

# SMD Power Inductor

## Fixed Inductor for Surface Mounting

## SPE4030 Series

### Construction

- SMD Magnetic-resin shielded type



### Features

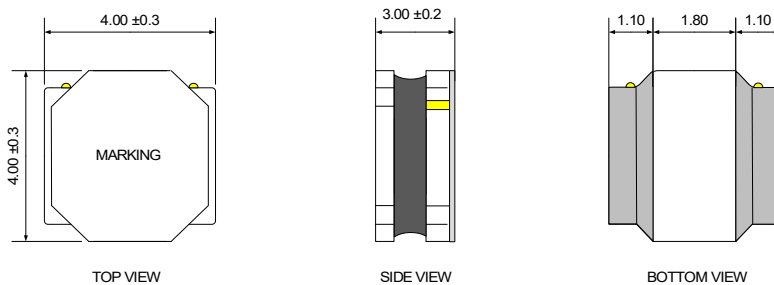
- Qualified to AEC-Q200
- Operating temperature -50 ~ +155°C (Including self temperature)
- Solder reflow temperature 260°C peak
- Suitable for lead-free reflow soldering
- Available on tape and reel for automatic insertion



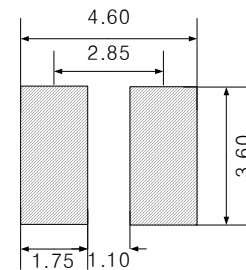
### Applications

- 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,TYP)	Irms*2(A,TYP)	Marking
SPE4030-R47N	0.47±30%	12.0	7.80	5.20	R47
SPE4030-R91N	0.91±30%	18.0	7.50	4.00	R91
SPE4030-1R2N	1.20±30%	21.0	6.50	3.50	1R2
SPE4030-1R5N	1.50±30%	24.0	5.90	3.20	1R5
SPE4030-2R2N	2.20±30%	31.0	4.70	2.80	2R2

#### ※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

**SMD Power Inductor**

Fixed Inductor for Surface Mounting

SPE4030 Series

## Electrical Characteristics

Ordering code	Inductance(uH)	DCR(m $\Omega$ , $\pm$ 30%)	Isat*1(A,TYP)	Irms*2(A,TYP)	Marking
SPE4030-3R0N	3.00 $\pm$ 30%	39.0	4.30	2.40	3R0
SPE4030-3R6N	3.60 $\pm$ 30%	49.0	4.00	2.20	3R6
SPE4030-4R7M	4.70 $\pm$ 20%	67.0	3.20	2.00	4R7
SPE4030-5R6M	5.60 $\pm$ 20%	73.0	3.10	1.90	5R6
SPE4030-6R8M	6.80 $\pm$ 20%	92.0	2.80	1.80	6R8
SPE4030-7R5M	7.50 $\pm$ 20%	99.0	2.60	1.60	7R5
SPE4030-8R2M	8.20 $\pm$ 20%	128.0	2.40	1.50	8R2
SPE4030-100M	10.0 $\pm$ 20%	138.0	2.20	1.40	100
SPE4030-120M	12.0 $\pm$ 20%	170.0	2.00	1.30	120
SPE4030-150M	15.0 $\pm$ 20%	212.0	1.80	1.00	150
SPE4030-180M	18.0 $\pm$ 20%	236.0	1.60	0.95	180
SPE4030-220M	22.0 $\pm$ 20%	355.0	1.40	0.90	220
SPE4030-330M	33.0 $\pm$ 20%	440.0	1.10	0.80	330
SPE4030-470M	47.0 $\pm$ 20%	705.0	1.00	0.70	470
SPE4030-560M	56.0 $\pm$ 20%	810.0	0.90	0.60	560
SPE4030-680M	68.0 $\pm$ 20%	920.0	0.85	0.50	680
SPE4030-820M	82.0 $\pm$ 20%	1.25 $\Omega$	0.80	0.46	820
SPE4030-101M	100.0 $\pm$ 20%	1.37 $\Omega$	0.75	0.45	101

## \*Test Equipment

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Revised 01/02/25

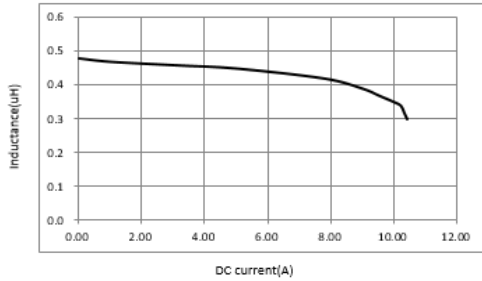
# SMD Power Inductor

## Fixed Inductor for Surface Mounting

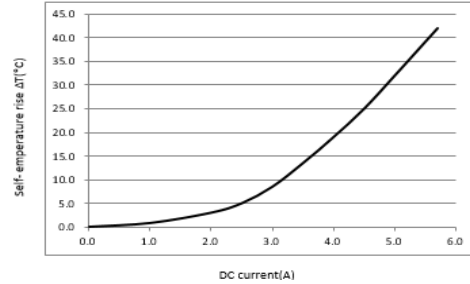
## SPE4030 Series

\*SPE4030-R47N

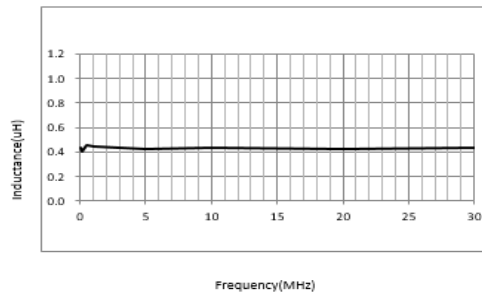
**Inductance vs DC current**



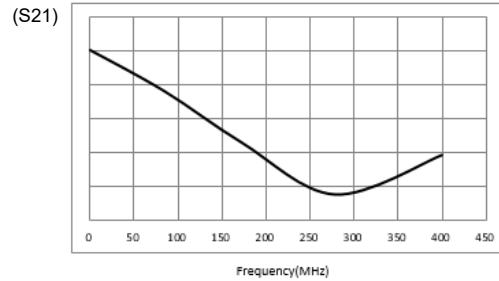
**DC current vs Temperature**



**Inductance vs Frequency**

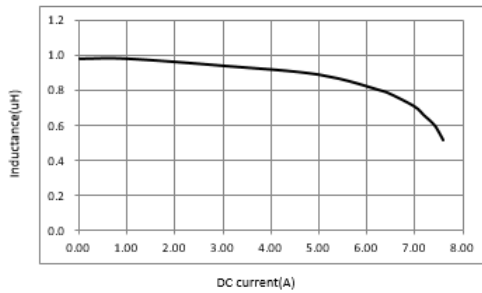


**SRF(Self Resonance Frequency)**

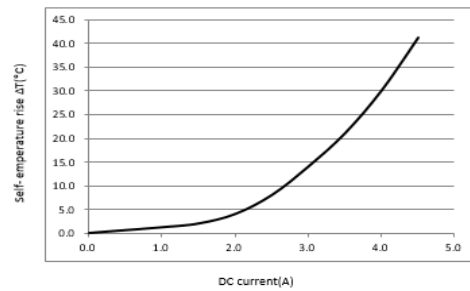


\*SPE4030-R91N

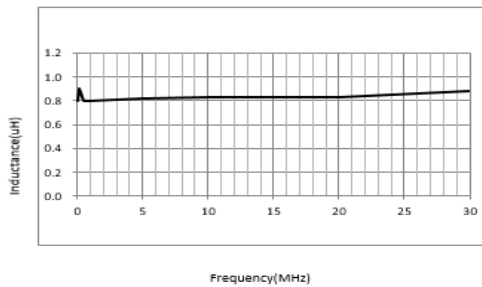
**Inductance vs DC current**



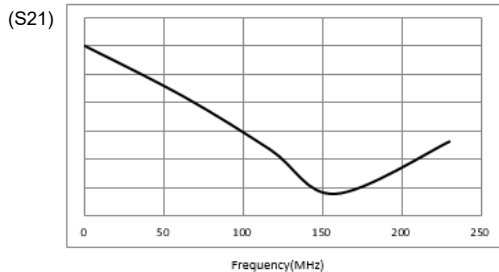
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



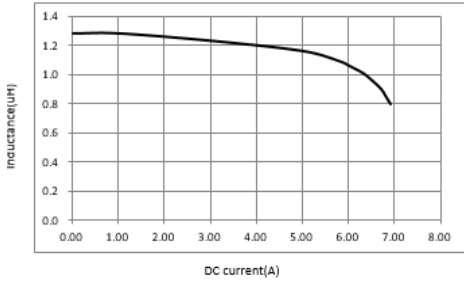
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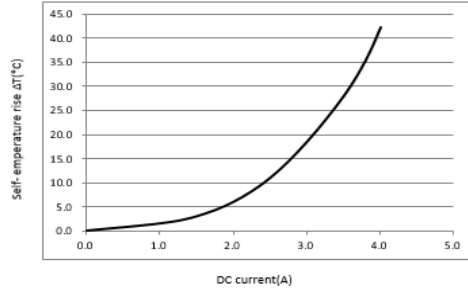
## SPE4030 Series

\*SPE4030-1R2N

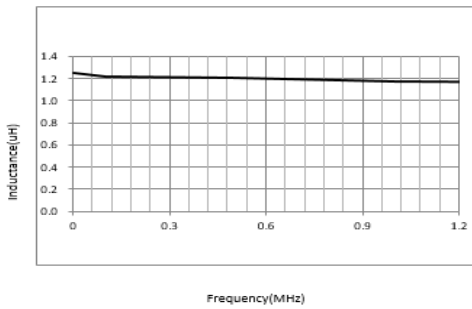
**Inductance vs DC current**



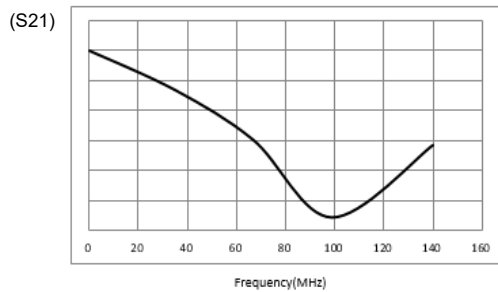
**DC current vs Temperature**



**Inductance vs Frequency**

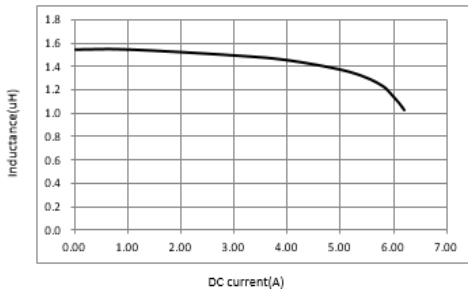


**SRF(Self Resonance Frequency)**

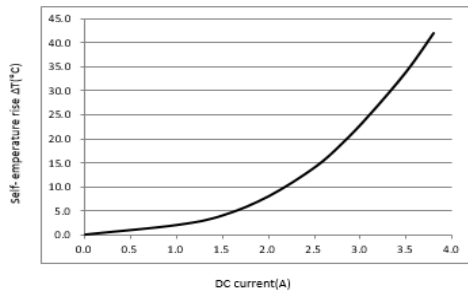


\*SPE4030-1R5N

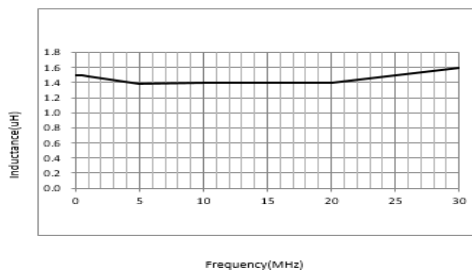
**Inductance vs DC current**



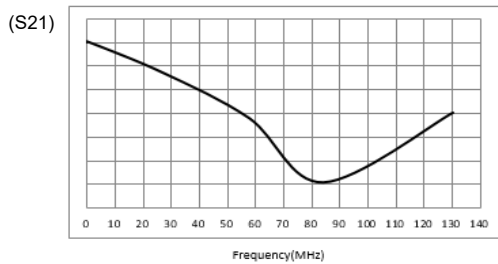
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



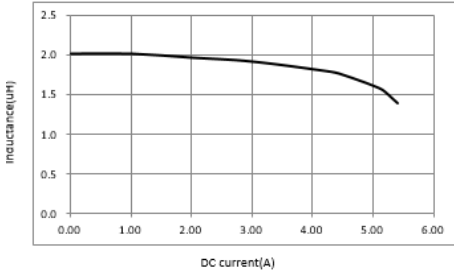
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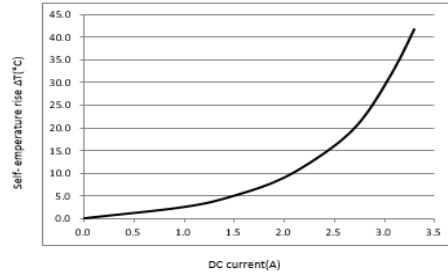
## SPE4030 Series

\*SPE4030-2R2N

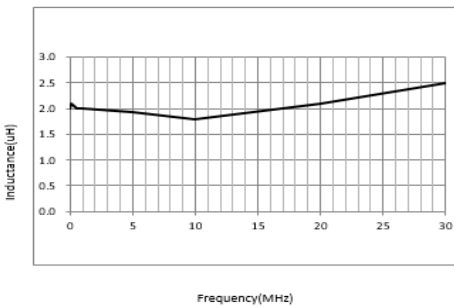
**Inductance vs DC current**



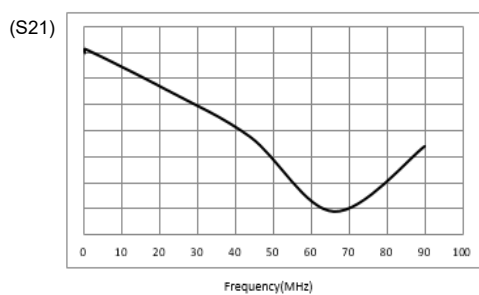
**DC current vs Temperature**



**Inductance vs Frequency**

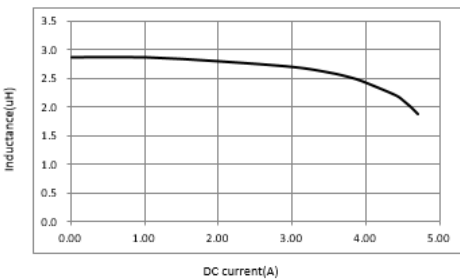


**SRF(Self Resonance Frequency)**

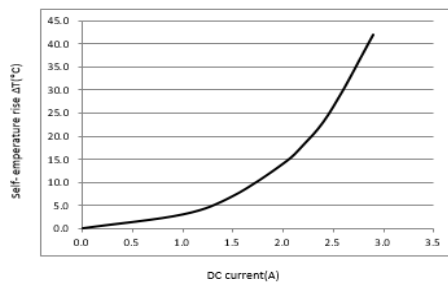


\*SPE4030-3R0N

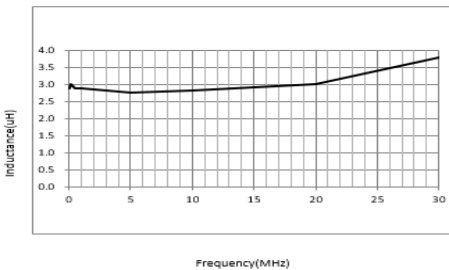
**Inductance vs DC current**



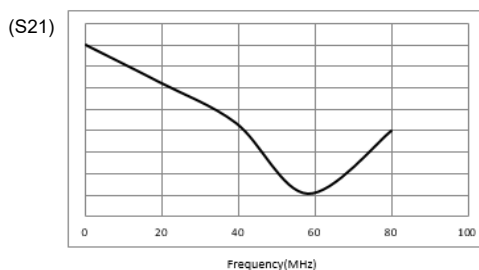
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



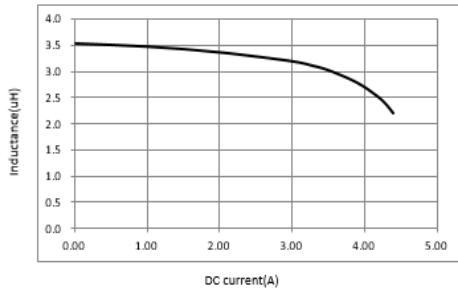
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## Fixed Inductor for Surface Mounting

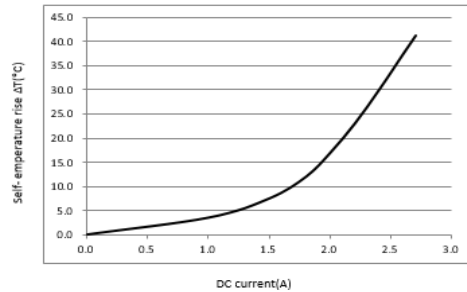
## SPE4030 Series

\*SPE4030-3R6N

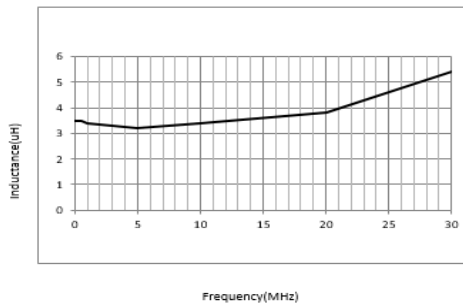
**Inductance vs DC current**



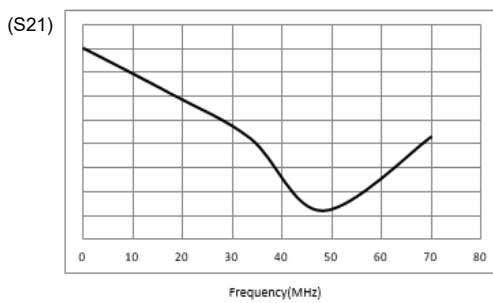
**DC current vs Temperature**



**Inductance vs Frequency**

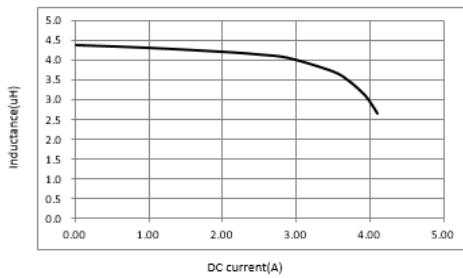


**SRF(Self Resonance Frequency)**

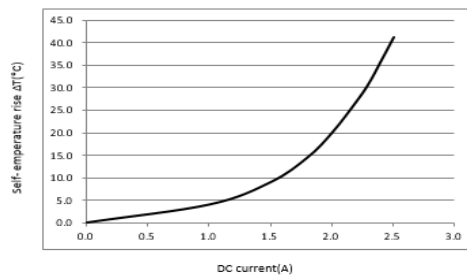


\*SPE4030-4R7M

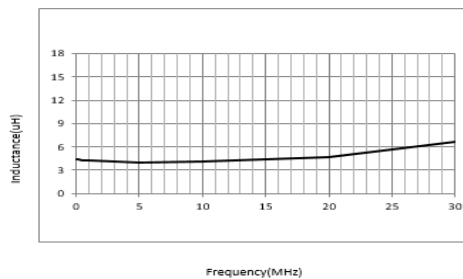
**Inductance vs DC current**



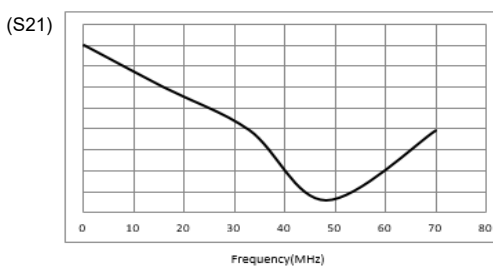
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



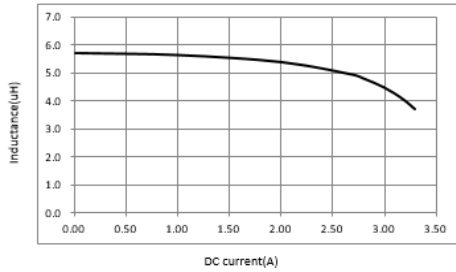
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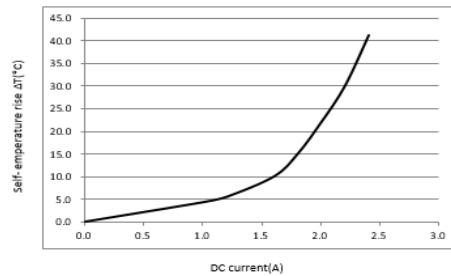
## SPE4030 Series

\*SPE4030-5R6M

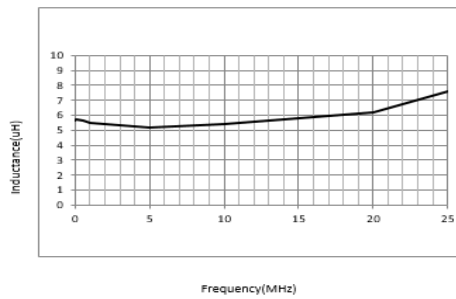
**Inductance vs DC current**



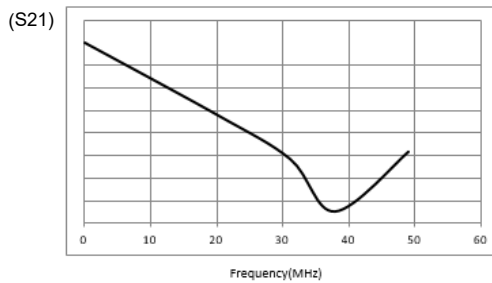
**DC current vs Temperature**



**Inductance vs Frequency**

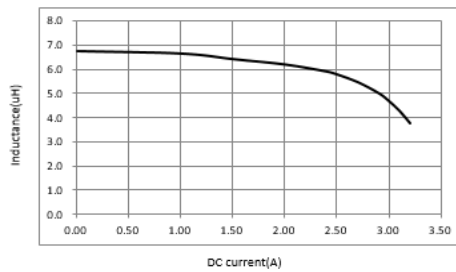


**SRF(Self Resonance Frequency)**

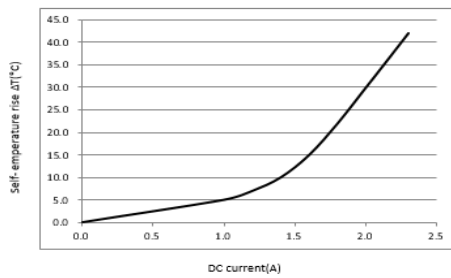


\*SPE4030-6R8M

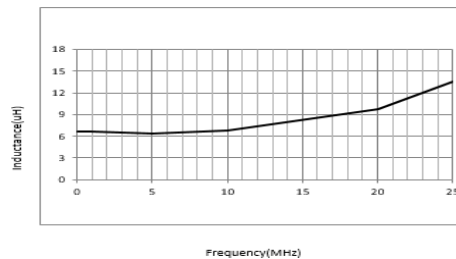
**Inductance vs DC current**



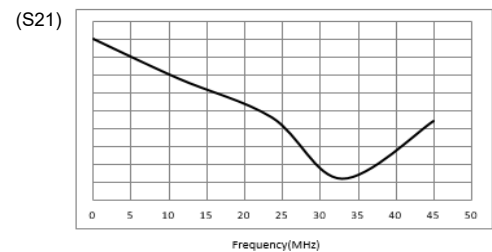
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



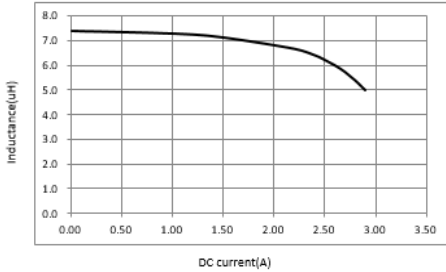
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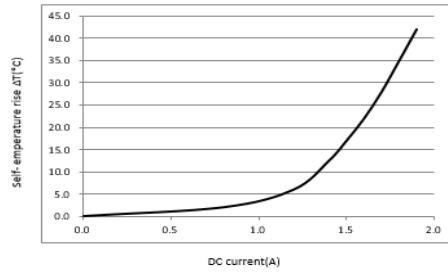
## SPE4030 Series

\*SPE4030-7R5M

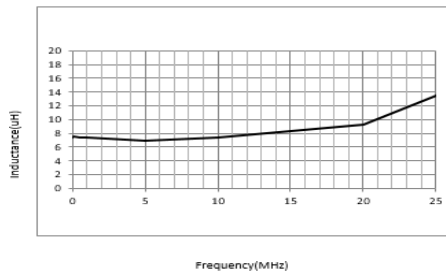
**Inductance vs DC current**



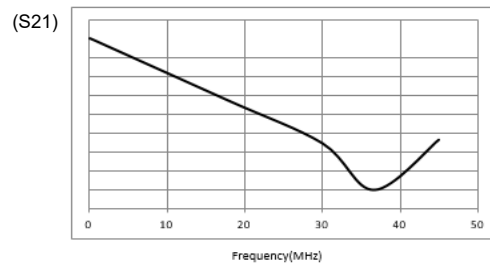
**DC current vs Temperature**



**Inductance vs Frequency**

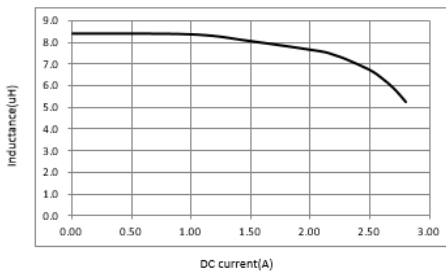


**SRF(Self Resonance Frequency)**

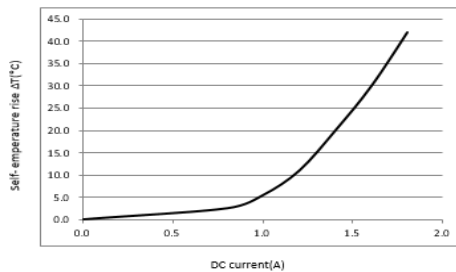


\*SPE4030-8R2M

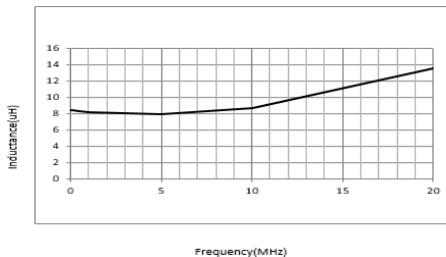
**Inductance vs DC current**



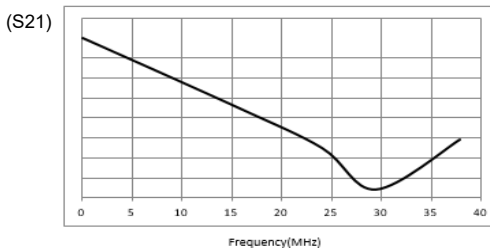
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



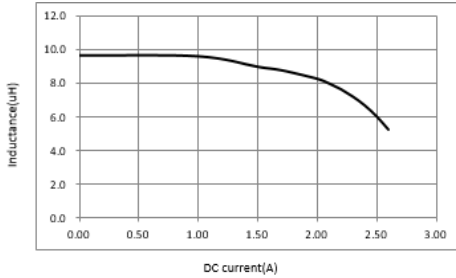
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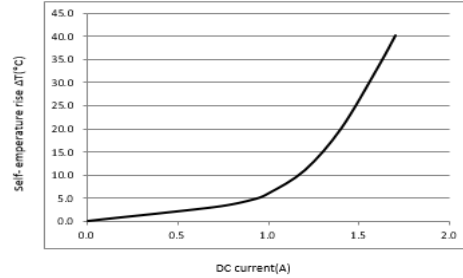
## SPE4030 Series

\*SPE4030-100M

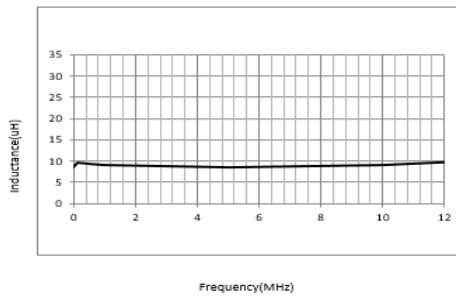
**Inductance vs DC current**



**DC current vs Temperature**



**Inductance vs Frequency**

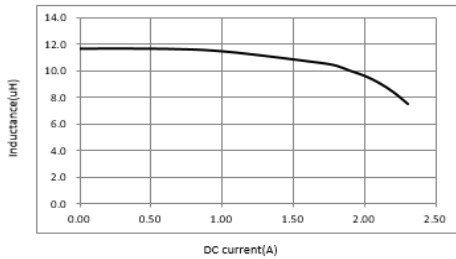


**SRF(Self Resonance Frequency)**

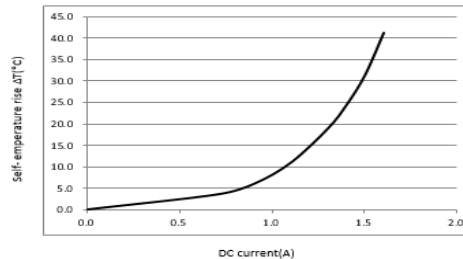


\*SPE4030-120M

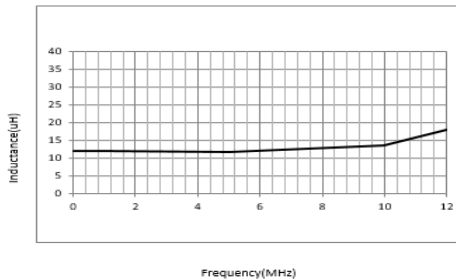
**Inductance vs DC current**



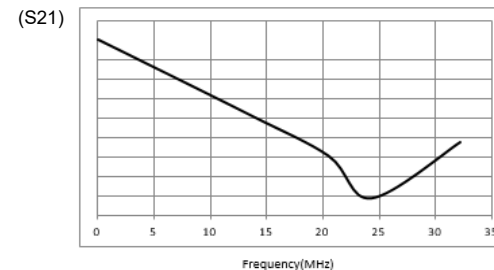
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



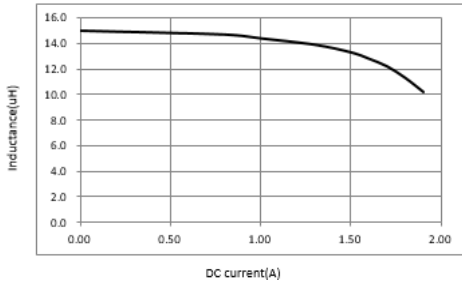
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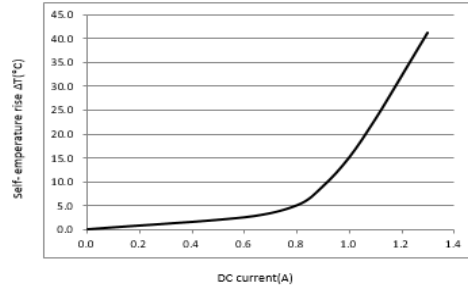
## SPE4030 Series

\*SPE4030-150M

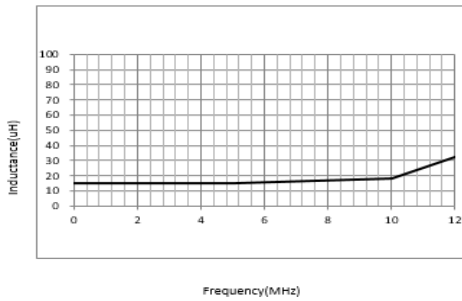
**Inductance vs DC current**



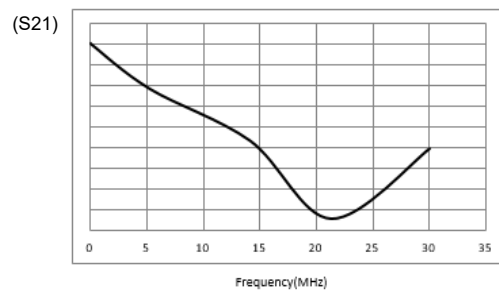
**DC current vs Temperature**



**Inductance vs Frequency**

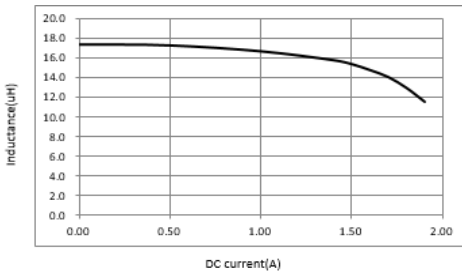


**SRF(Self Resonance Frequency)**

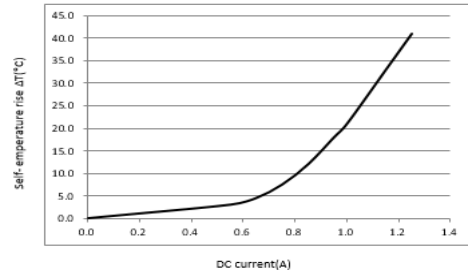


\*SPE4030-180M

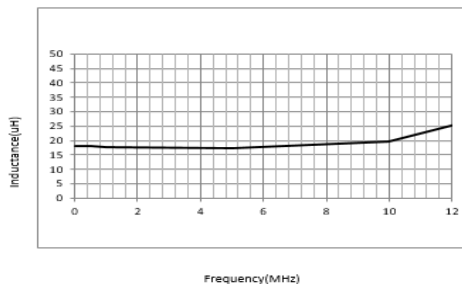
**Inductance vs DC current**



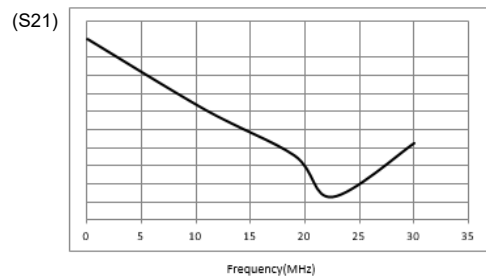
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



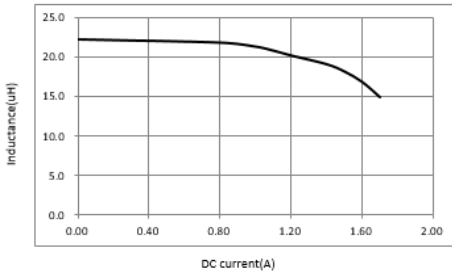
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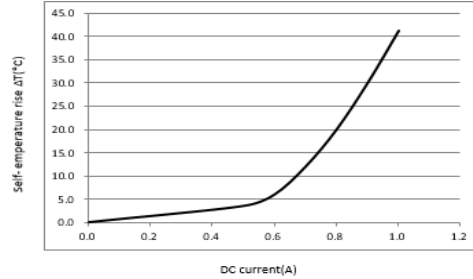
## SPE4030 Series

\*SPE4030-220M

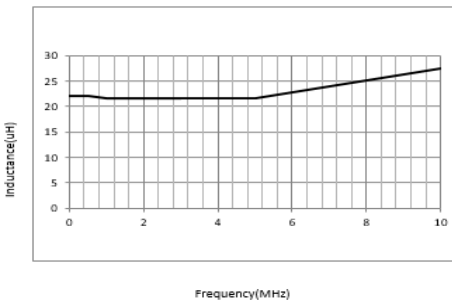
**Inductance vs DC current**



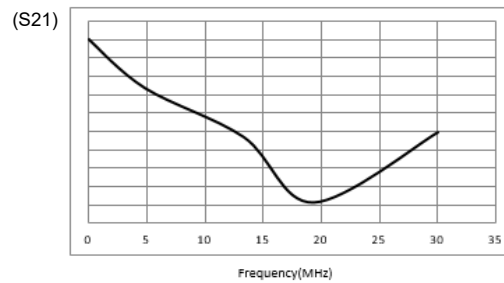
**DC current vs Temperature**



**Inductance vs Frequency**

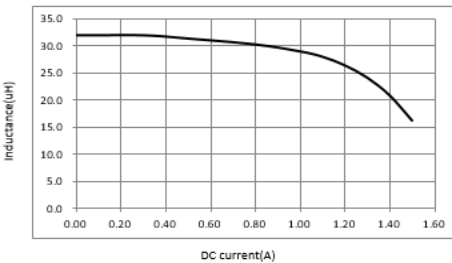


**SRF(Self Resonance Frequency)**

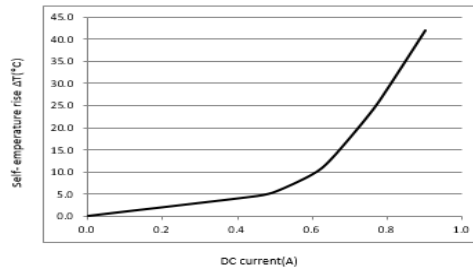


\*SPE4030-330M

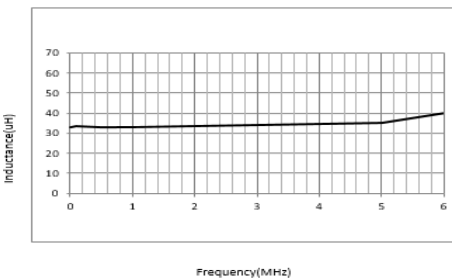
**Inductance vs DC current**



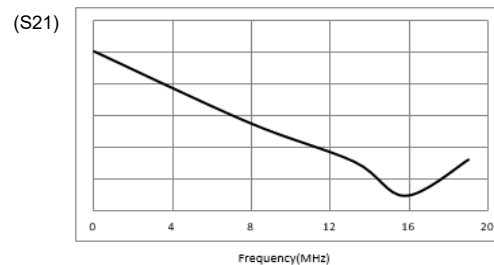
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



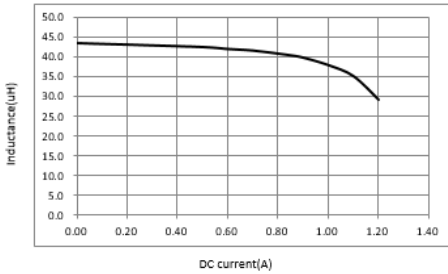
# SMD Power Inductor

## Fixed Inductor for Surface Mounting

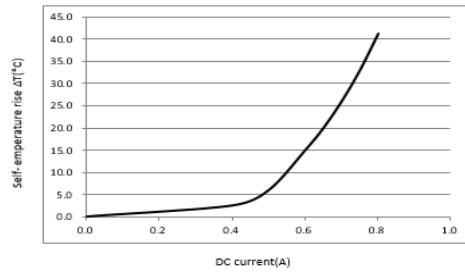
## SPE4030 Series

\*SPE4030-470M

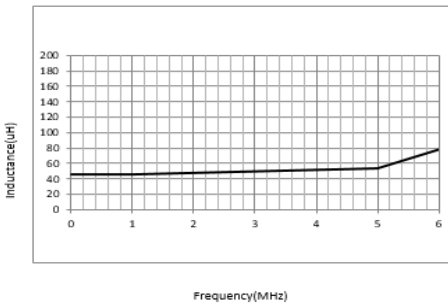
**Inductance vs DC current**



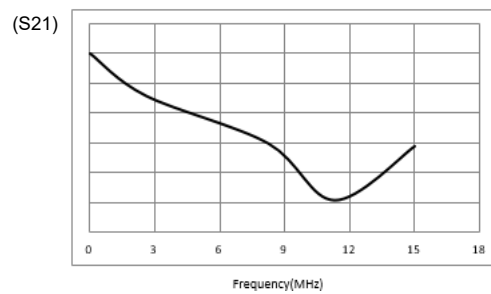
**DC current vs Temperature**



**Inductance vs Frequency**

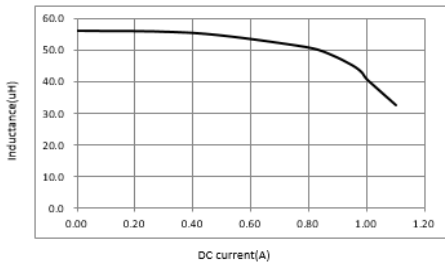


**SRF(Self Resonance Frequency)**

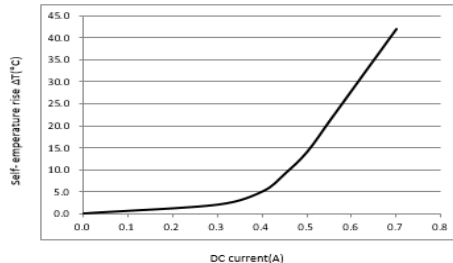


\*SPE4030-560M

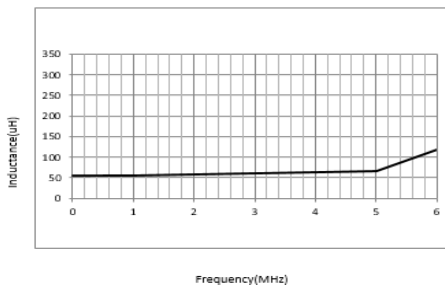
**Inductance vs DC current**



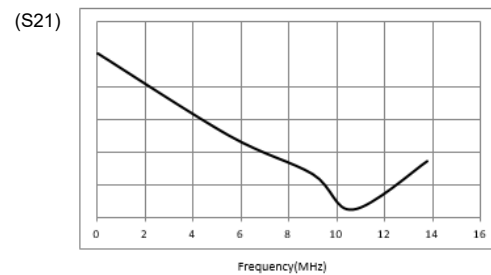
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



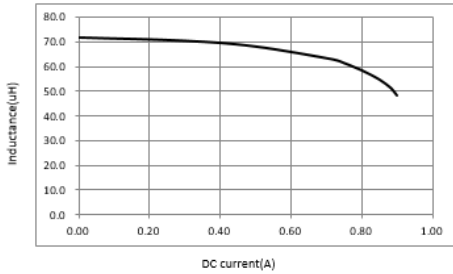
# SMD Power Inductor

## Fixed Inductor for Surface Mounting

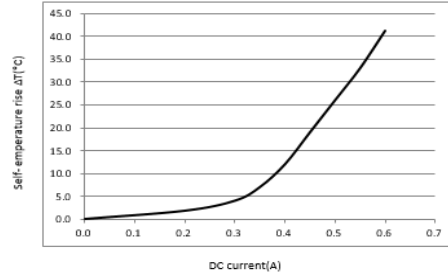
## SPE4030 Series

\*SPE4030-680M

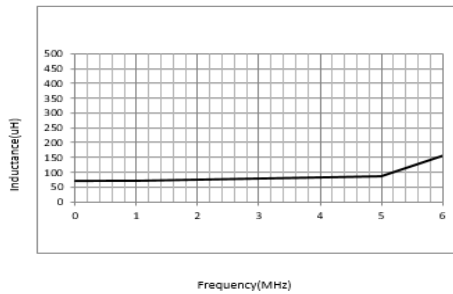
**Inductance vs DC current**



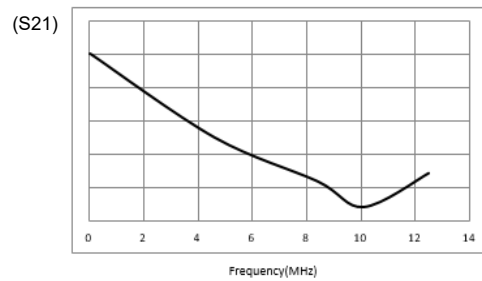
**DC current vs Temperature**



**Inductance vs Frequency**

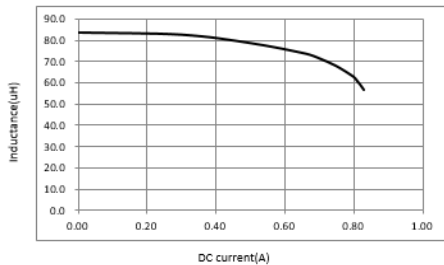


**SRF(Self Resonance Frequency)**

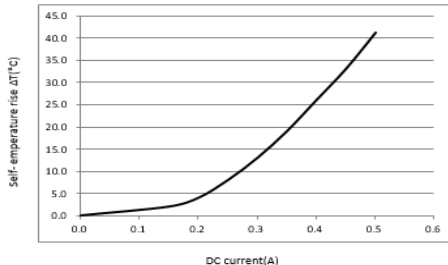


\*SPE4030-820M

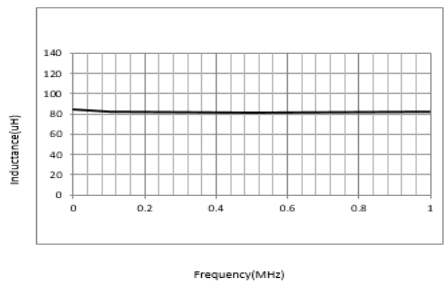
**Inductance vs DC current**



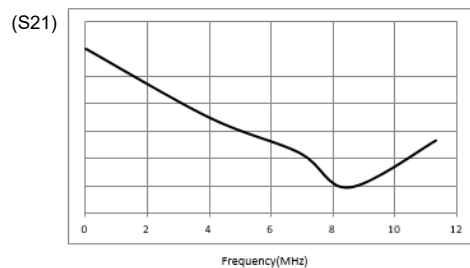
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



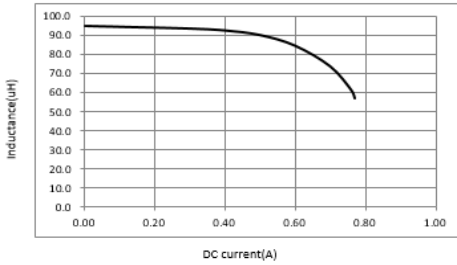
# SMD Power Inductor

## Fixed Inductor for Surface Mounting

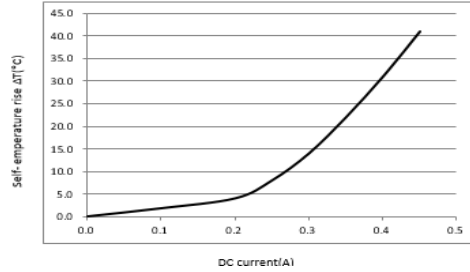
## SPE4030 Series

\*SPE4030-101M

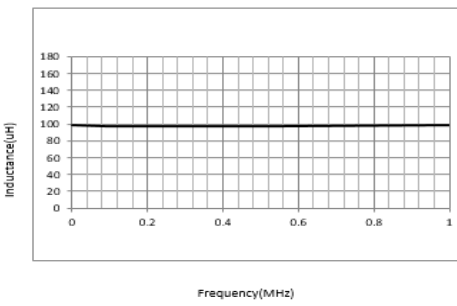
**Inductance vs DC current**



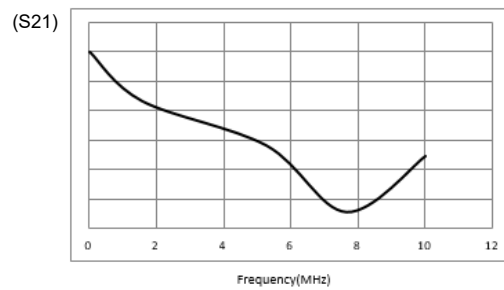
**DC current vs Temperature**



**Inductance vs Frequency**



**SRF(Self Resonance Frequency)**



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

Revised 01/02/25