

SMD Power Inductor

Fixed Inductor for Surface Mounting

SPE3015 Series

Construction

- SMD Magnetic-resin shielded type



Features

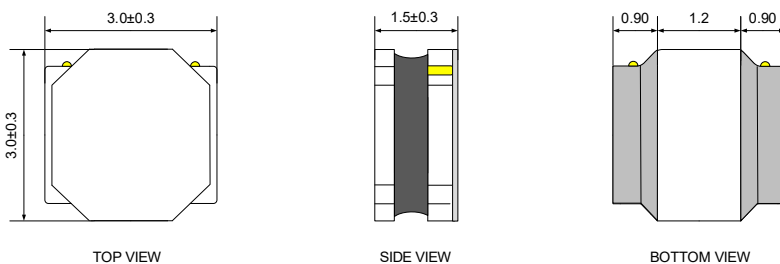
- Qualified to AEC-Q200
- Operating temperature -50 ~ +155C (Including self temperature)
- Solder reflow temperature 260°C peak
- Suitable for lead-free reflow soldering
- Available on tape and reel for automatic insertion



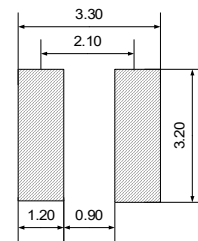
Applications

- Automotive / PDA / Notebook systems
- DC/DC converters
- Portable gaming devices, personal navigation systems, personal multimedia devices

Dimensions (Unit:mm)



Recommended Land Pattern (Unit:mm)



Electrical Characteristics

Ordering code	Inductance(uH)	DCR(mΩ,±30%)	Isat*1(A,MAX)	Irms*2(A,TYP)	Marking
SPE3015-1R0N	1.00±30%	30.0	2.30	2.20	-
SPE3015-1R2N	1.20±30%	36.0	2.20	1.90	-
SPE3015-1R5N	1.50±30%	45.0	2.10	1.60	-
SPE3015-1R8N	1.80±30%	50.0	1.80	1.50	-
SPE3015-2R2N	2.20±30%	60.0	1.60	1.40	-

※Test Equipment

*Inductance : Agilent 4285A (100kHz, 1.0V)

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : Agilent 4285A + Agilent 42841A

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

*Notes

*1.Isat : DC current (A) that will cause L0 to drop approximately 30%

*2.Irms : DC current (A) that will cause an approximate ΔT of 40°C

Revised 01/02/25

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SPE3015-2R7N	2.70 \pm 30%	79.0	1.50	1.30	-
SPE3015-3R3N	3.30 \pm 30%	85.0	1.30	1.20	-
SPE3015-4R7M	4.70 \pm 20%	125.0	1.10	1.00	-
SPE3015-5R6N	5.60 \pm 20%	150.0	1.00	0.95	-
SPE3015-6R8M	6.80 \pm 20%	200.0	0.90	0.85	-
SPE3015-8R2M	8.20 \pm 20%	225.0	0.80	0.75	-
SPE3015-100M	10.0 \pm 20%	255.0	0.72	0.70	-
SPE3015-120M	12.0 \pm 20%	360.0	0.65	0.60	-
SPE3015-150M	15.0 \pm 20%	460.0	0.60	0.55	-
SPE3015-220M	22.0 \pm 20%	520.0	0.50	0.47	-
SPE3015-330M	33.0 \pm 20%	920.0	0.40	0.37	-
SPE3015-470M	47.0 \pm 20%	1.60 Ω	0.35	0.30	-

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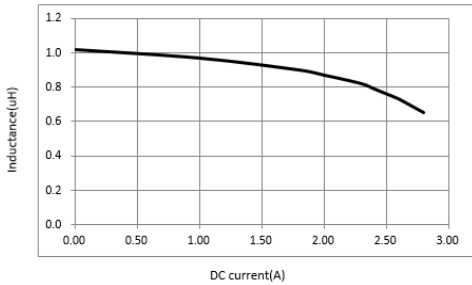
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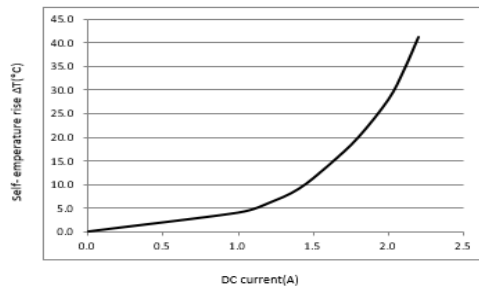
SPE3015 Series

*SPE3015-1R0N

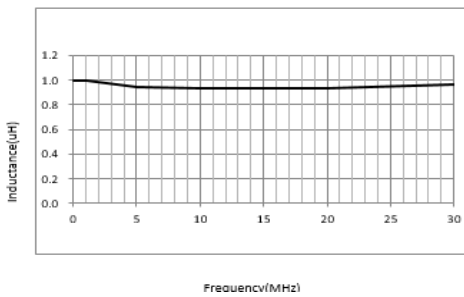
Inductance vs DC current



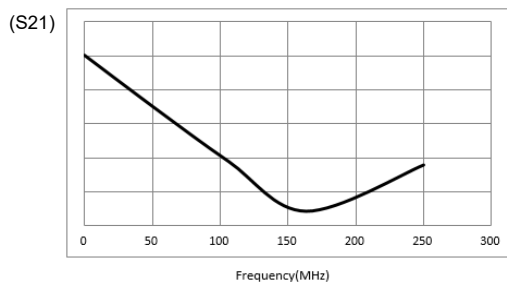
DC current vs Temperature



Inductance vs Frequency

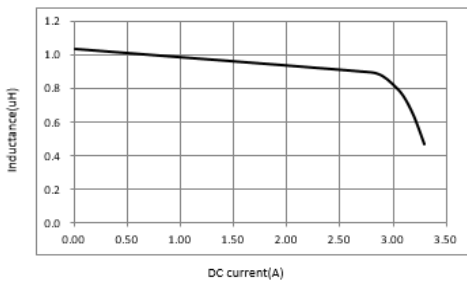


SRF(Self Resonance Frequency)

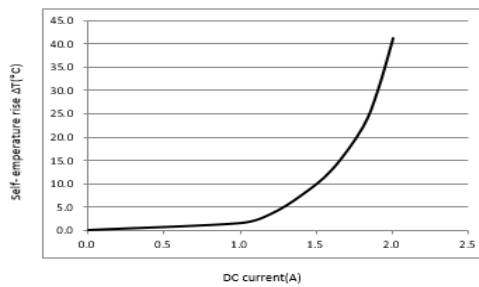


*SPE3015-1R2N

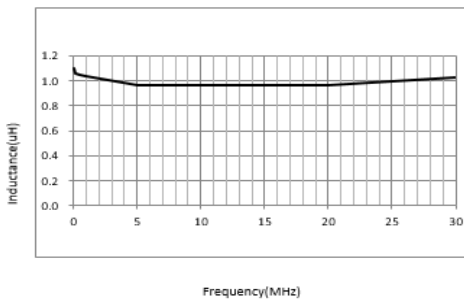
Inductance vs DC current



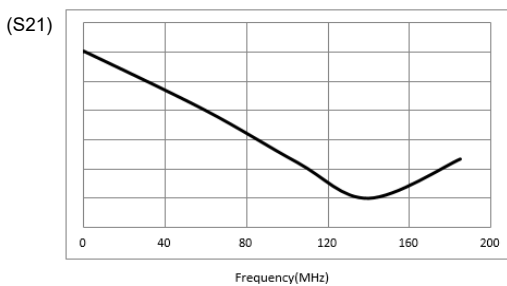
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



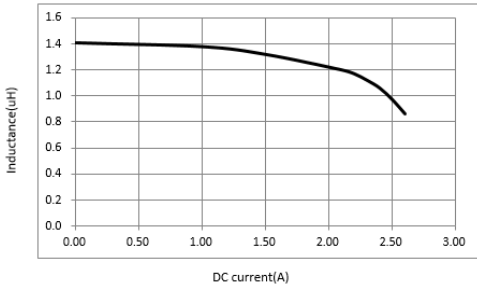
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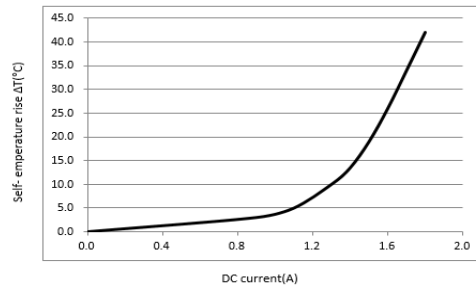
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*SPE3015-1R5N

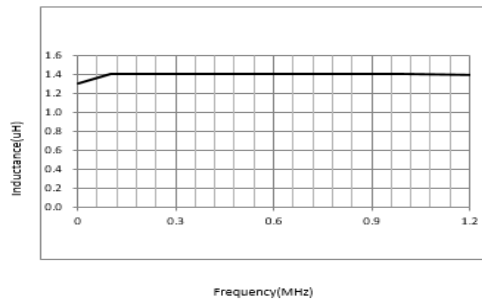
Inductance vs DC current



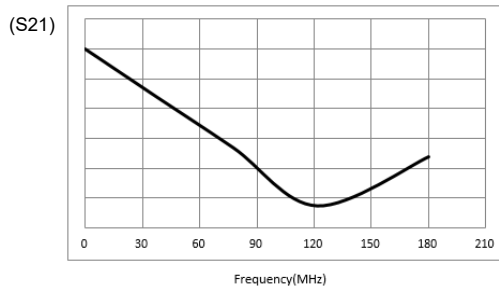
DC current vs Temperature



Inductance vs Frequency

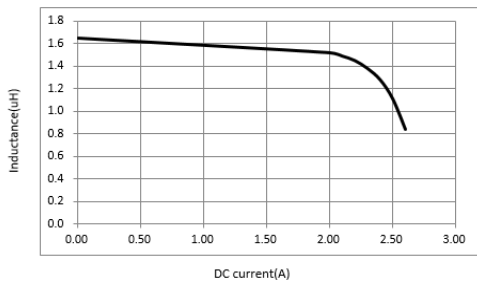


SRF(Self Resonance Frequency)

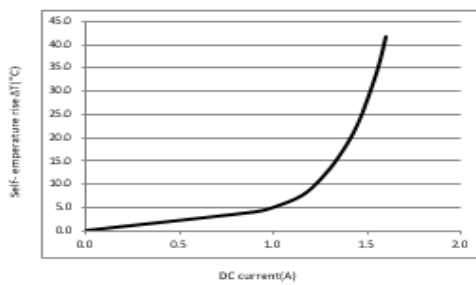


*SPE3015-1R8N

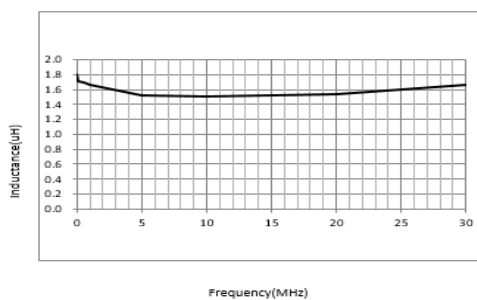
Inductance vs DC current



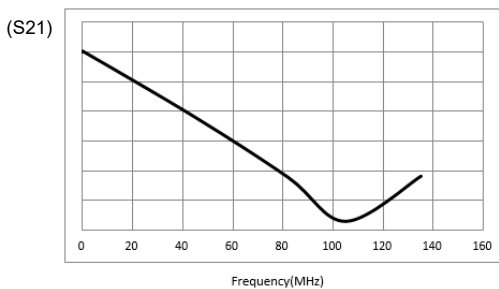
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



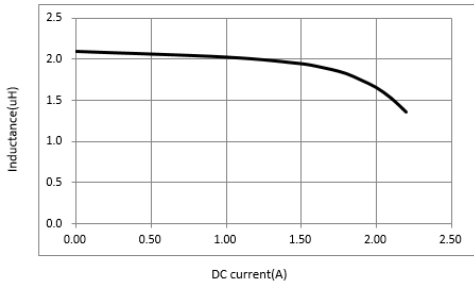
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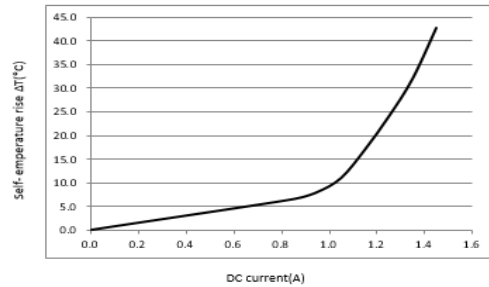
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*SPE3015-2R2N

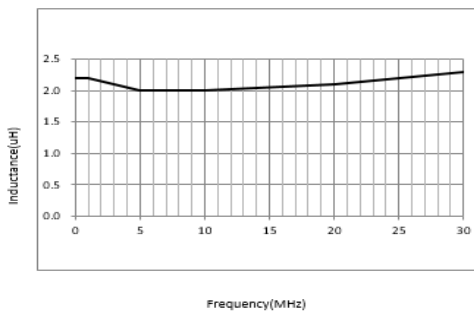
Inductance vs DC current



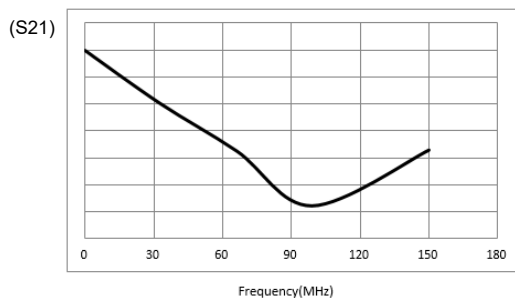
DC current vs Temperature



Inductance vs Frequency

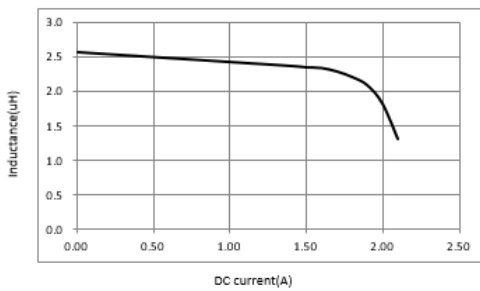


SRF(Self Resonance Frequency)

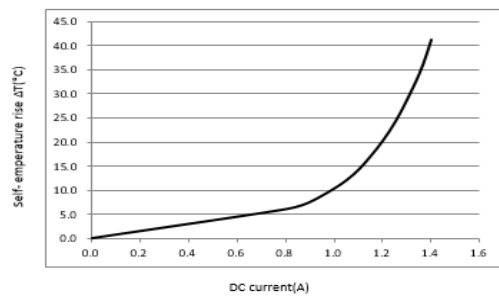


*SPE3015-2R7N

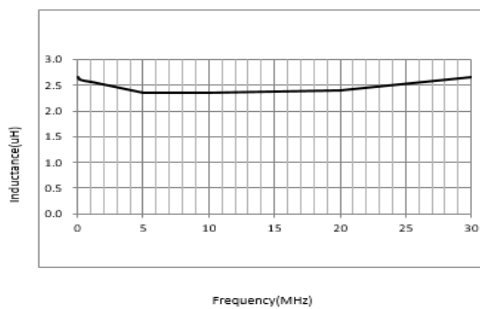
Inductance vs DC current



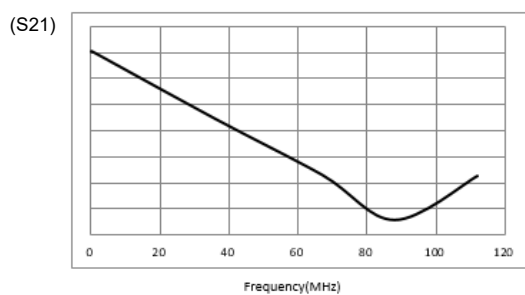
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



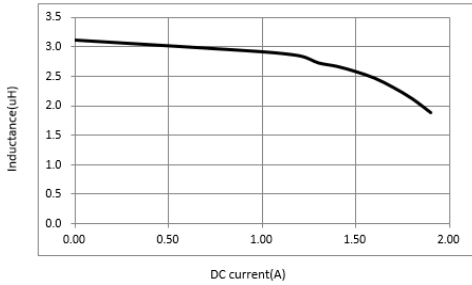
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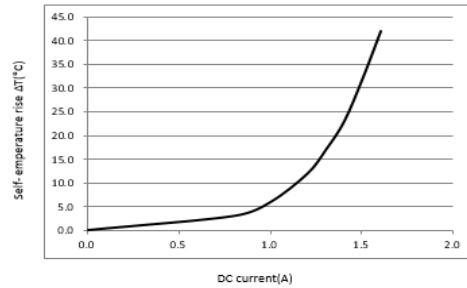
SPE3015 Series

*SPE3015-3R3N

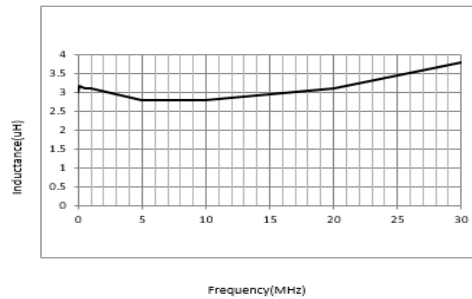
Inductance vs DC current



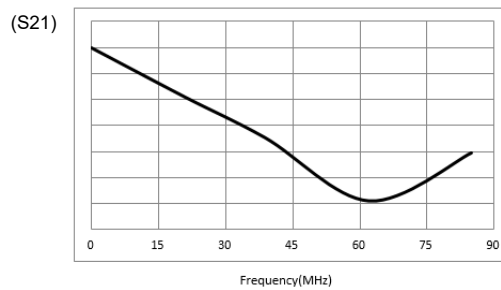
DC current vs Temperature



Inductance vs Frequency

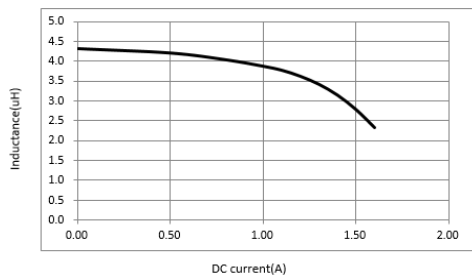


SRF(Self Resonance Frequency)

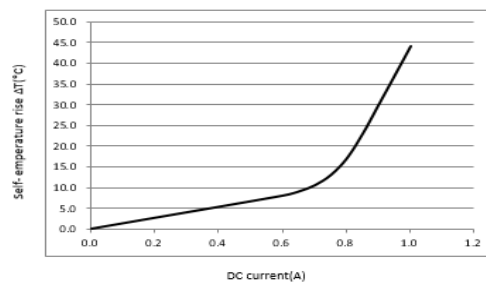


*SPE3015-4R7M

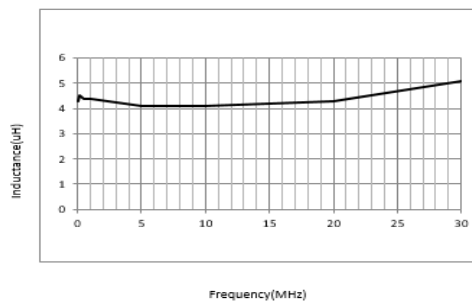
Inductance vs DC current



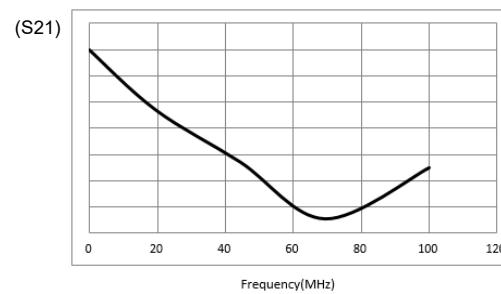
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



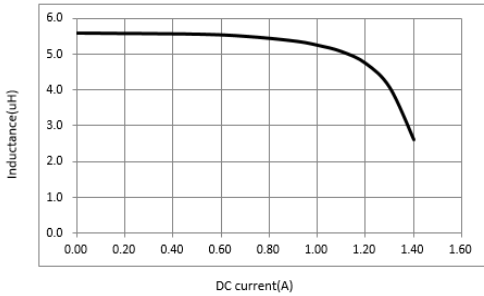
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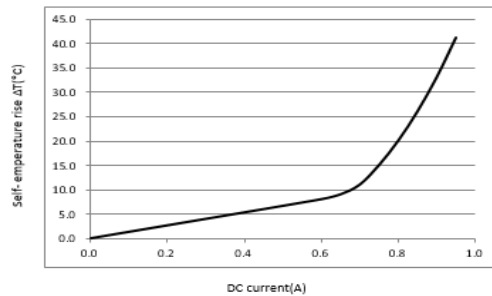
SPE3015 Series

*SPE3015-5R6M

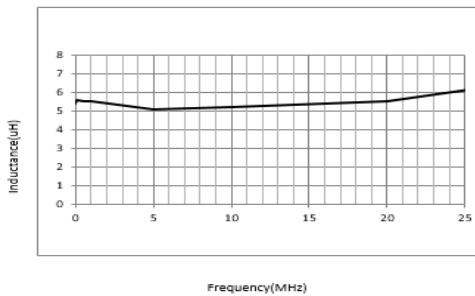
Inductance vs DC current



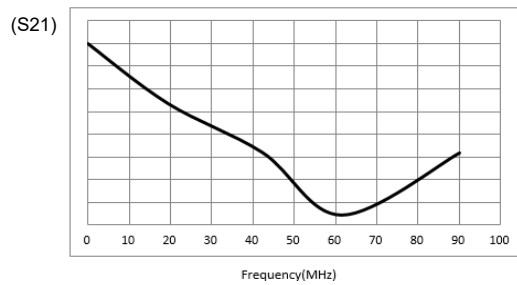
DC current vs Temperature



Inductance vs Frequency

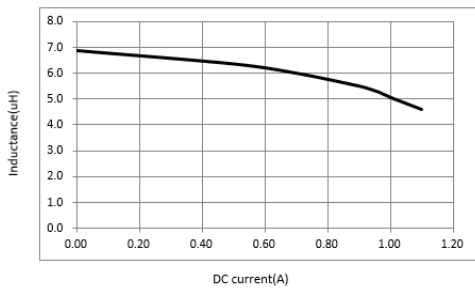


SRF(Self Resonance Frequency)

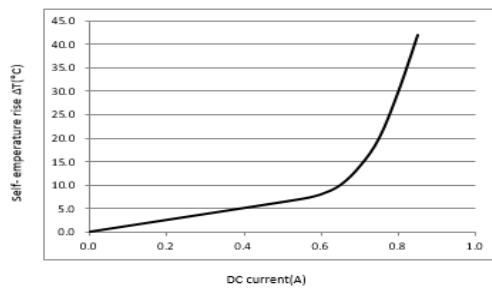


*SPE3015-6R8M

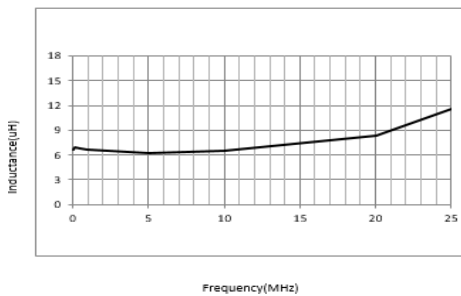
Inductance vs DC current



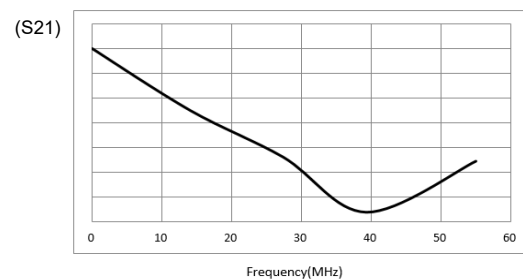
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



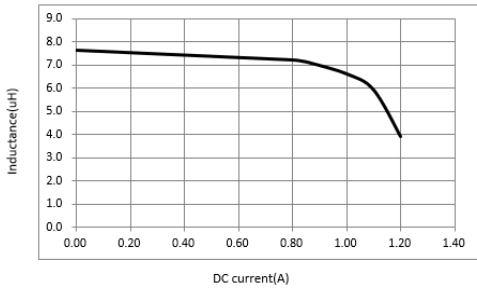
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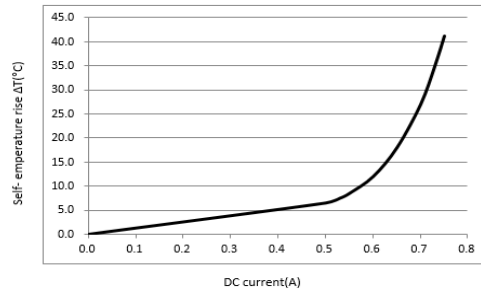
SPE3015 Series

*SPE3015-8R2M

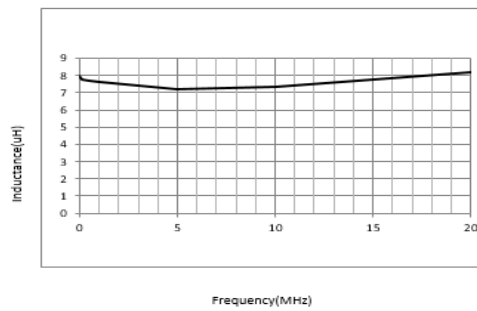
Inductance vs DC current



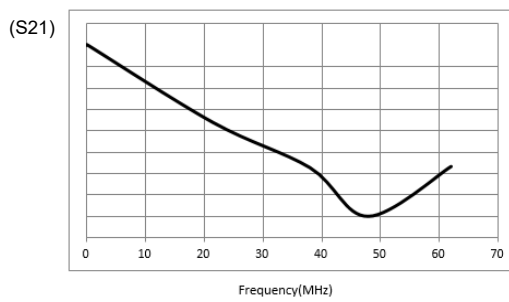
DC current vs Temperature



Inductance vs Frequency

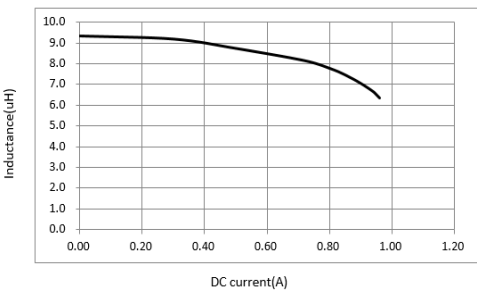


SRF(Self Resonance Frequency)

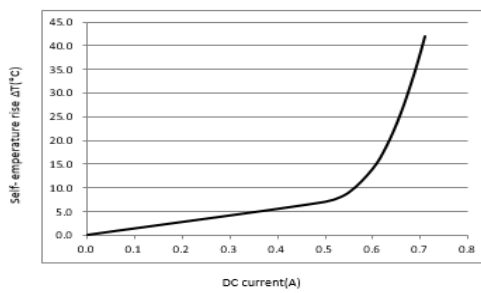


*SPE3015-100M

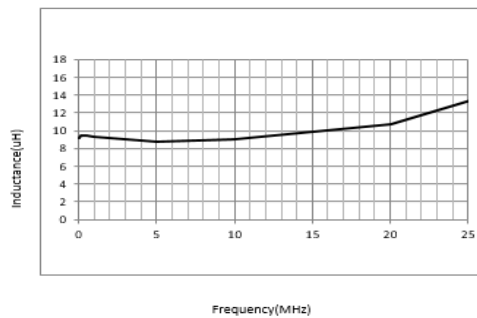
Inductance vs DC current



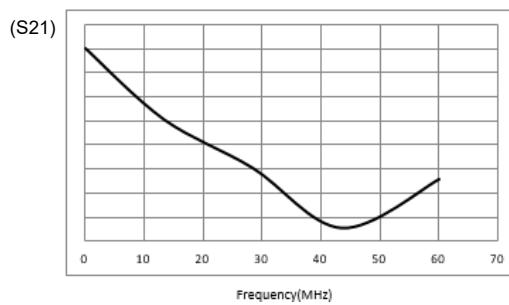
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



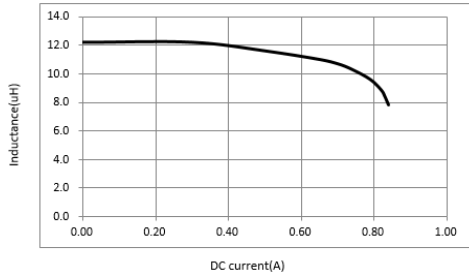
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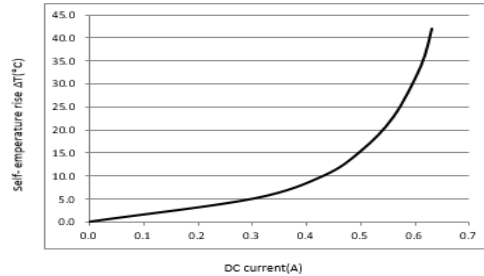
SPE3015 Series

*SPE3015-120M

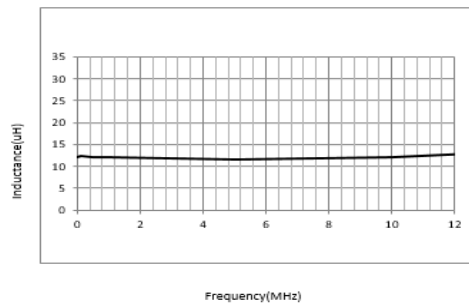
Inductance vs DC current



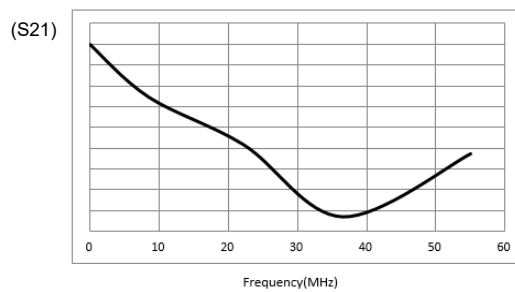
DC current vs Temperature



Inductance vs Frequency

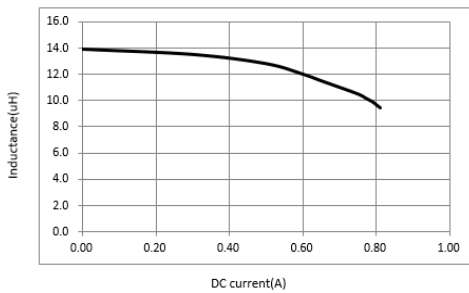


SRF(Self Resonance Frequency)

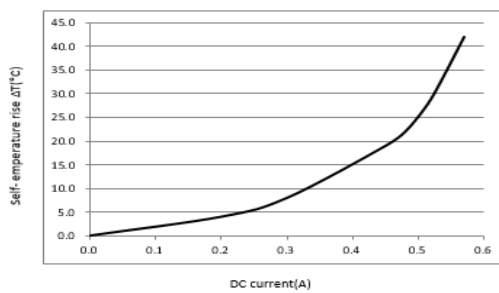


*SPE3015-150M

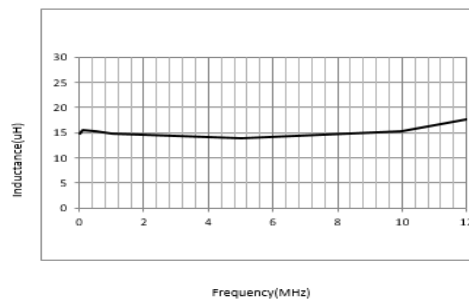
Inductance vs DC current



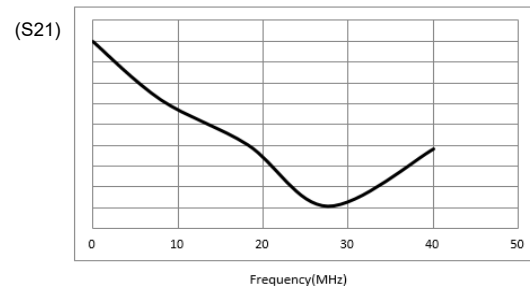
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



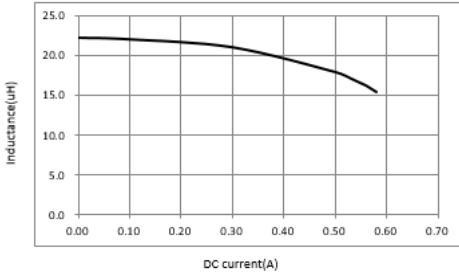
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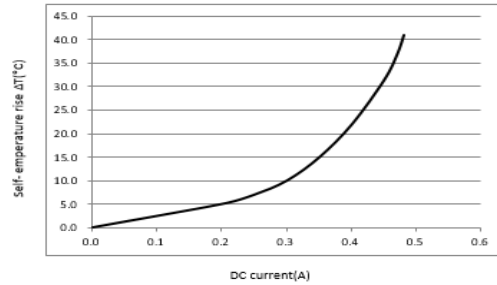
SPE3015 Series

*SPE3015-220M

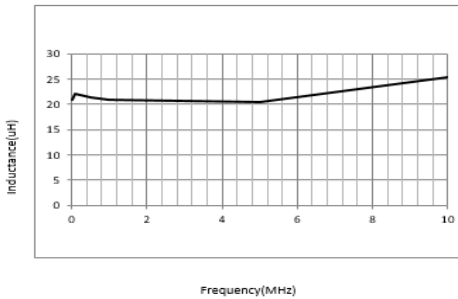
Inductance vs DC current



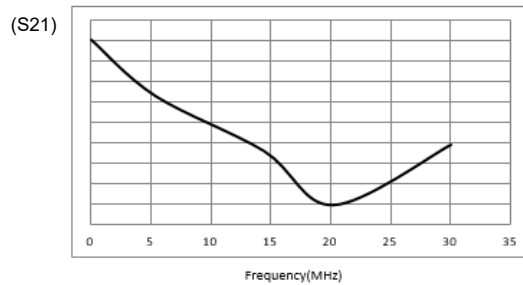
DC current vs Temperature



Inductance vs Frequency

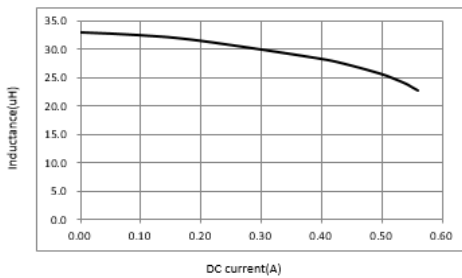


SRF(Self Resonance Frequency)

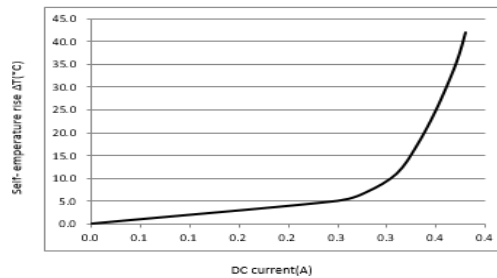


*SPE3015-330M

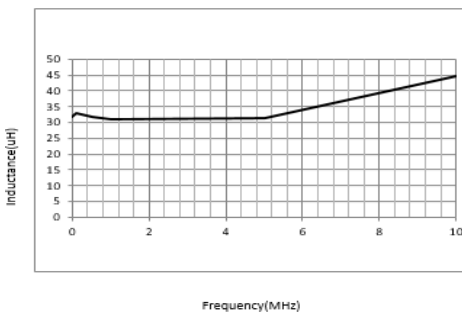
Inductance vs DC current



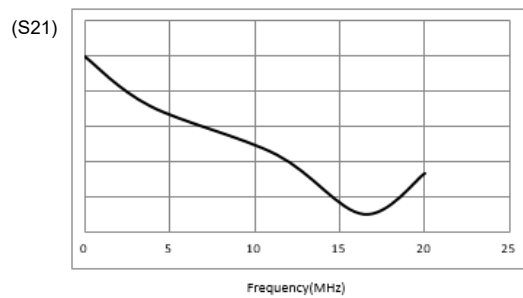
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



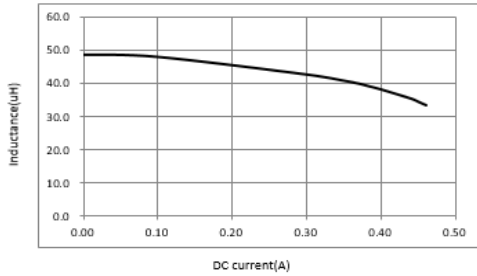
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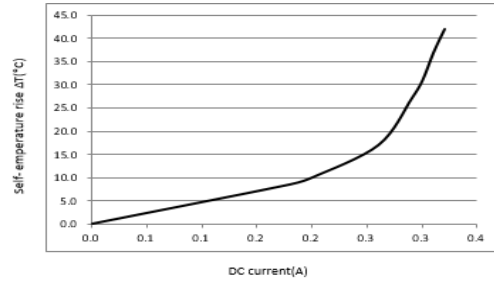
SPE3015 Series

*SPE3015-470M

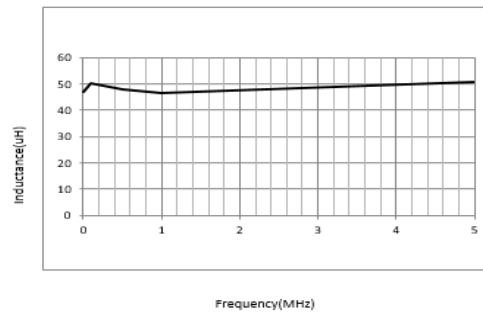
Inductance vs DC current



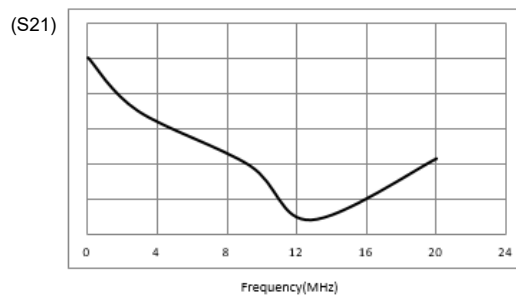
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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Revised 01/02/25