

SMD INDUCTOR

Fixed Inductor for Surface Mounting

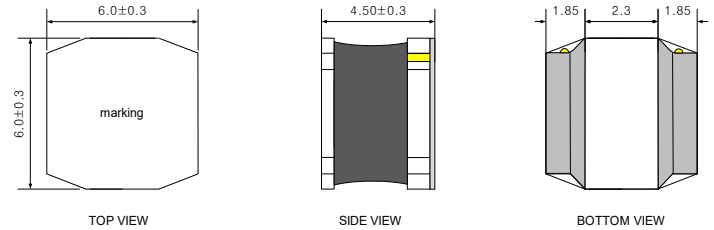
SPE6045

SMD Magnetic-resin shielded type

UNIT : mm

TYPE SPE6045
For Reflow Soldering
Inductance Range: 0.47 ~ 4,700uH

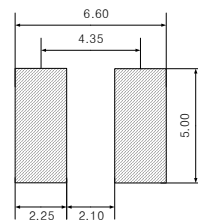
Dimensions



Features

- *Low profile (4.5mm high)
- *Suitable for reflow soldering
- *Available on tape and reel for automatic insertion
- *Qualified to AEC-Q200

Recommended PCB Pattern



Electrical Characteristics

Ordering code	Inductance range (μH)	DCR(mΩ±30%)	Isat*1 (A,MAX)	Irms*2 (A,MAX)	Marking
SPE6045-R47N	0.47±30%	8.0	15.0	7.5	R47
SPE6045-1R0N	1.0±30%	10.0	8.3	5.1	1R0
SPE6045-1R5N	1.5±30%	11.0	8.0	4.9	1R5
SPE6045-1R8N	1.8±30%	12.0	7.0	4.8	1R8
SPE6045-2R2N	2.2±30%	14.0	6.6	4.6	2R2
SPE6045-3R0N	3.0±30%	17.0	5.6	4.2	3R0
SPE6045-3R3N	3.3±30%	20.0	5.0	4.0	3R3
SPE6045-3R6N	3.6±30%	23.0	4.8	3.7	3R6
SPE6045-4R7M	4.7±20%	25.0	4.5	3.3	4R7
SPE6045-5R6M	5.6±20%	30.0	4.0	3.1	5R6
SPE6045-6R8M	6.8±20%	31.0	3.6	3.0	6R8
SPE6045-7R5M	7.5±20%	35.0	3.5	2.7	7R5
SPE6045-8R2M	8.2±20%	37.0	3.4	2.6	8R2
SPE6045-100M	10±20%	47.0	3.0	2.4	100
SPE6045-120M	12±20%	52.0	2.6	2.2	120
SPE6045-150M	15±20%	66.0	2.5	2.0	150
SPE6045-220M	22±20%	90.0	2.0	1.8	220
SPE6045-330M	33±20%	137.0	1.6	1.4	330
SPE6045-470M	47±20%	187.0	1.3	1.2	470
SPE6045-560M	56±20%	221.0	1.2	1.1	560
SPE6045-680M	68±20%	287.0	1.0	0.90	680
SPE6045-820M	82±20%	326.0	0.95	0.85	820
SPE6045-101M	100±20%	433.0	0.90	0.80	101
SPE6045-221M	220±20%	850.0	0.65	0.55	221
SPE6045-331M	330±20%	1.15Ω	0.55	0.50	331
SPE6045-471M	470±20%	2.01Ω	0.50	0.45	471
SPE6045-152M	1,500±20%	5.50Ω	0.30	0.25	152
SPE6045-222M	2,200±20%	8.41Ω	0.19	0.15	222
SPE6045-472M	4,700±20%	24.5Ω	0.15	0.10	472

*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

※Test Equipment

- *Inductance : Agilent 4284A (100kHz, 1.0V)
- *DCR : ABM3245 (20mΩ~2MΩ)
- *Bias Current : Agilent 4284A + Agilent 42841A

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Revised 20/04/21

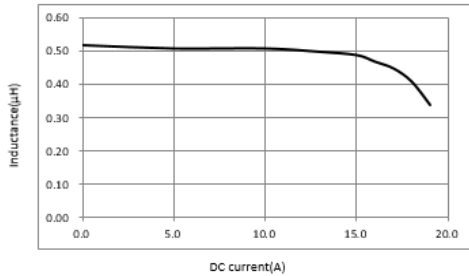
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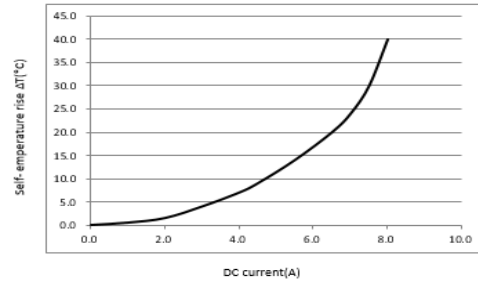
SPE6045

*SPE6045-R47N

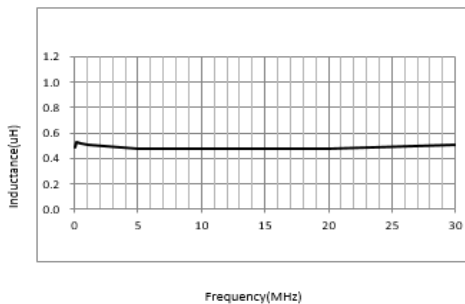
Inductance vs DC current



DC current vs Temperature

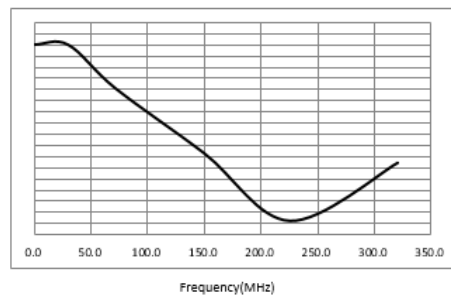


Inductance vs Frequency



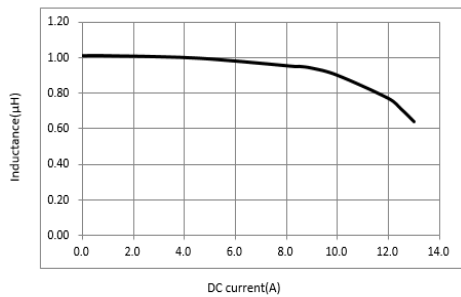
SRF(Self Resonance Frequency)

(S21)

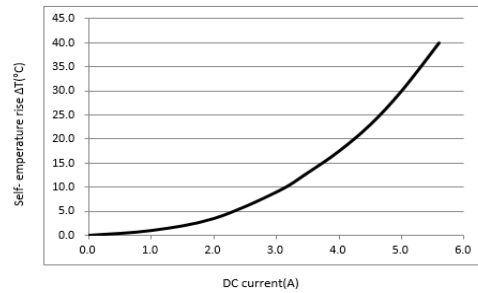


*SPE6045-1R0N

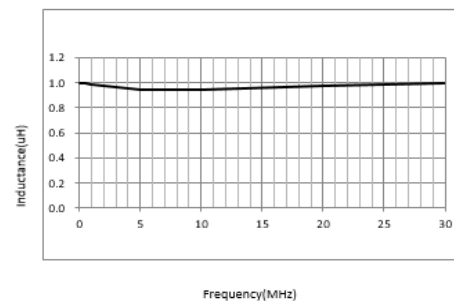
Inductance vs DC current



DC current vs Temperature

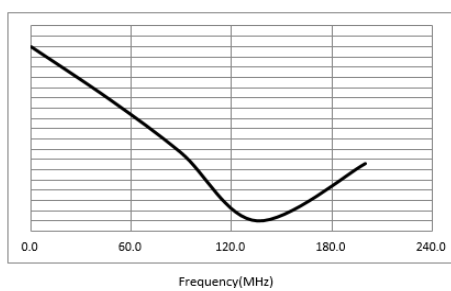


Inductance vs Frequency



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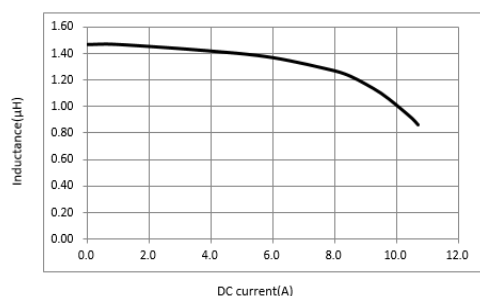
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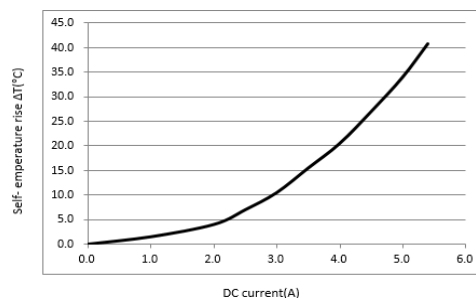
SPE6045

*SPE6045-1R5N

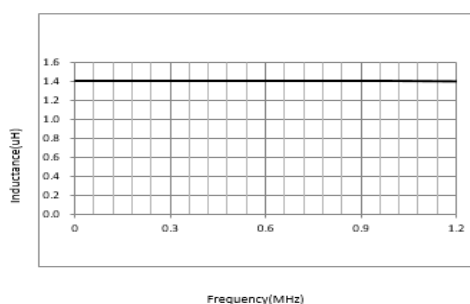
Inductance vs DC current



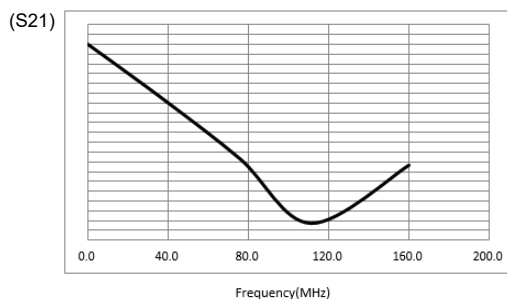
DC current vs Temperature



Inductance vs Frequency

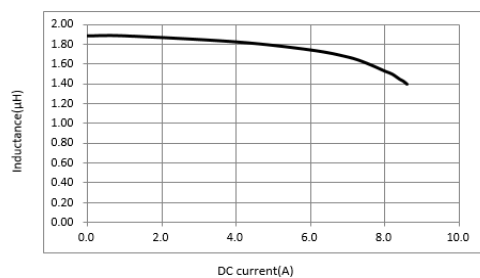


SRF(Self Resonance Frequency)

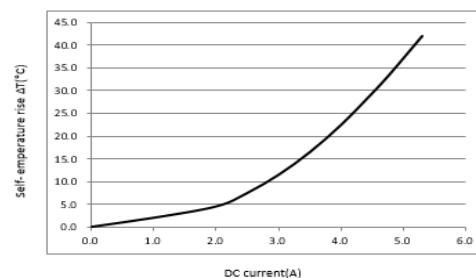


*SPE6045-1R8N

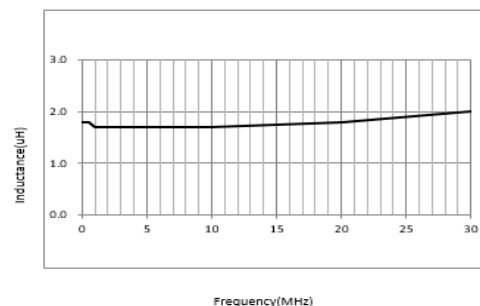
Inductance vs DC current



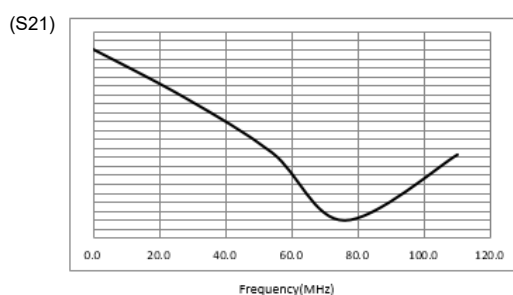
DC current vs Temperature



Inductance vs Frequency



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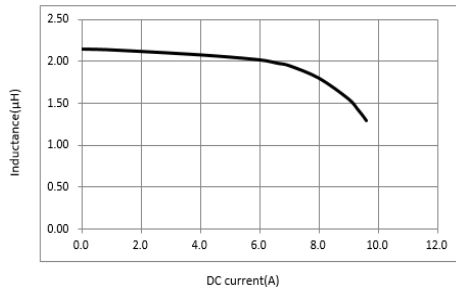
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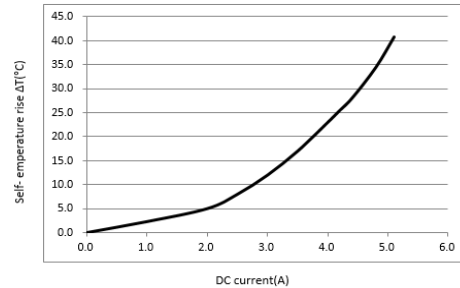
SPE6045

*SPE6045-2R2N

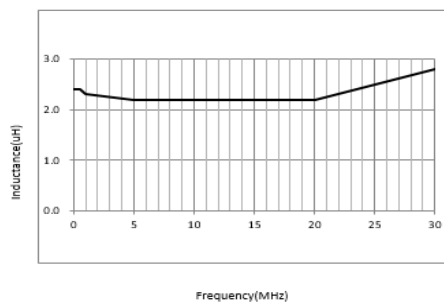
Inductance vs DC current



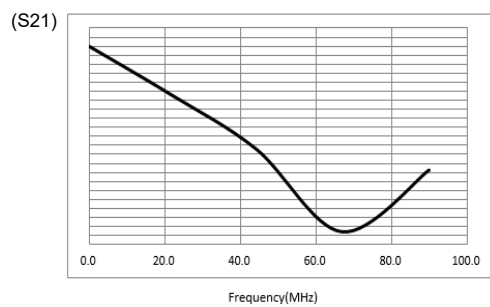
DC current vs Temperature



Inductance vs Frequency

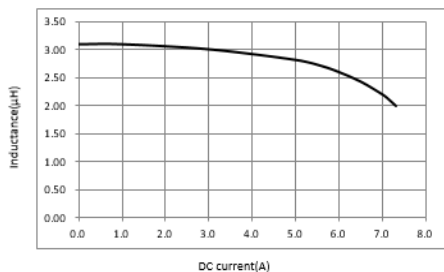


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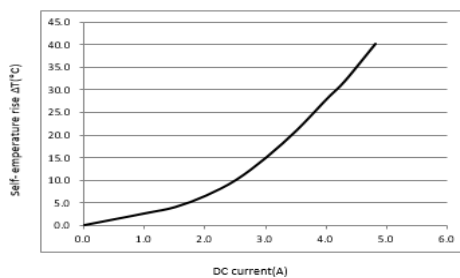


*SPE6045-3R0N

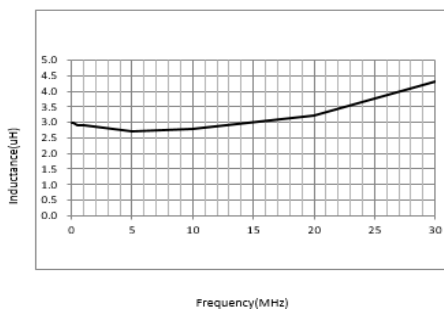
Inductance vs DC current



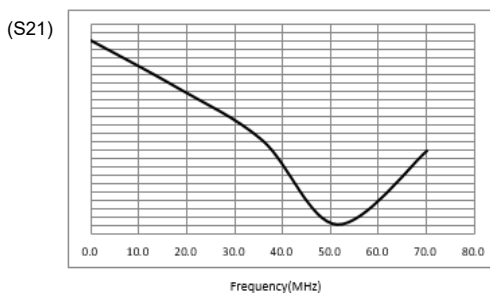
DC current vs Temperature



Inductance vs Frequency



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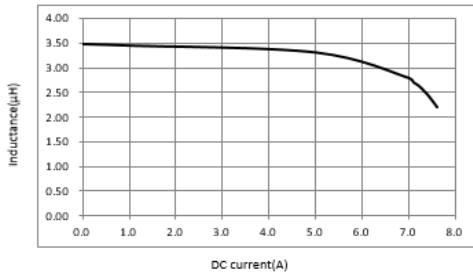
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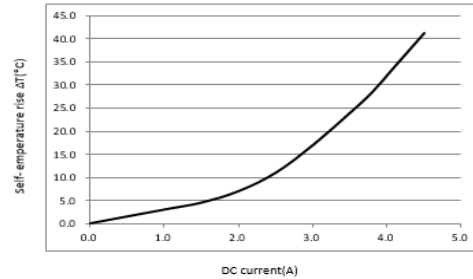
SPE6045

*SPE6045-3R3N

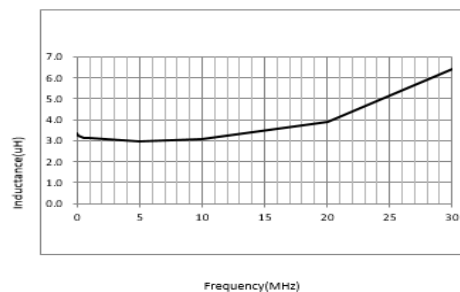
Inductance vs DC current



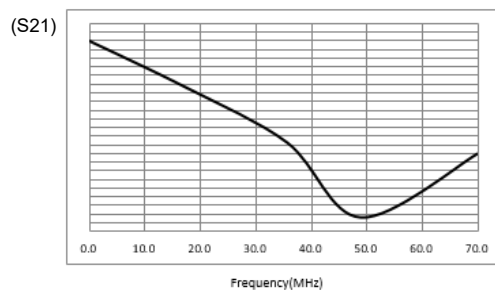
DC current vs Temperature



Inductance vs Frequency

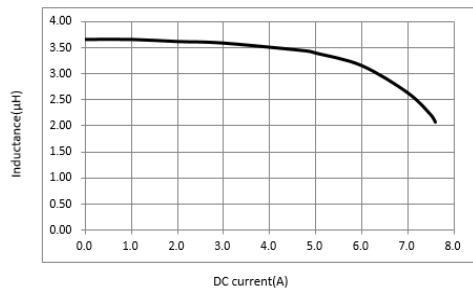


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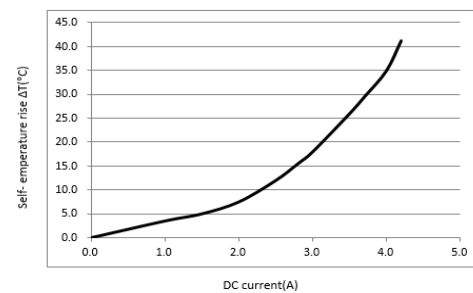


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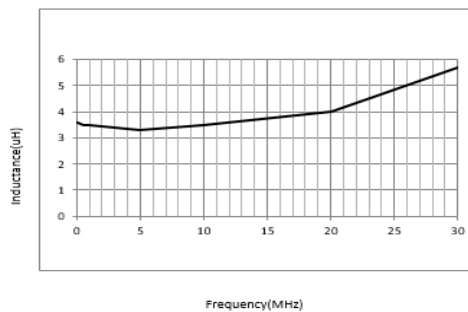
Inductance vs DC current



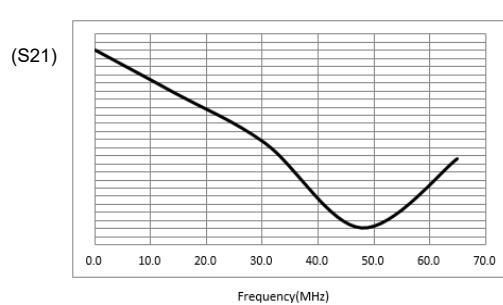
DC current vs Temperature



Inductance vs Frequency



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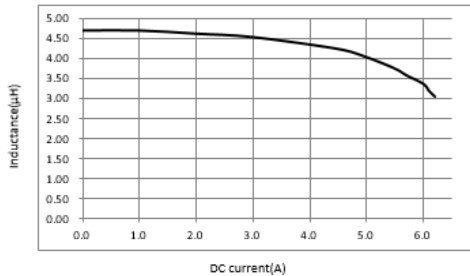
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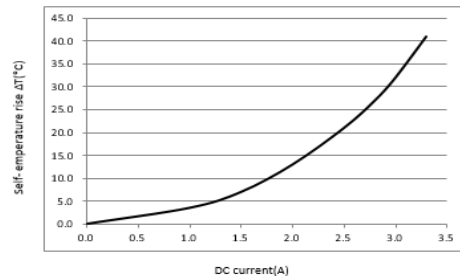
SPE6045

*SPE6045-4R7M

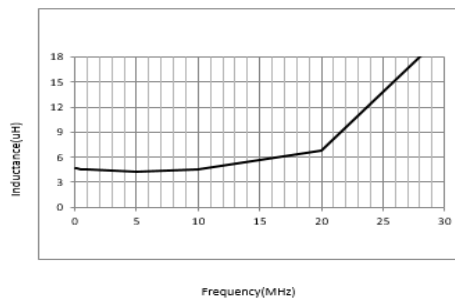
Inductance vs DC current



DC current vs Temperature

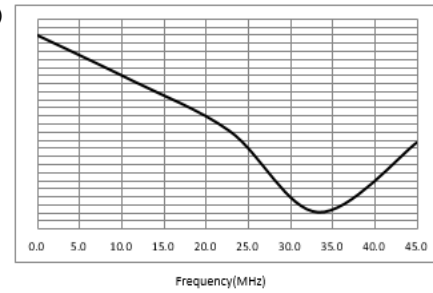


Inductance vs Frequency



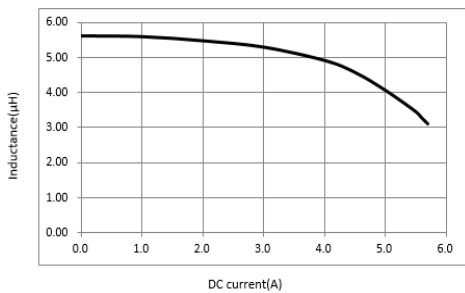
SRF(Self Resonance Frequency)

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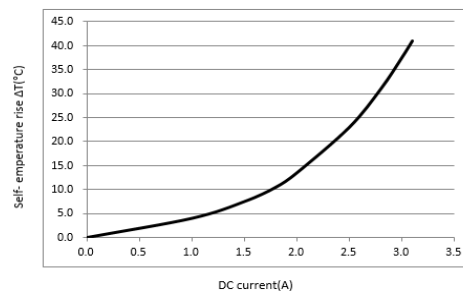


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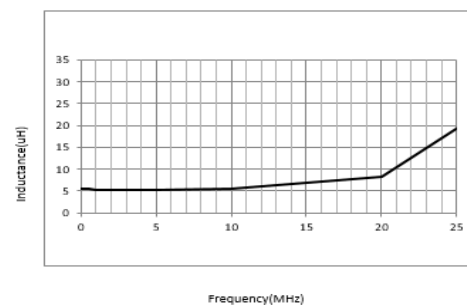
Inductance vs DC current



DC current vs Temperature

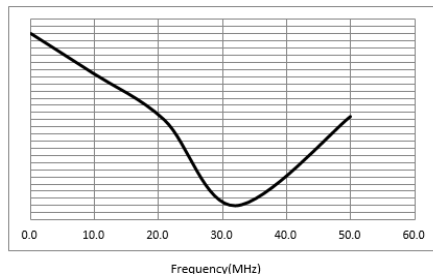


Inductance vs Frequency



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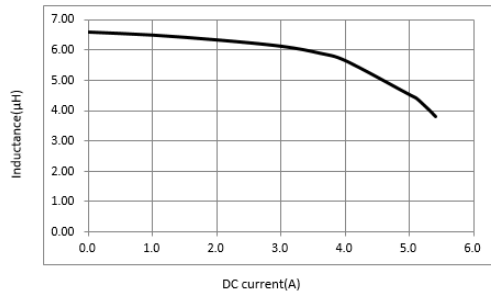
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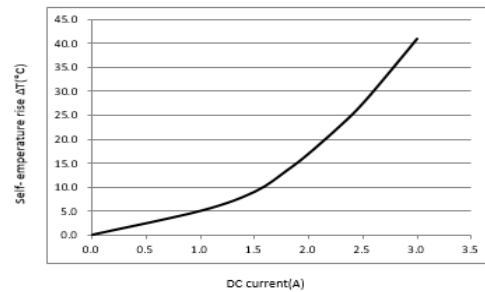
SPE6045

*SPE6045-6R8M

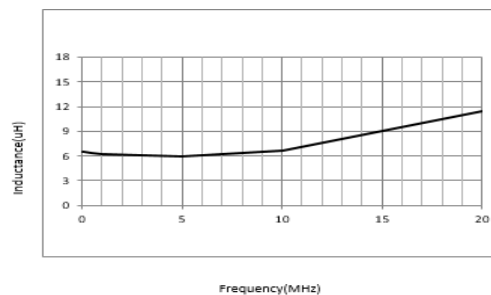
Inductance vs DC current



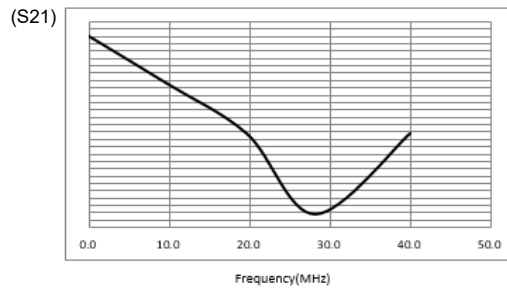
DC current vs Temperature



Inductance vs Frequency

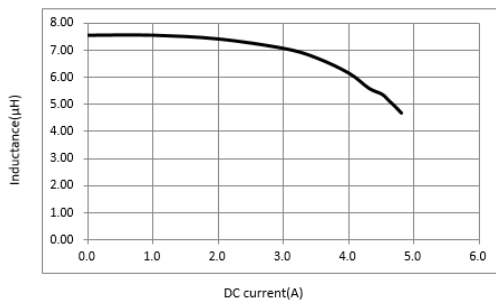


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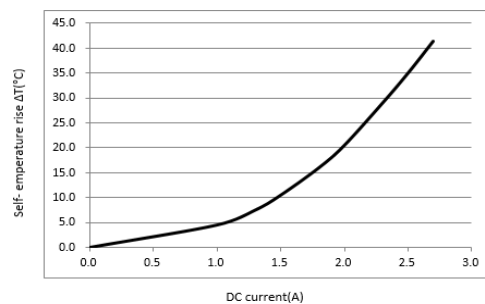


*SPE6045-7R5M

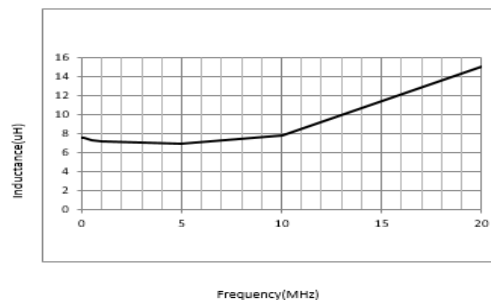
Inductance vs DC current



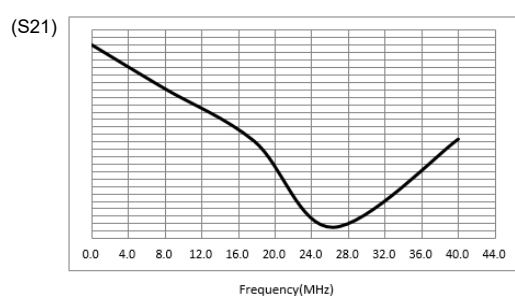
DC current vs Temperature



Inductance vs Frequency



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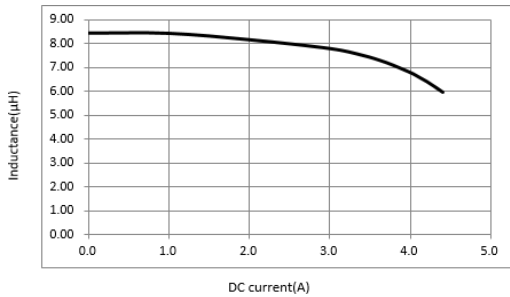
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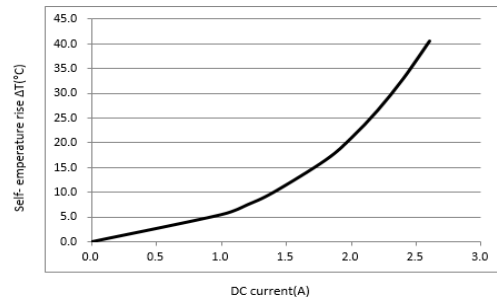
SPE6045

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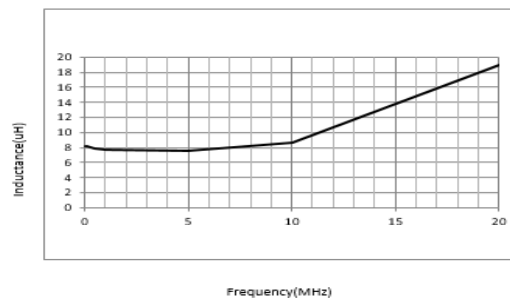
Inductance vs DC current



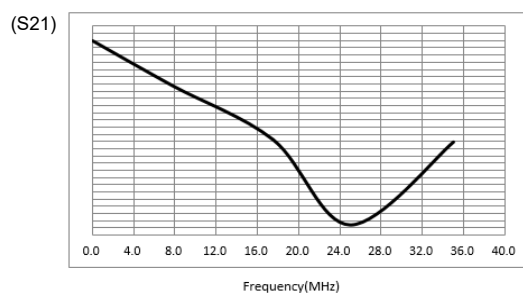
DC current vs Temperature



Inductance vs Frequency

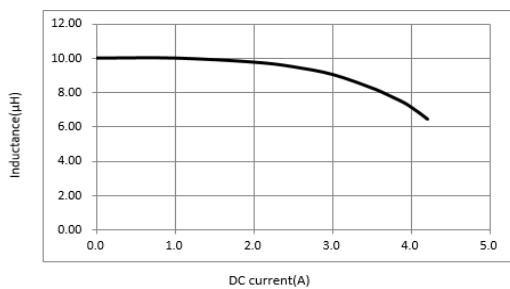


SRF(Self Resonance Frequency)

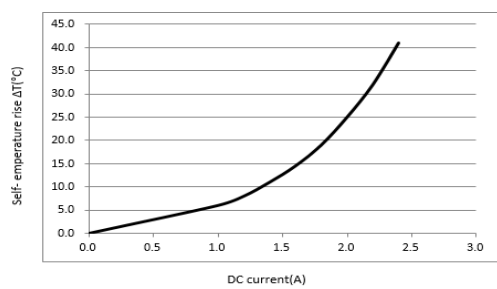


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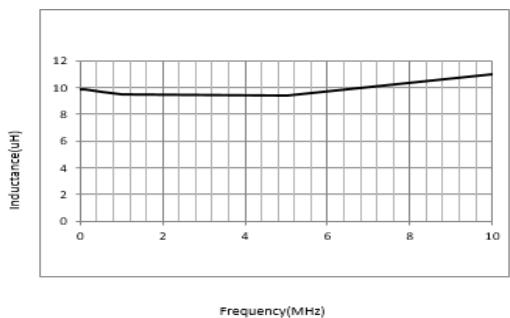
Inductance vs DC current



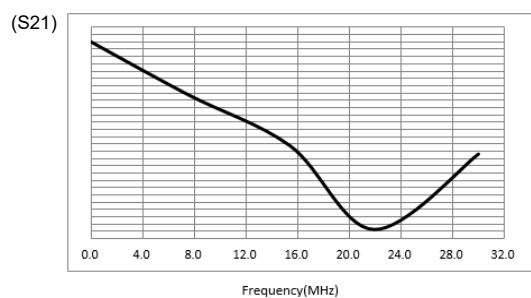
DC current vs Temperature



Inductance vs Frequency



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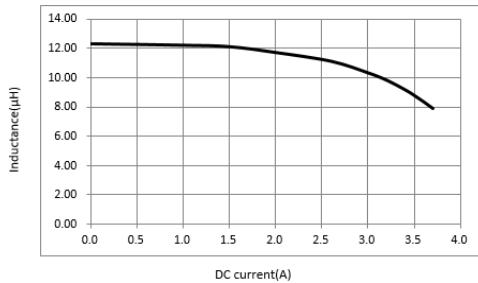
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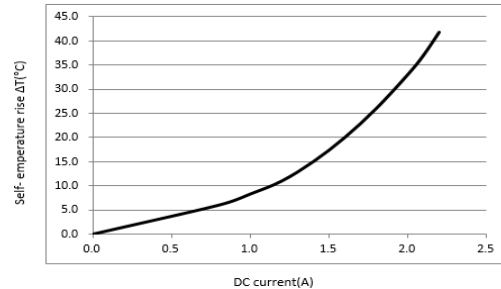
SPE6045

*SPE6045-120M

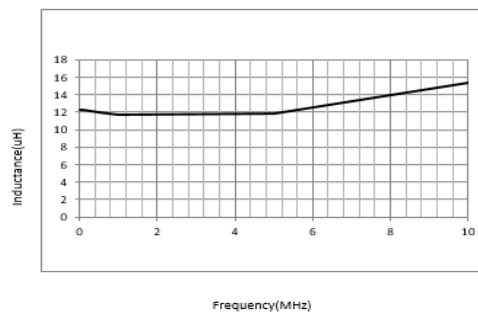
Inductance vs DC current



DC current vs Temperature

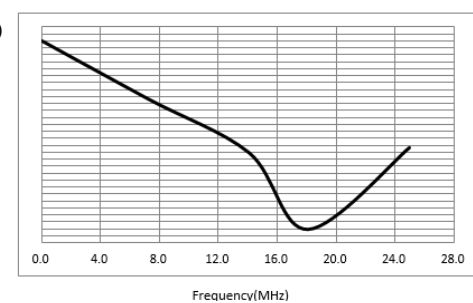


Inductance vs Frequency



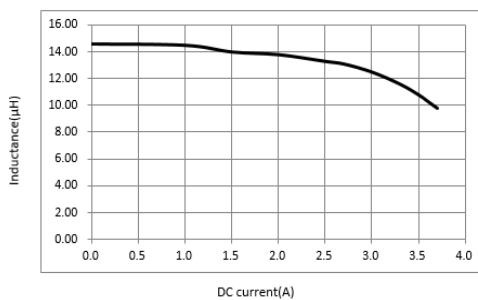
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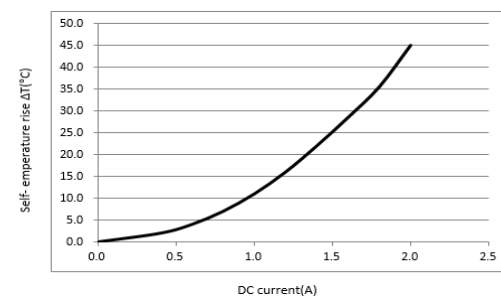


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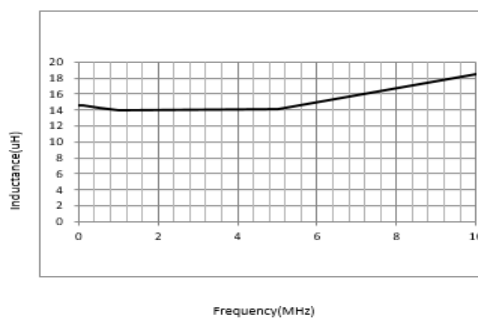
Inductance vs DC current



DC current vs Temperature

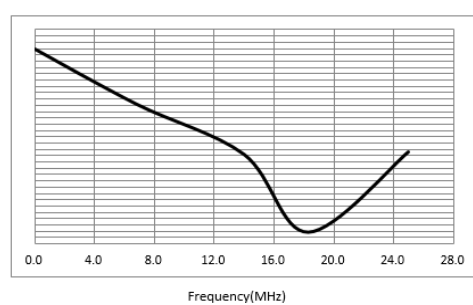


Inductance vs Frequency



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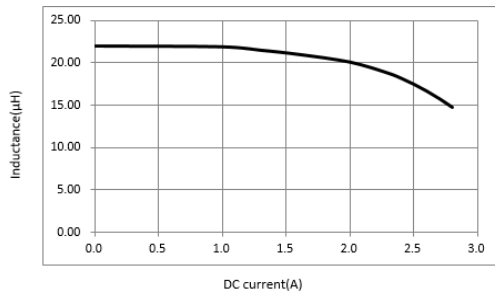
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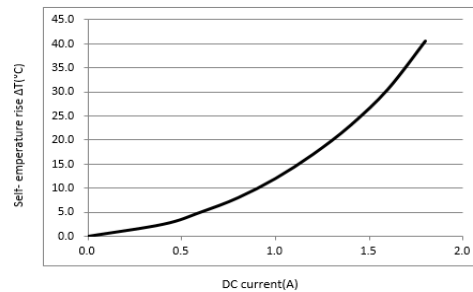
SPE6045

*SPE6045-220M

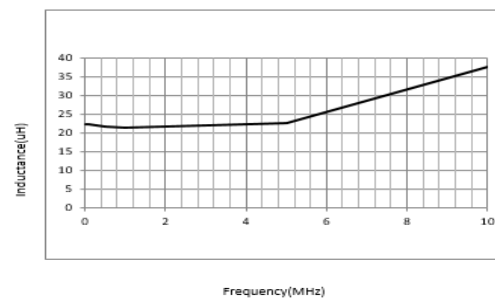
Inductance vs DC current



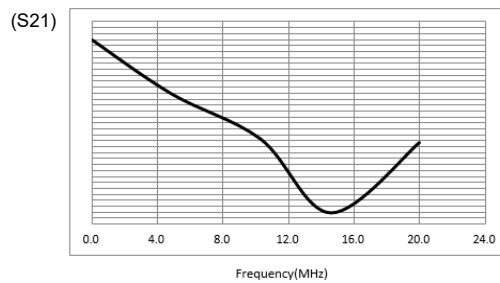
DC current vs Temperature



Inductance vs Frequency

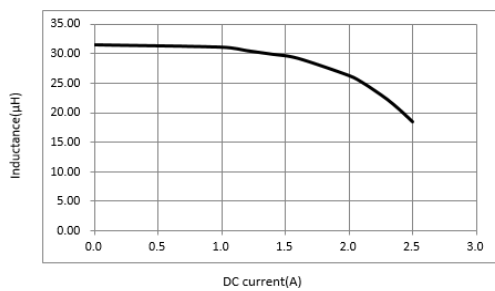


SRF(Self Resonance Frequency)

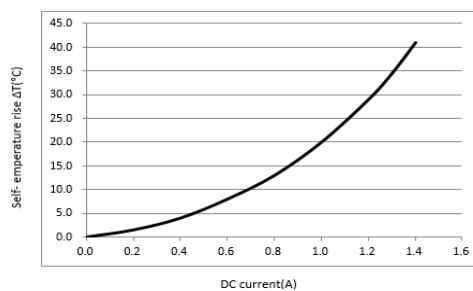


*SPE6045-330M

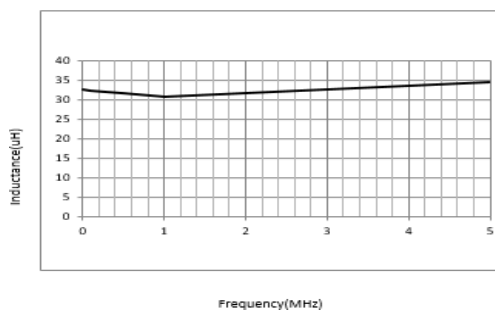
Inductance vs DC current



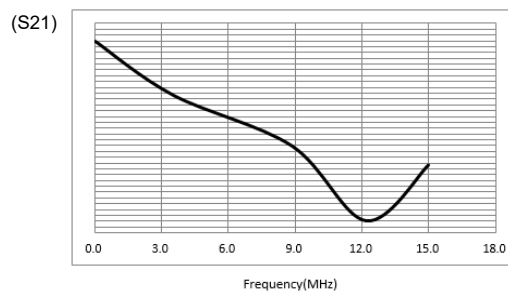
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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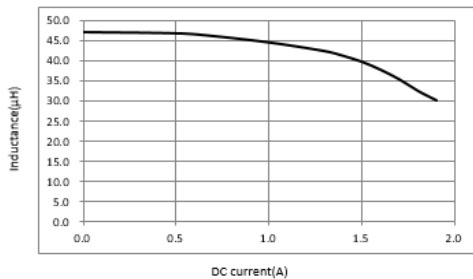
SMD Power Inductors

Fixed Inductor for Surface Mounting

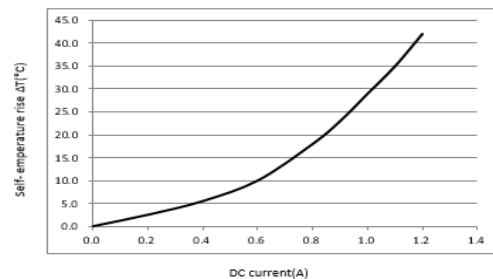
SPE6045

*SPE6045-470M

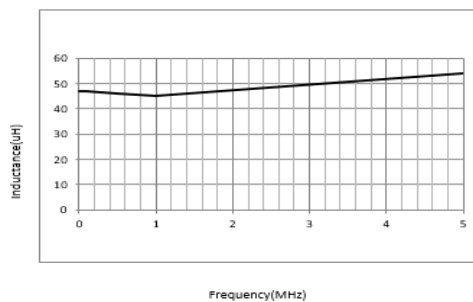
Inductance vs DC current



DC current vs Temperature

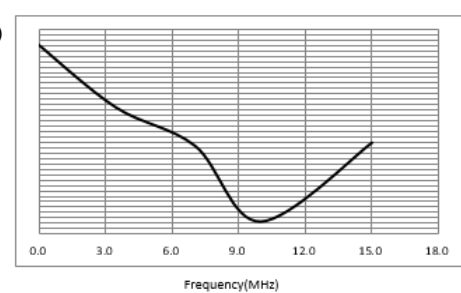


Inductance vs Frequency



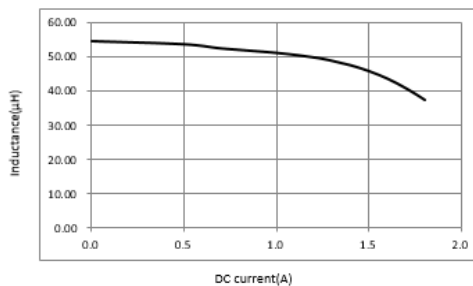
SRF(Self Resonance Frequency)

(S21)

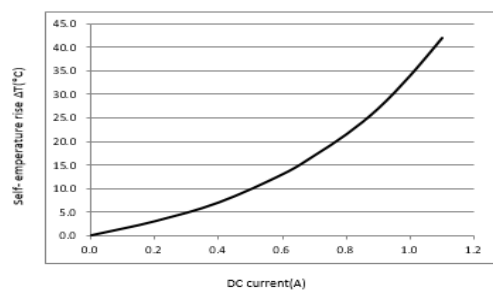


*SPE6045-560M

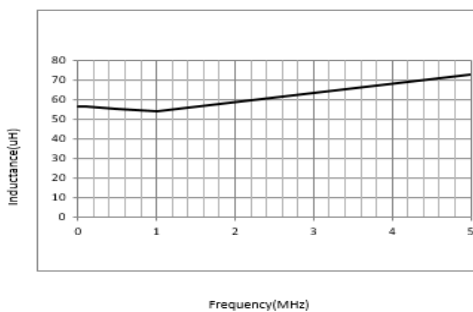
Inductance vs DC current



DC current vs Temperature

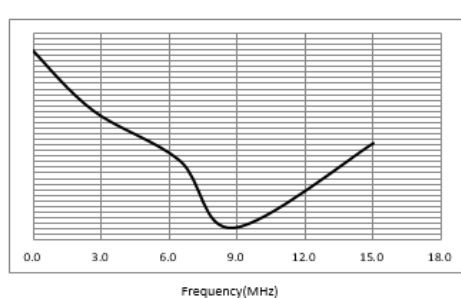


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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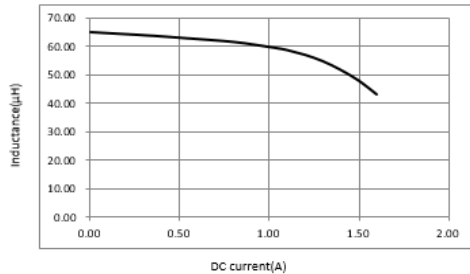
SMD Power Inductors

Fixed Inductor for Surface Mounting

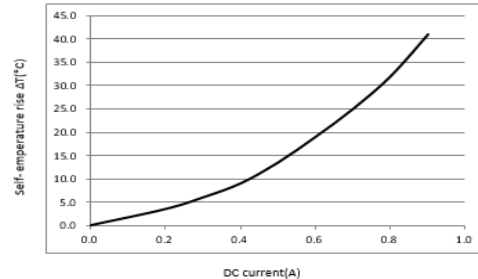
SPE6045

*SPE6045-680M

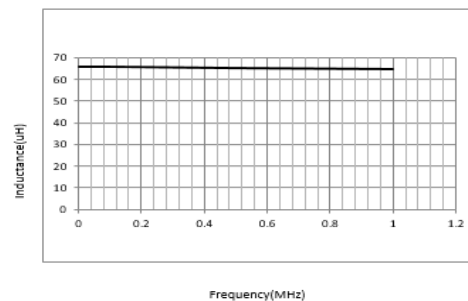
Inductance vs DC current



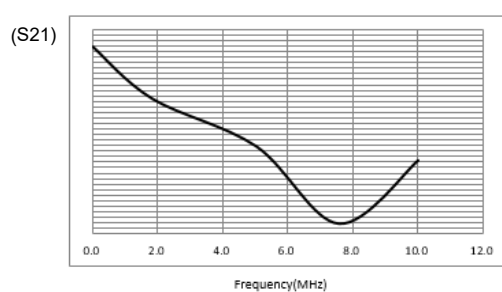
DC current vs Temperature



Inductance vs Frequency

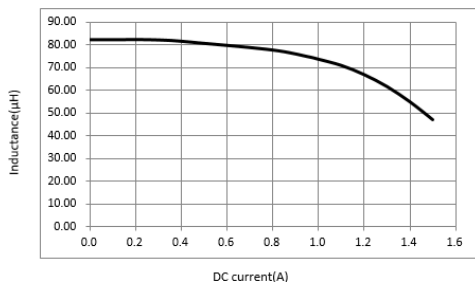


SRF(Self Resonance Frequency)

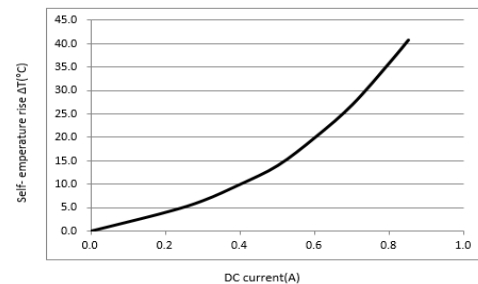


*SPE6045-820M

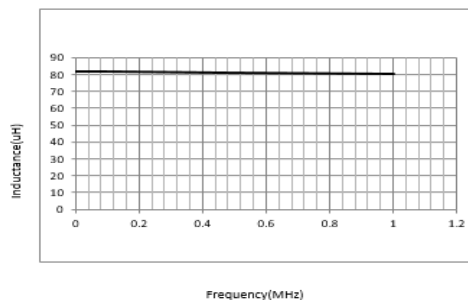
Inductance vs DC current



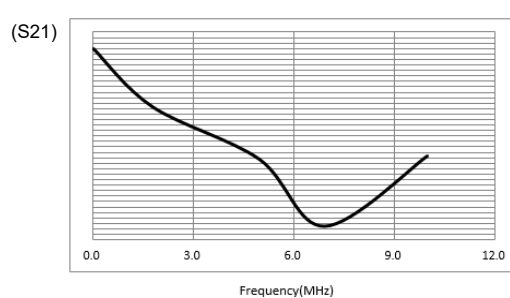
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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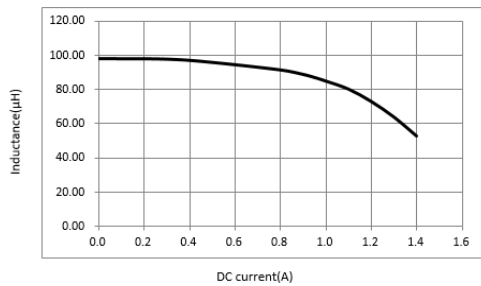
SMD Power Inductors

Fixed Inductor for Surface Mounting

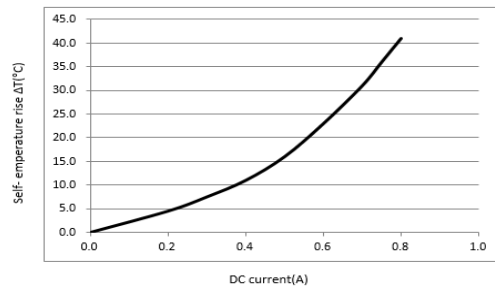
SPE6045

*SPE6045-101M

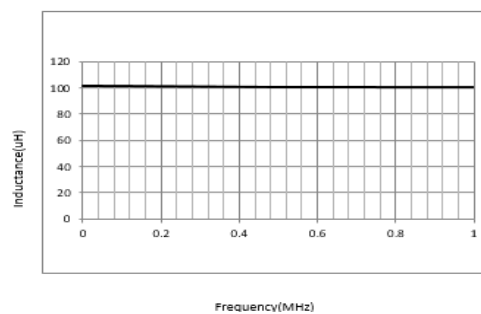
Inductance vs DC current



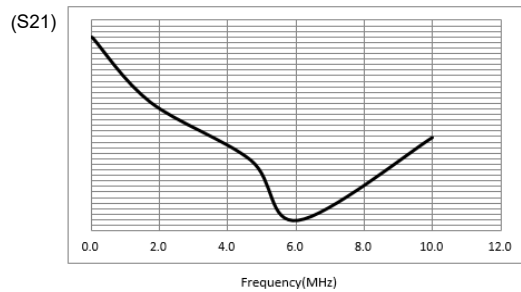
DC current vs Temperature



Inductance vs Frequency

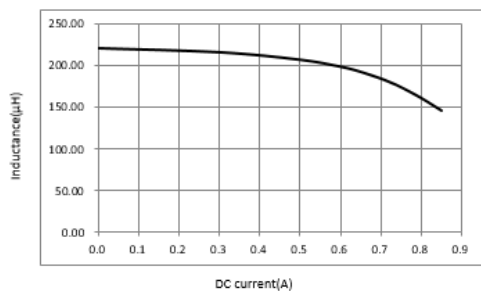


SRF(Self Resonance Frequency)

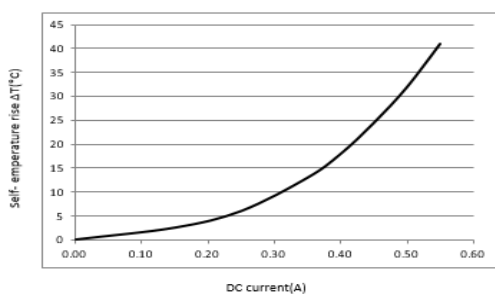


*SPE6045-221M

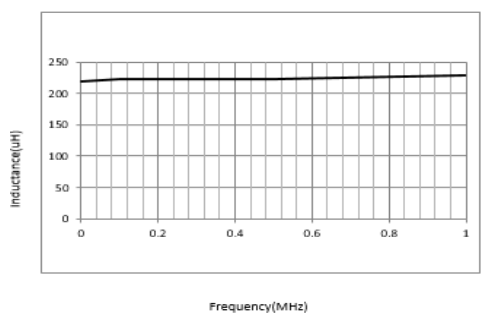
Inductance vs DC current



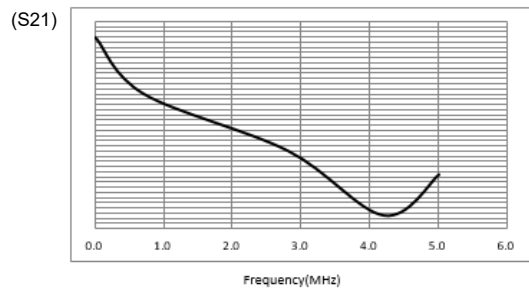
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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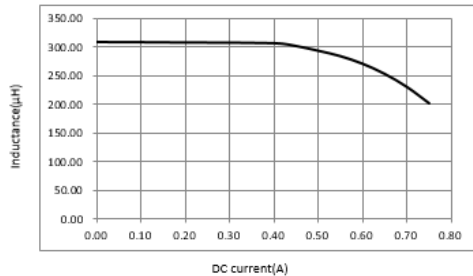
SMD Power Inductors

Fixed Inductor for Surface Mounting

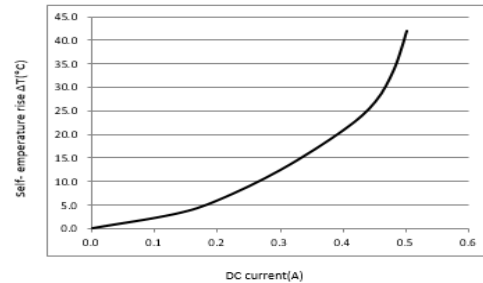
SPE6045

*SPE6045-331M

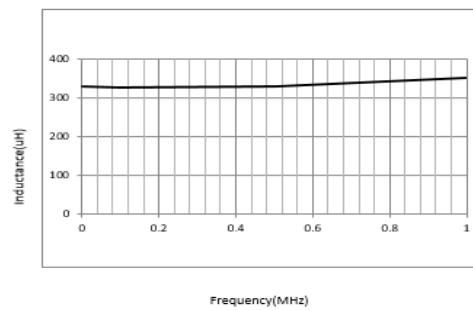
Inductance vs DC current



DC current vs Temperature

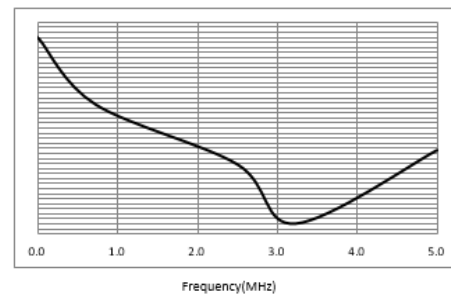


Inductance vs Frequency



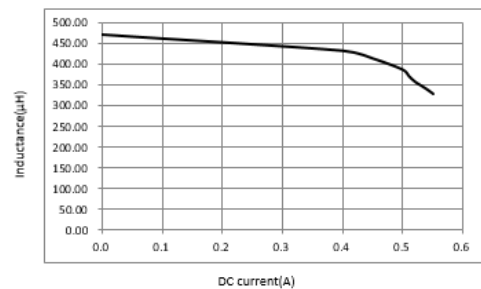
SRF(Self Resonance Frequency)

(S21)

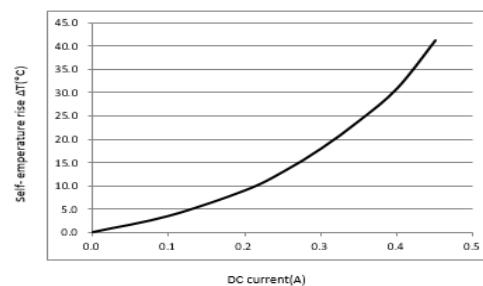


*SPE6045-471M

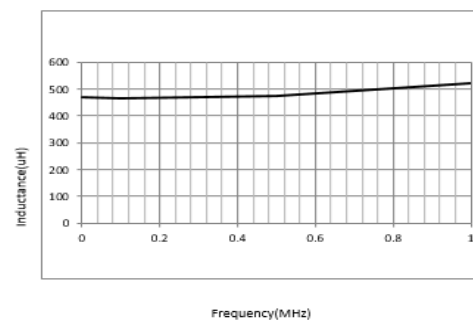
Inductance vs DC current



DC current vs Temperature

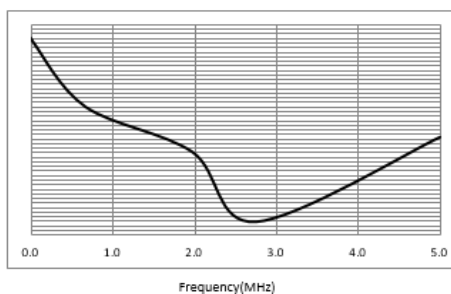


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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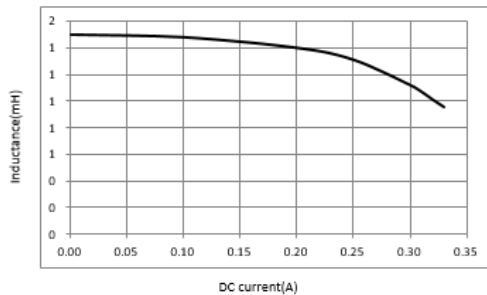
SMD Power Inductors

Fixed Inductor for Surface Mounting

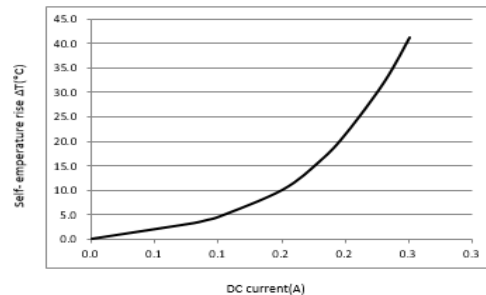
SPE6045

*SPE6045-152M

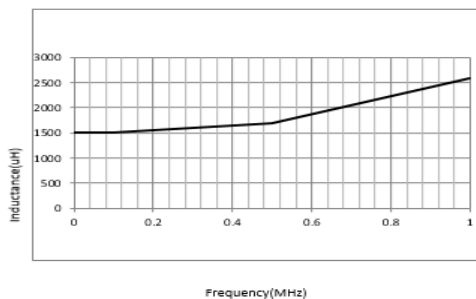
Inductance vs DC current



DC current vs Temperature

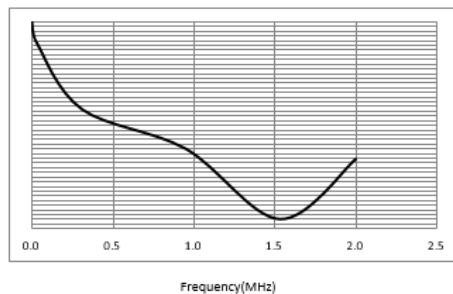


Inductance vs Frequency



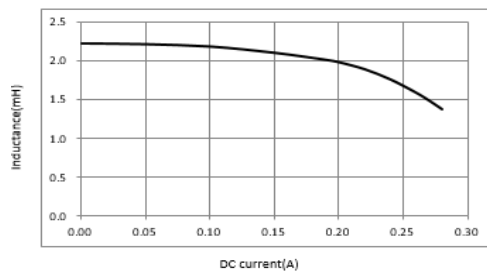
SRF(Self Resonance Frequency)

(S21)

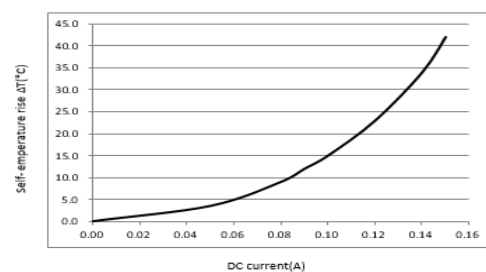


*SPE6045-222M

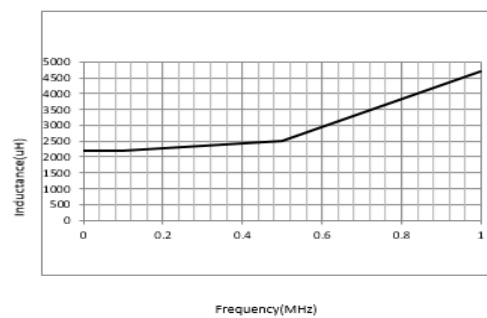
Inductance vs DC current



DC current vs Temperature

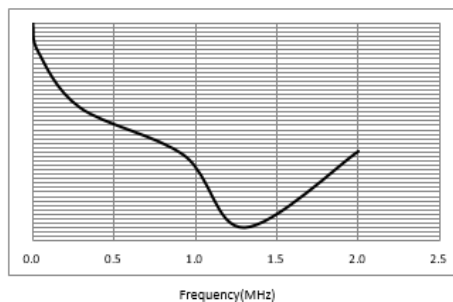


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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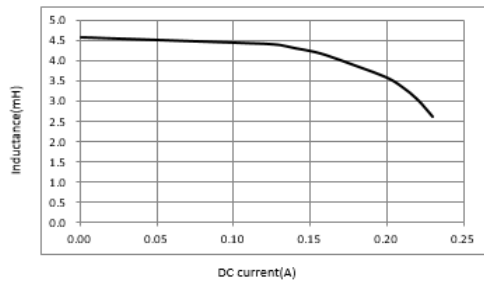
SMD Power Inductors

Fixed Inductor for Surface Mounting

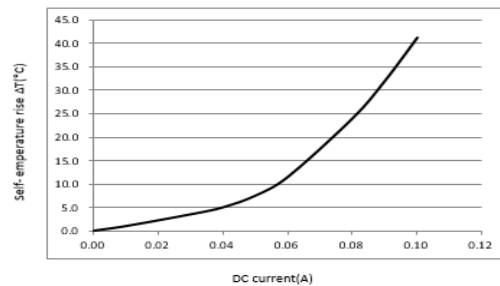
SPE6045

*SPE6045-472M

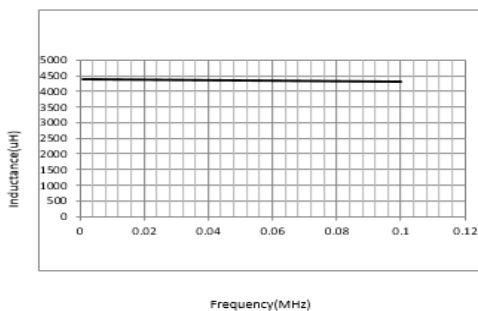
Inductance vs DC current



DC current vs Temperature

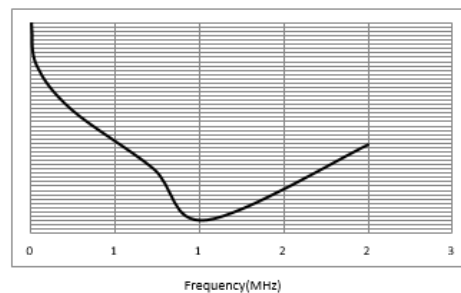


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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