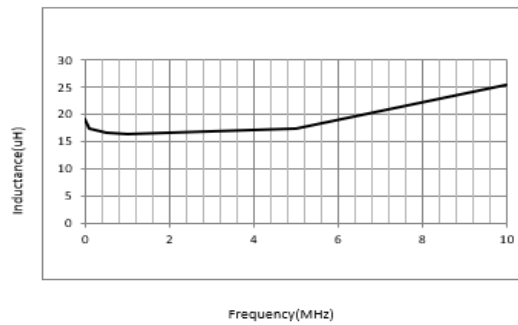
**Inductance vs DC current**



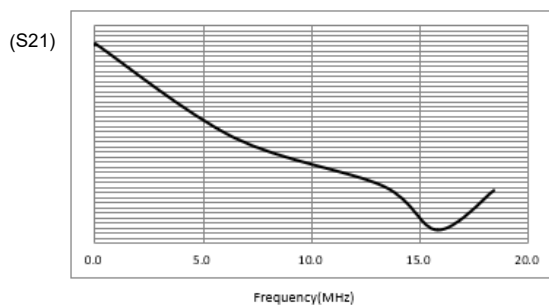
**DC current vs Temperature**



**Inductance vs Frequency**

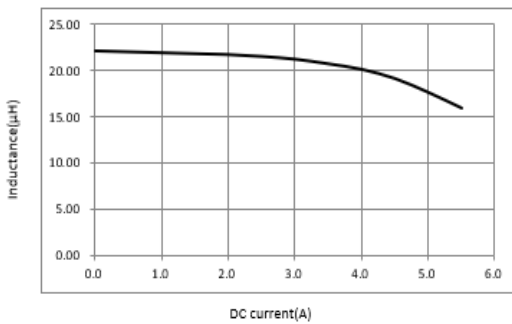


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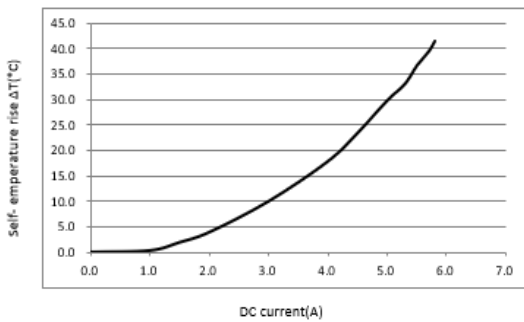


\*SPL12060-220M

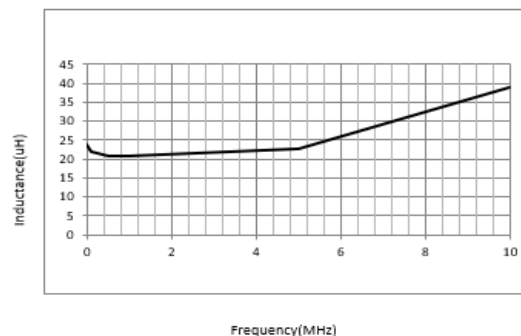
**Inductance vs DC current**



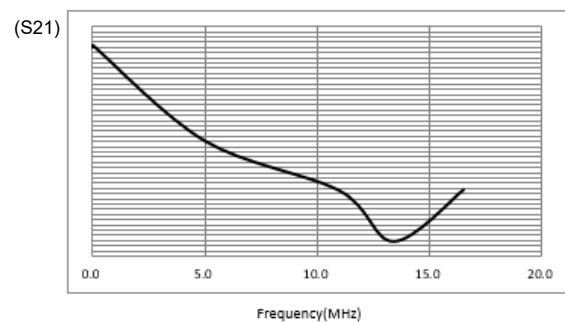
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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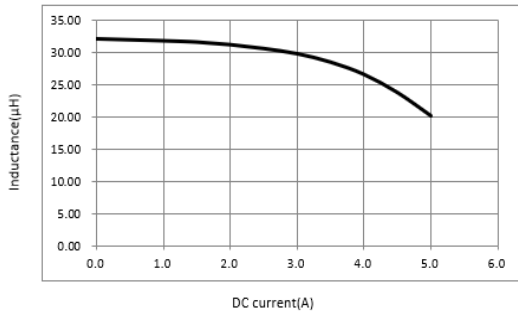
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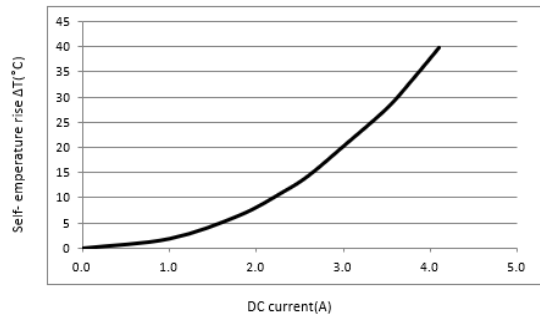
SPL12060

\*SPL12060-330M

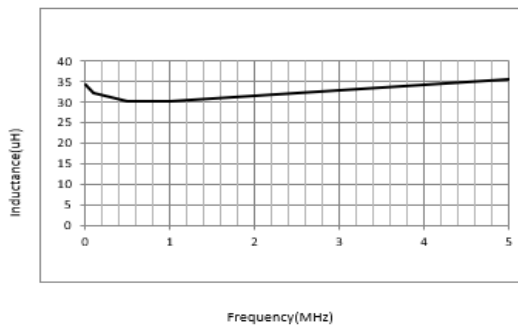
**Inductance vs DC current**



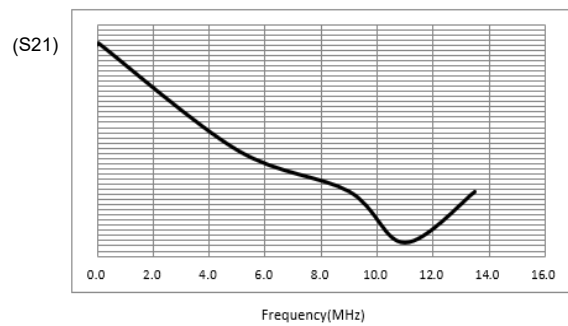
**DC current vs Temperature**



**Inductance vs Frequency**

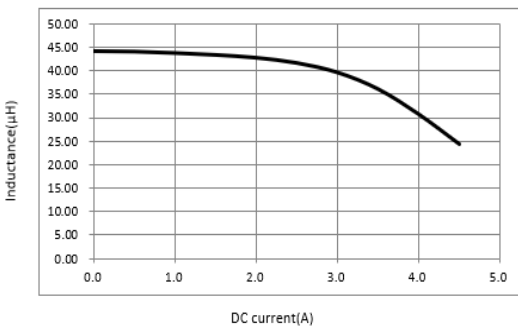


**SRF(Self Resonance Frequency)**

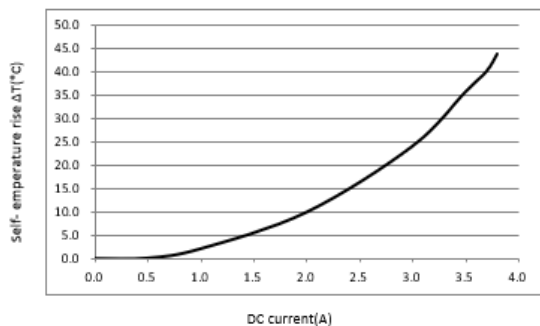


\*SPL12060-470M

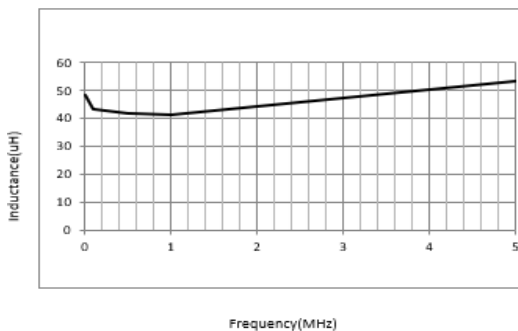
**Inductance vs DC current**



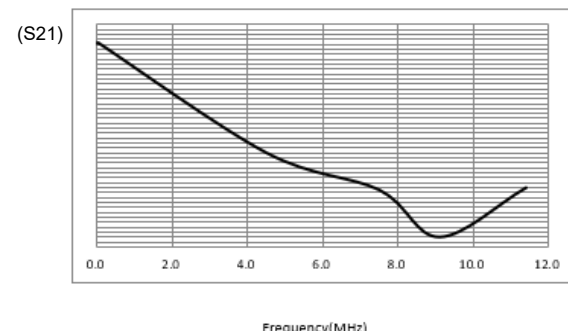
**DC current vs Temperature**



**Inductance vs Frequency**



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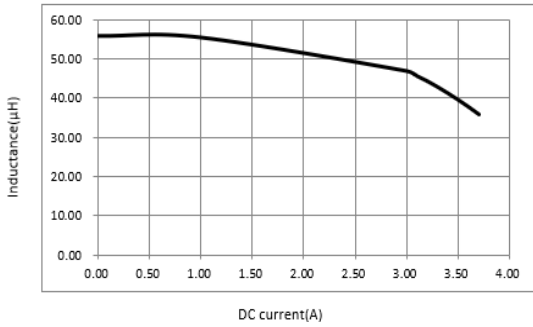
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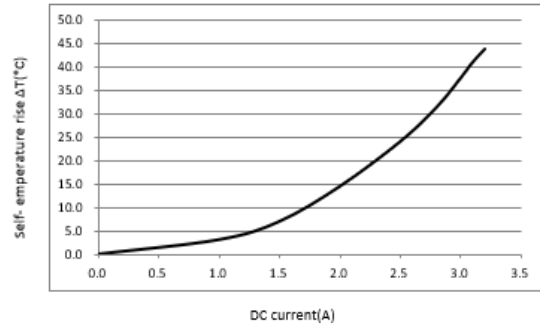
SPL12060

\*SPL12060-560M

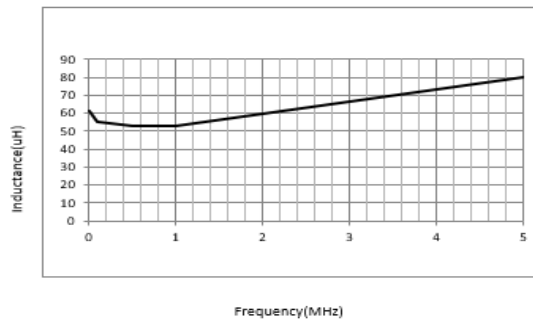
**Inductance vs DC current**



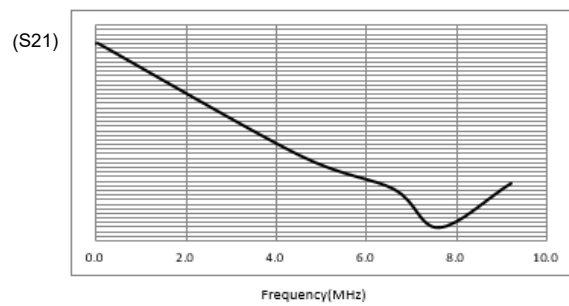
**DC current vs Temperature**



**Inductance vs Frequency**

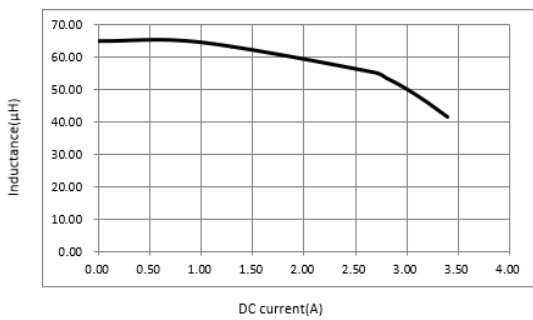


**SRF(Self Resonance Frequency)**

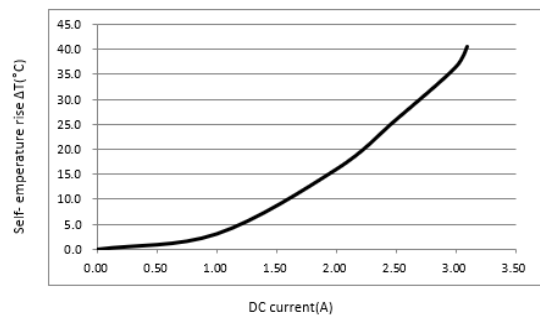


\*SPL12060-680M

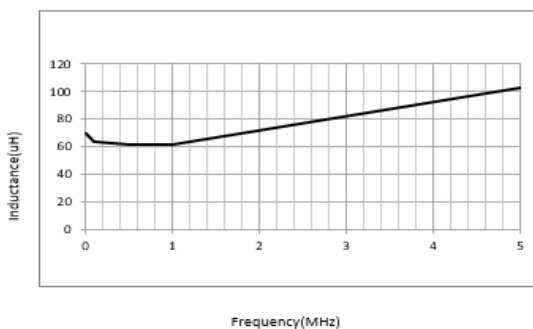
**Inductance vs DC current**



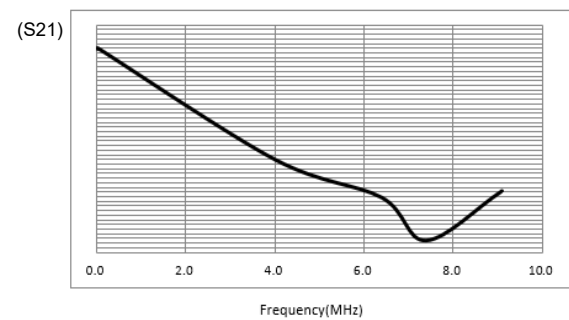
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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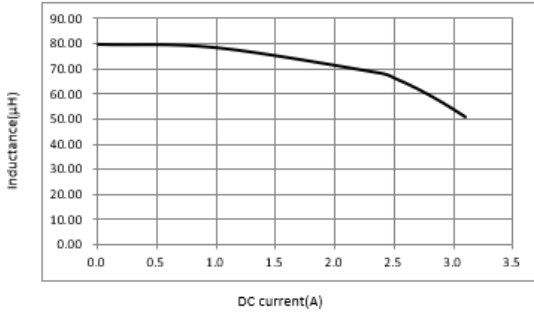
# SMD Power Inductors

## Fixed Inductor for Surface Mounting

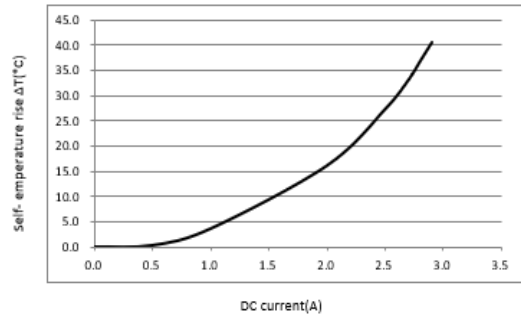
SPL12060

\*SPL12060-820M

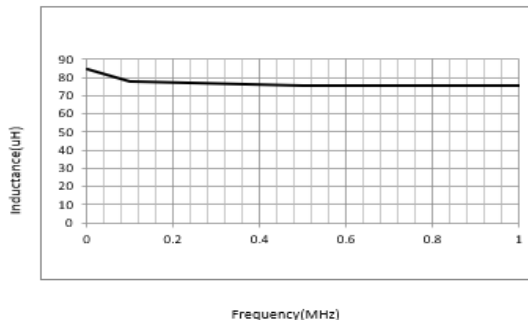
**Inductance vs DC current**



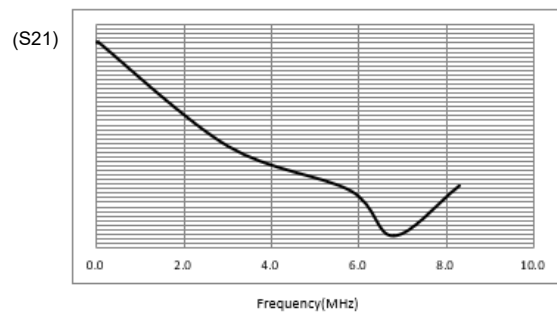
**DC current vs Temperature**



**Inductance vs Frequency**

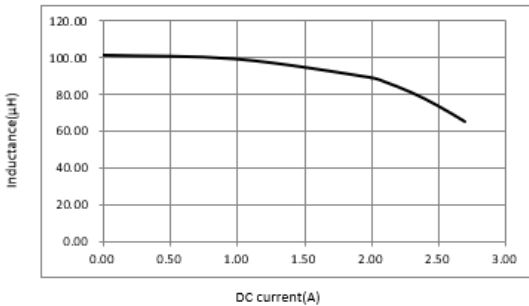


**SRF(Self Resonance Frequency)**

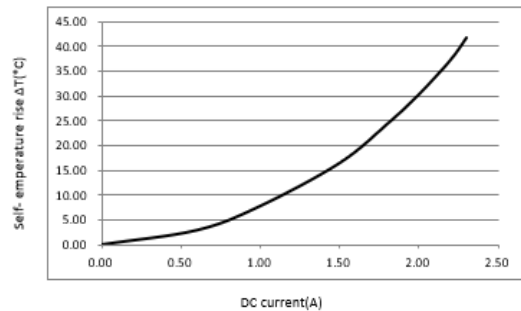


\*SPL12060-101M

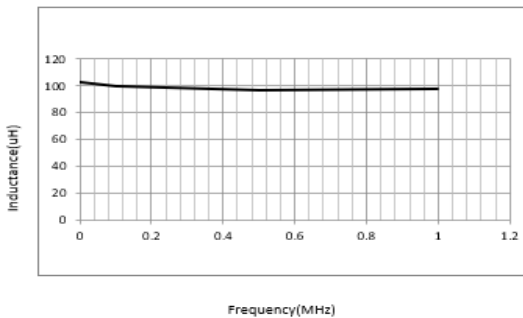
**Inductance vs DC current**



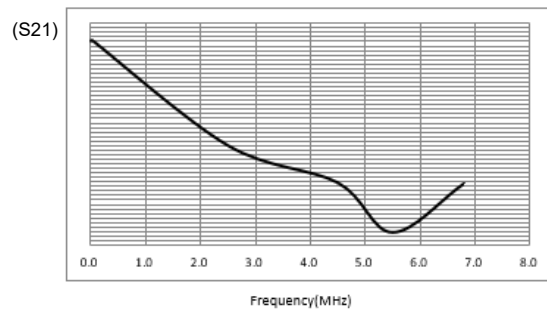
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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

Revised 10/18/21

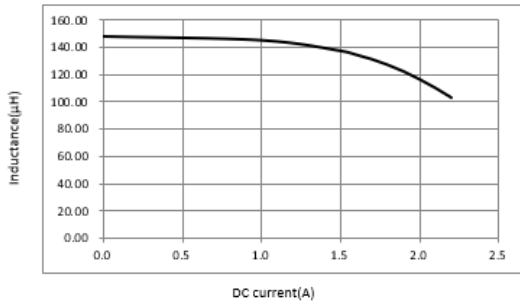
# SMD Power Inductors

## Fixed Inductor for Surface Mounting

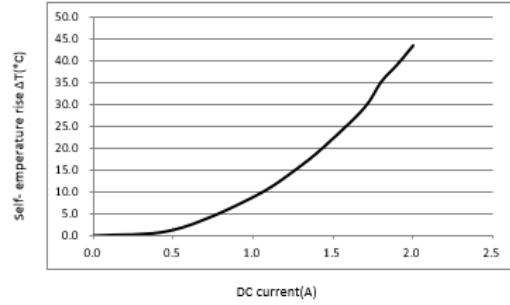
SPL12060

\*SPL12060-151M

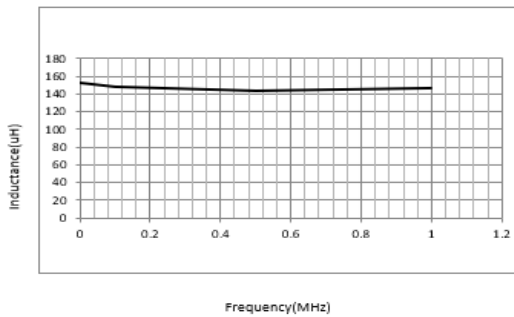
**Inductance vs DC current**



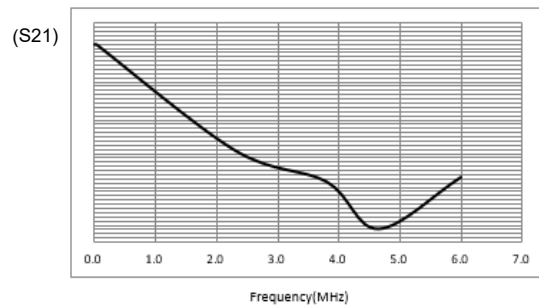
**DC current vs Temperature**



**Inductance vs Frequency**

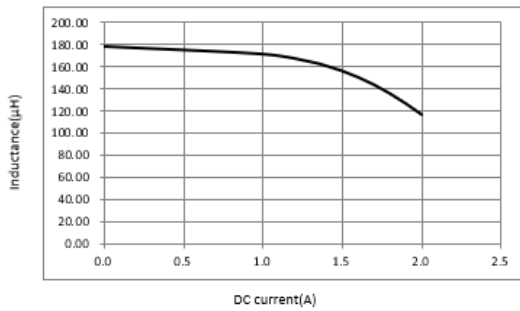


**SRF(Self Resonance Frequency)**

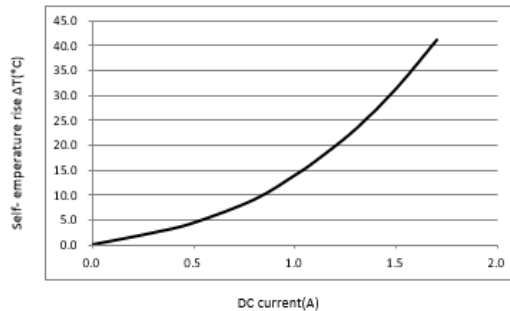


\*SPL12060-181M

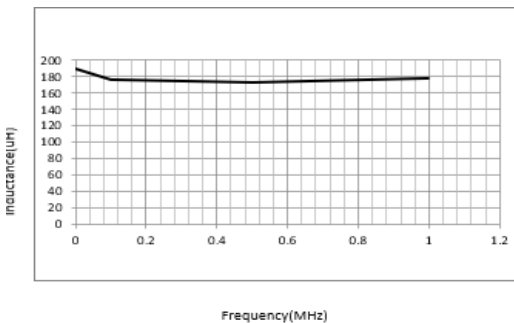
**Inductance vs DC current**



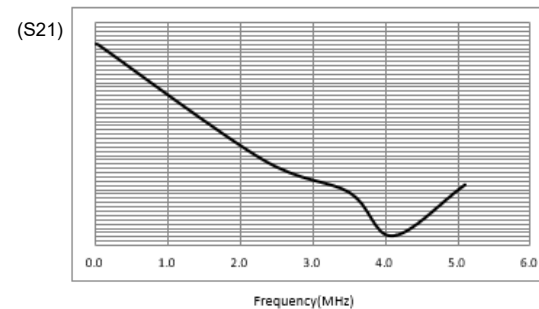
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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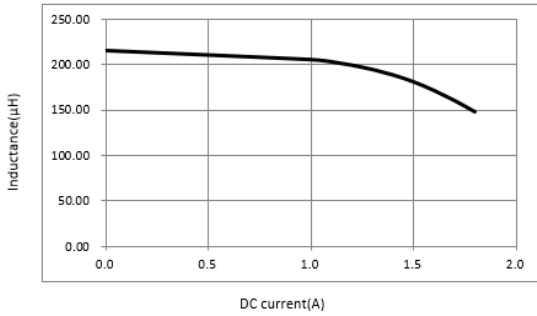
# SMD Power Inductors

## Fixed Inductor for Surface Mounting

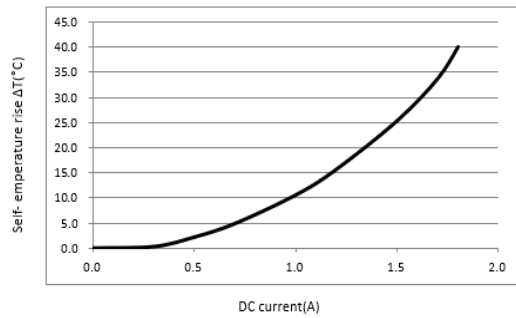
SPL12060

\*SPL12060-221M

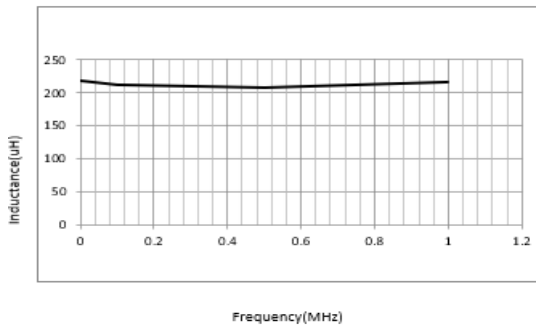
**Inductance vs DC current**



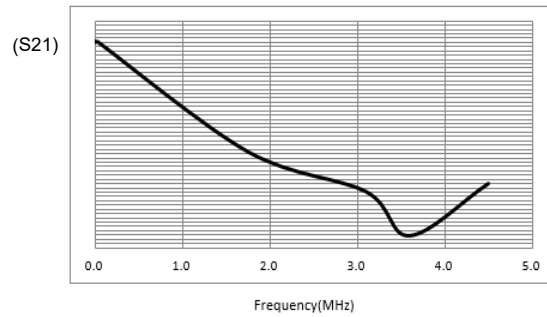
**DC current vs Temperature**



**Inductance vs Frequency**

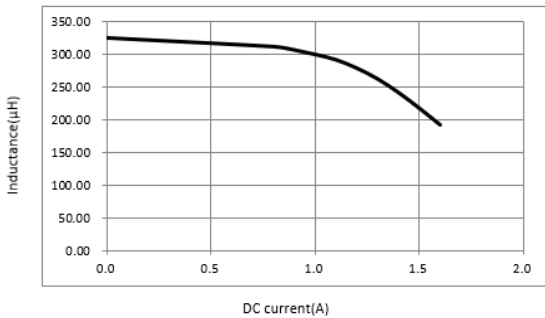


**SRF(Self Resonance Frequency)**

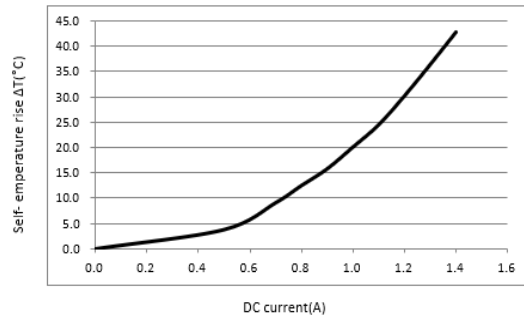


\*SPL12060-331M

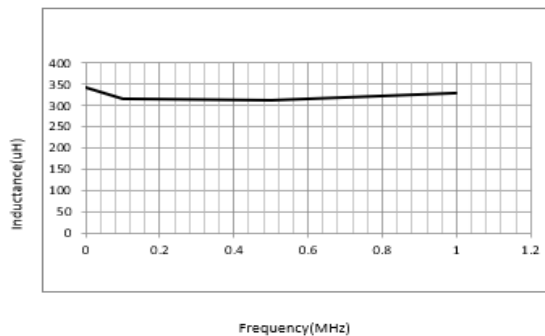
**Inductance vs DC current**



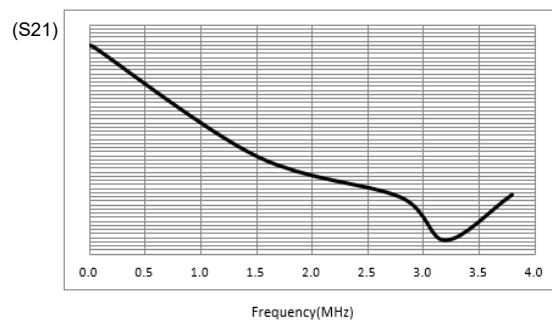
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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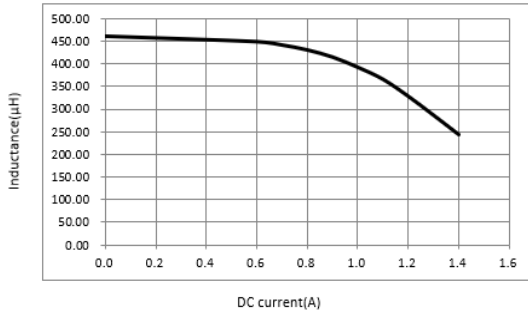
# SMD Power Inductors

Fixed Inductor for Surface Mounting

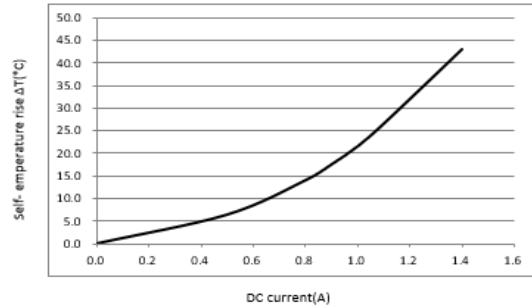
SPL12060

\*SPL12060-471M

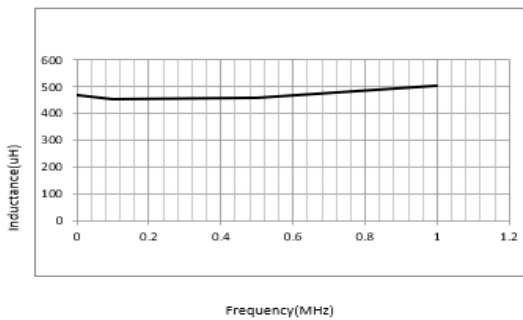
**Inductance vs DC current**



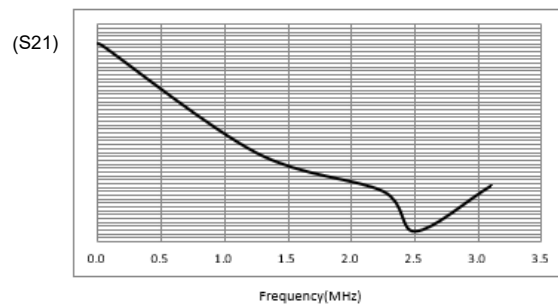
**DC current vs Temperature**



**Inductance vs Frequency**

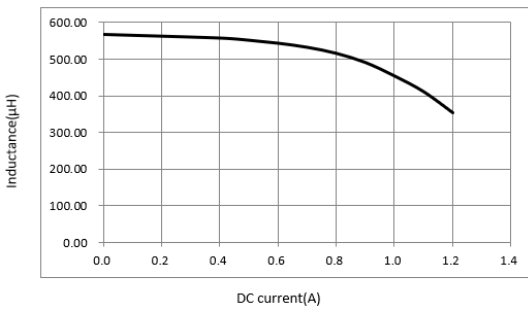


**SRF(Self Resonance Frequency)**

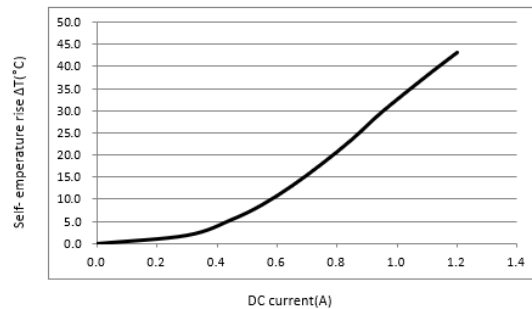


\*SPL12060-561M

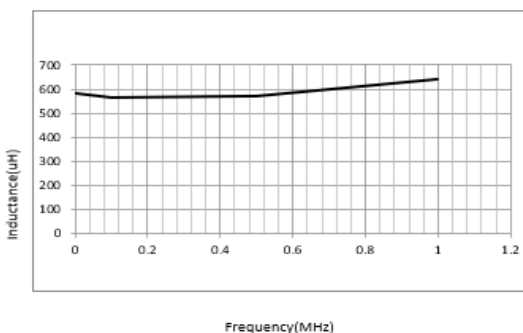
**Inductance vs DC current**



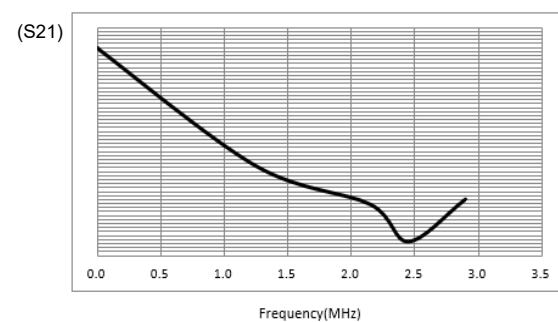
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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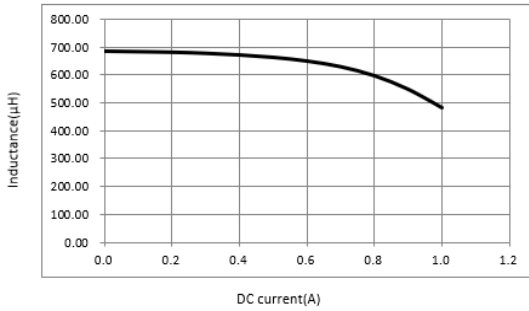
# SMD Power Inductors

## Fixed Inductor for Surface Mounting

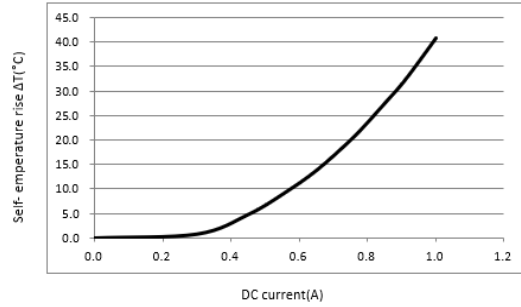
SPL12060

\*SPL12060-681M

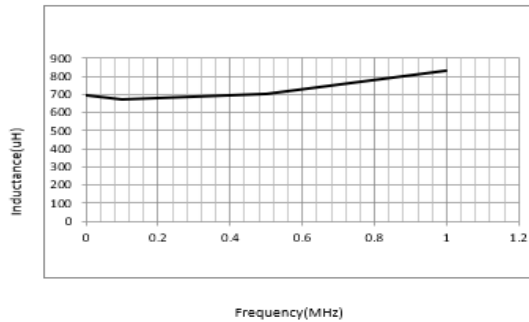
**Inductance vs DC current**



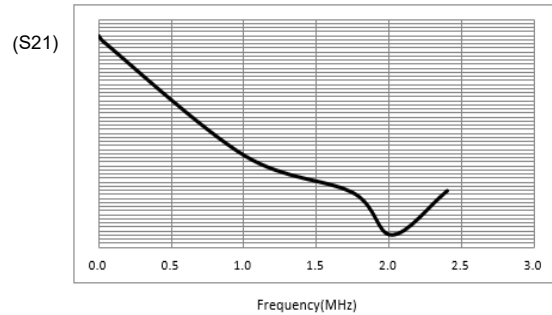
**DC current vs Temperature**



**Inductance vs Frequency**

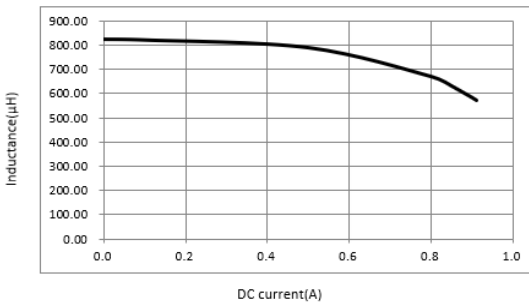


**SRF(Self Resonance Frequency)**

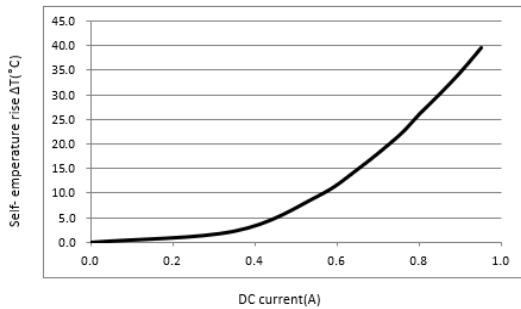


\*SPL12060-821M

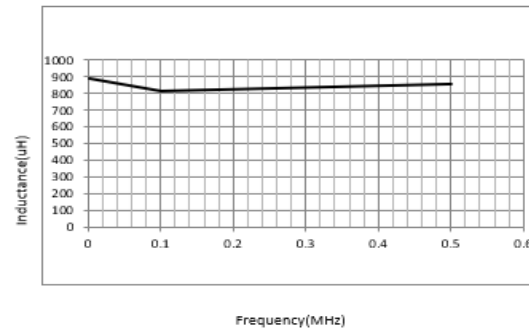
**Inductance vs DC current**



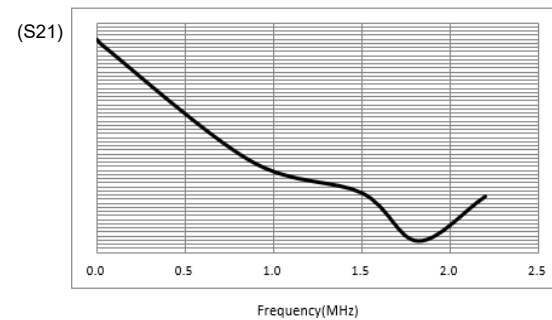
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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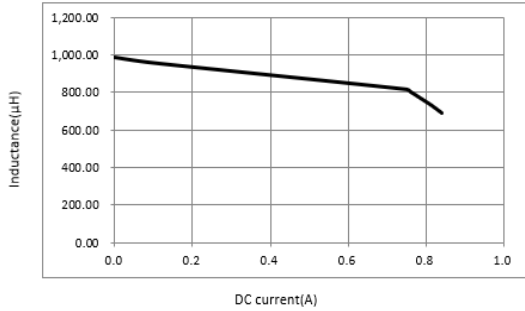
# SMD Power Inductors

Fixed Inductor for Surface Mounting

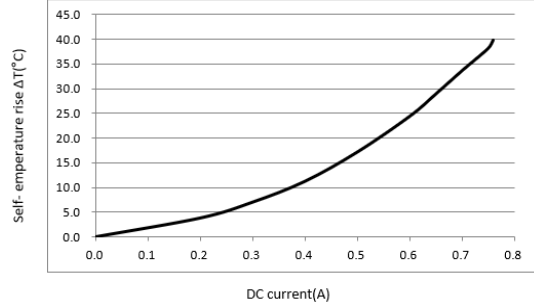
SPL12060

\*SPL12060-102M

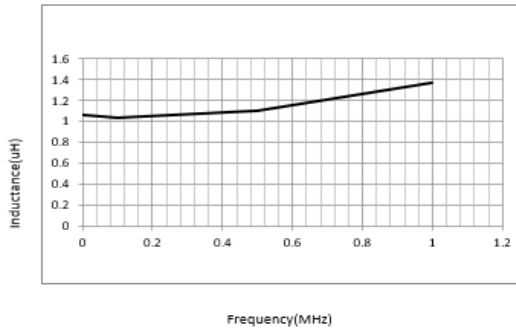
**Inductance vs DC current**



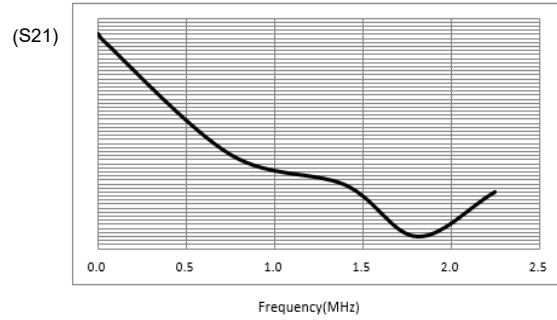
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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