

SMD INDUCTOR

Fixed Inductor for Surface Mounting

SPE4020

SMD Magnetic-resin shielded type

UNIT : mm

TYPE SPE4020

For Reflow Soldering

Frequency Range: 1kHz ~5MHz

Inductance Range: 1.0 ~ 100uH

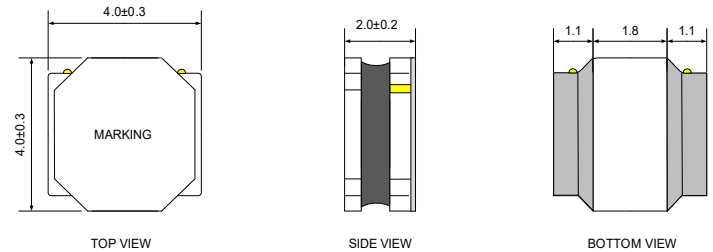
Features

*Low profile (2.0mm high)

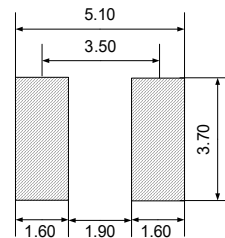
*Suitable for reflow soldering

*Available on tape and reel for automatic insertion

Dimensions



Recommended PCB Pattern



Electrical Characteristics

Ordering code	Inductance range (μH)	DCR(mΩ±30%)	Isat*1 (A,MAX)	Irms*2 (A,MAX)	Marking
SPE4020-1R0N	1.0±30%	23	5.1	2.15	1R0
SPE4020-1R5N	1.5±30%	28	4.0	1.95	1R5
SPE4020-1R8N	1.8±30%	33	3.9	1.90	1R8
SPE4020-2R2N	2.2±30%	40	3.4	1.85	2R2
SPE4020-2R7N	2.7±30%	45	3.2	1.50	2R7
SPE4020-3R3N	3.3±30%	56	2.9	1.40	3R3
SPE4020-4R7M	4.7±20%	81	2.4	1.30	4R7
SPE4020-5R6M	5.6±20%	90	2.1	1.20	5R6
SPE4020-6R8M	6.8±20%	115	2.0	1.04	6R8
SPE4020-8R2M	8.2±20%	141	1.7	0.95	8R2
SPE4020-100M	10±20%	173	1.5	0.90	100
SPE4020-120M	12±20%	185	1.3	0.88	120
SPE4020-150M	15±20%	290	1.2	0.77	150
SPE4020-220M	22±20%	465	1.0	0.62	220
SPE4020-330M	33±20%	595	0.85	0.49	330
SPE4020-390M	39±20%	650	0.75	0.46	390
SPE4020-470M	47±20%	755	0.70	0.44	470
SPE4020-560M	56±20%	1.0Ω	0.65	0.41	560
SPE4020-680M	68±20%	1.15Ω	0.60	0.36	680
SPE4020-820M	82±20%	1.9Ω	0.55	0.34	820
SPE4020-101M	100±20%	2.1Ω	0.50	0.31	101

*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 Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : Agilent 4284A + Agilent 42841A

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

Revised 20/04/21

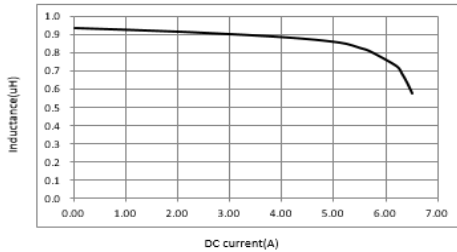
SMD Power Inductors

Fixed Inductor for Surface Mounting

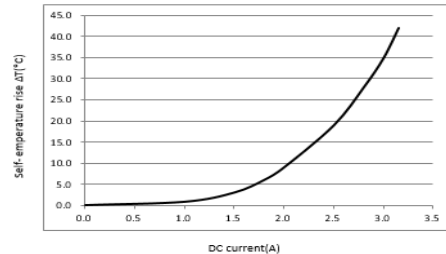
SPE4020

*SPE4020-1R0N

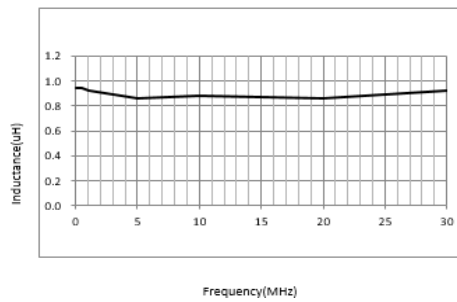
Inductance vs DC current



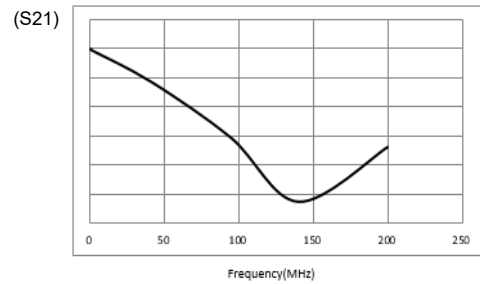
DC current vs Temperature



Inductance vs Frequency

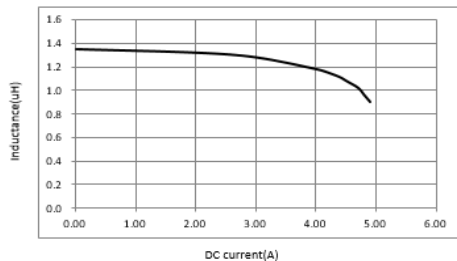


SRF(Self Resonance Frequency)

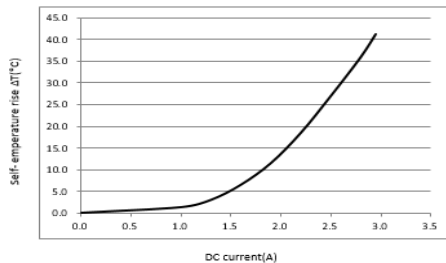


*SPE4020-1R5N

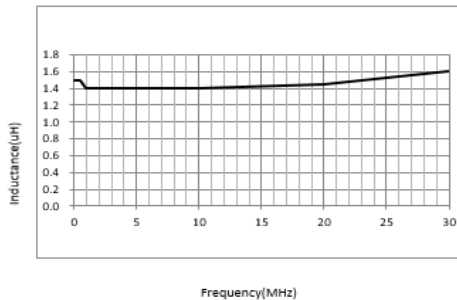
Inductance vs DC current



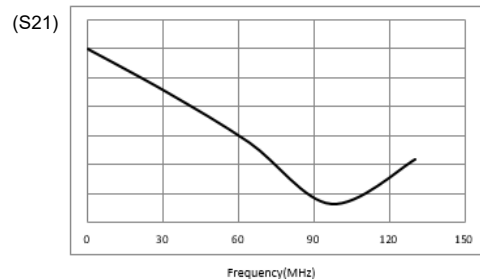
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

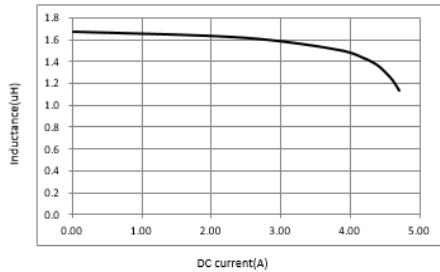
SMD Power Inductors

Fixed Inductor for Surface Mounting

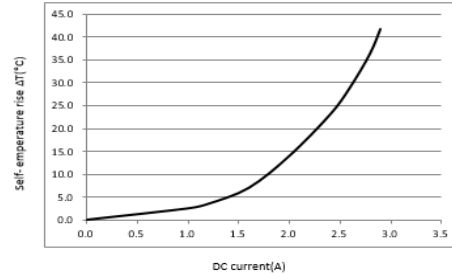
SPE4020

*SPE4020-1R8N

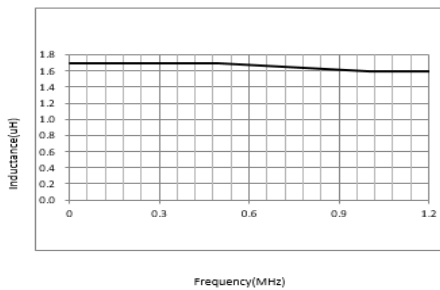
Inductance vs DC current



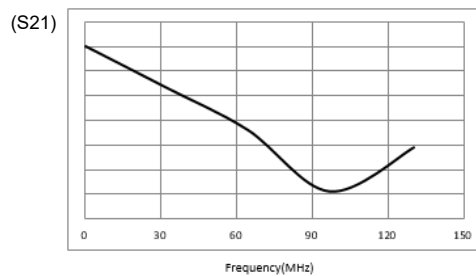
DC current vs Temperature



Inductance vs Frequency

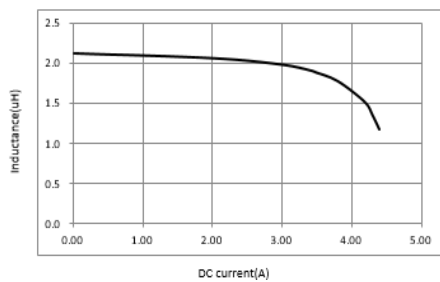


SRF(Self Resonance Frequency)

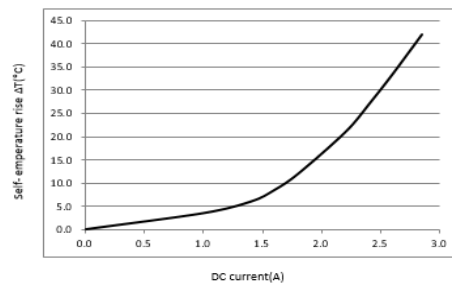


*SPE4020-2R2N

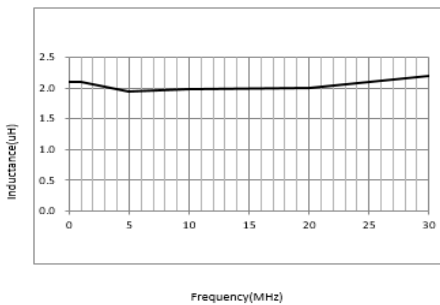
Inductance vs DC current



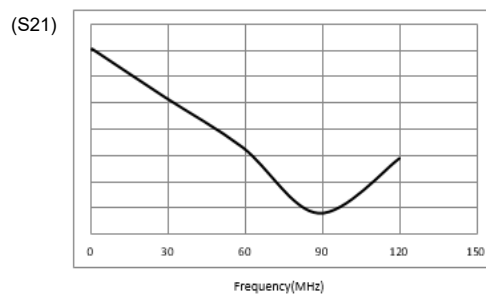
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

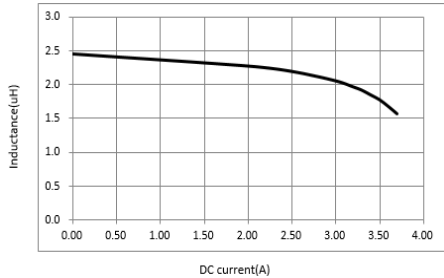
SMD Power Inductors

Fixed Inductor for Surface Mounting

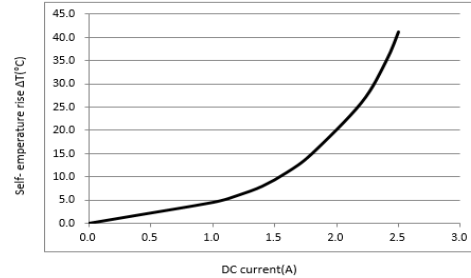
SPE4020

*SPE4020-2R7N

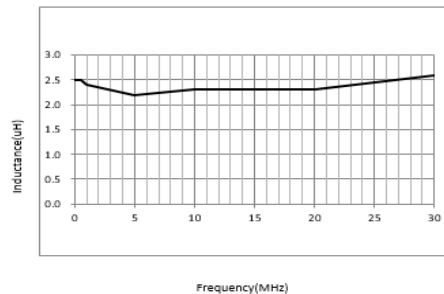
Inductance vs DC current



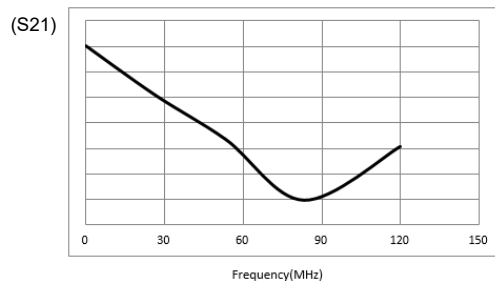
DC current vs Temperature



Inductance vs Frequency

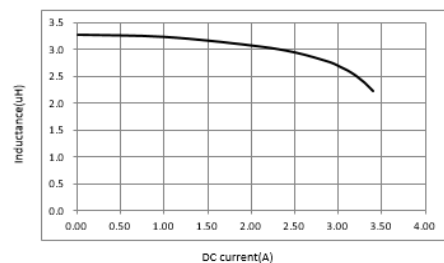


SRF(Self Resonance Frequency)

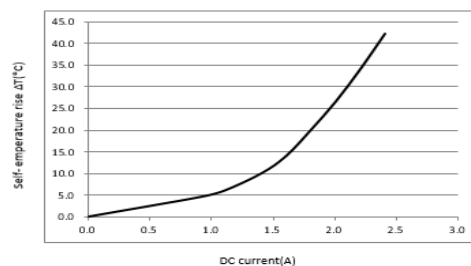


*SPE4020-3R3N

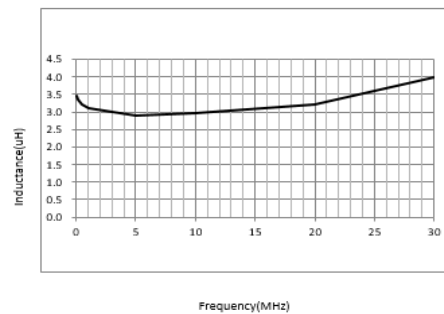
Inductance vs DC current



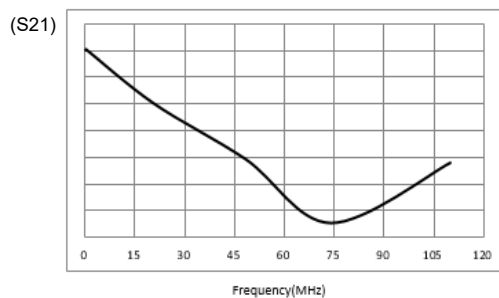
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

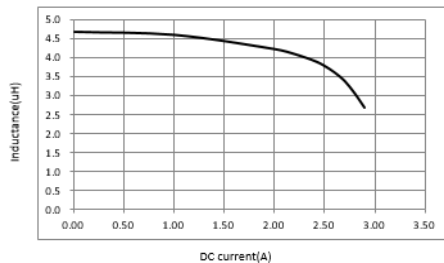
SMD Power Inductors

Fixed Inductor for Surface Mounting

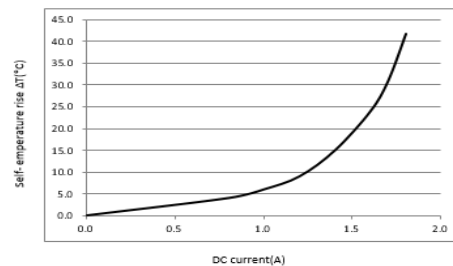
SPE4020

*SPE4020-4R7M

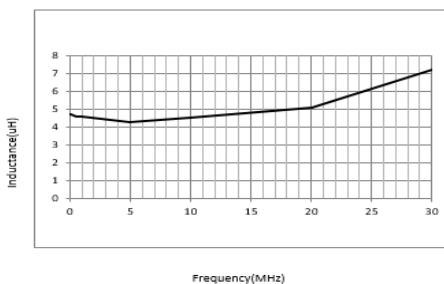
Inductance vs DC current



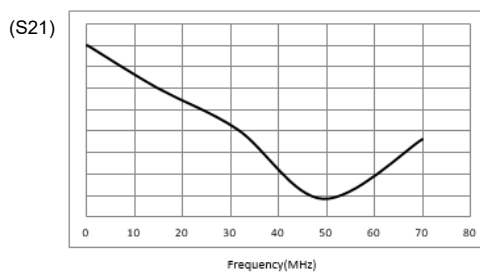
DC current vs Temperature



Inductance vs Frequency

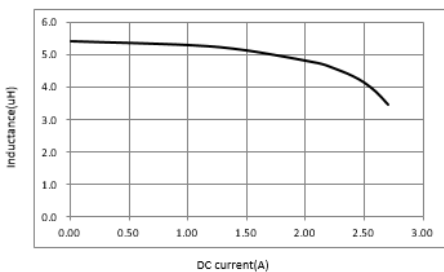


SRF(Self Resonance Frequency)

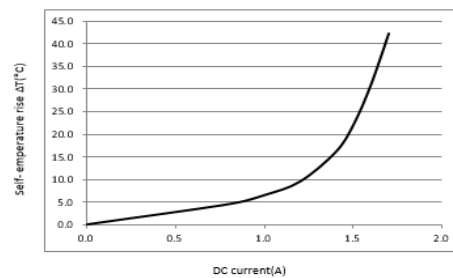


*SPE4020-5R6M

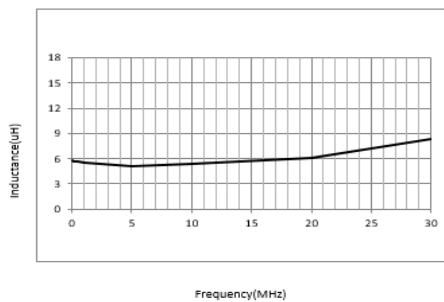
Inductance vs DC current



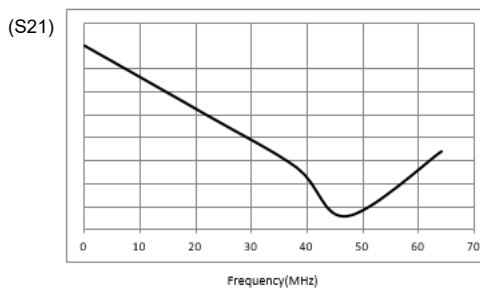
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

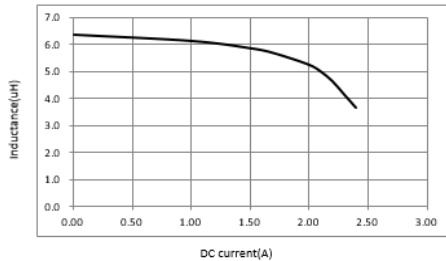
SMD Power Inductors

Fixed Inductor for Surface Mounting

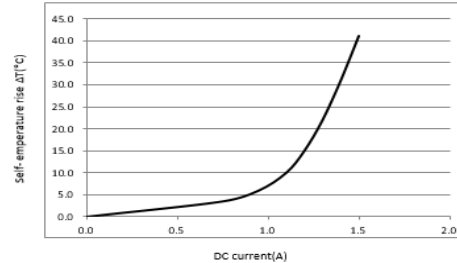
SPE4020

*SPE4020-6R8M

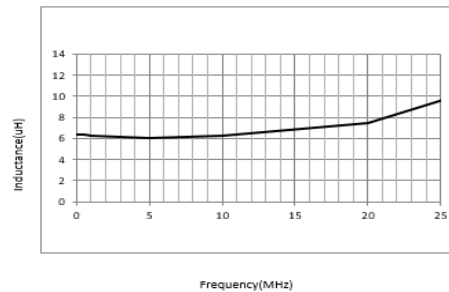
Inductance vs DC current



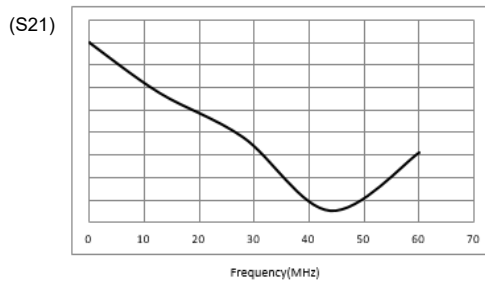
DC current vs Temperature



Inductance vs Frequency

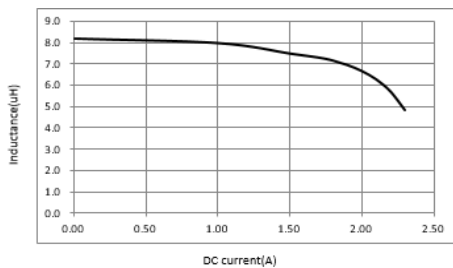


SRF(Self Resonance Frequency)

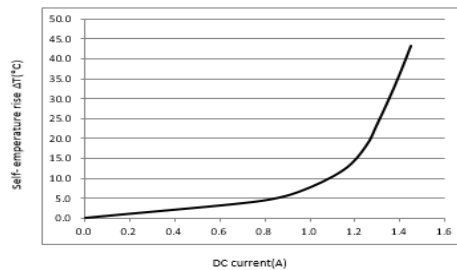


*SPE4020-8R2M

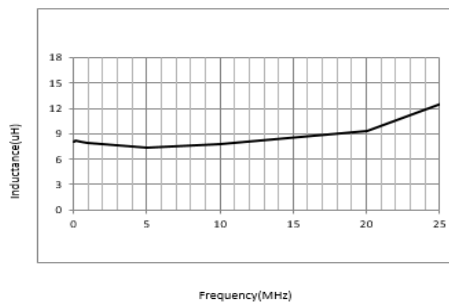
Inductance vs DC current



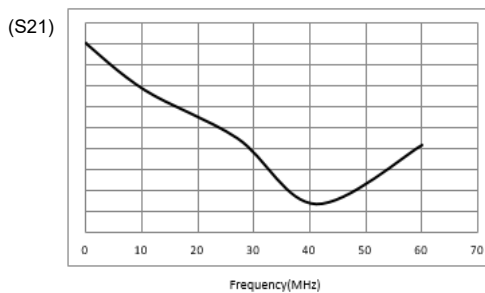
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

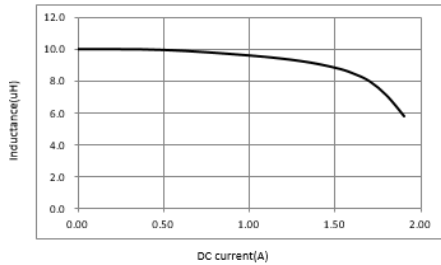
SMD Power Inductors

Fixed Inductor for Surface Mounting

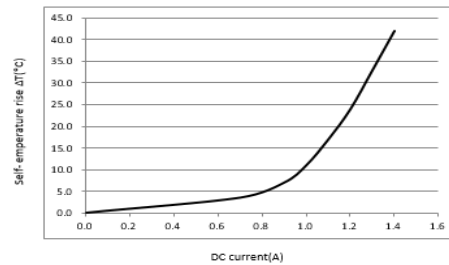
SPE4020

*SPE4020-100M

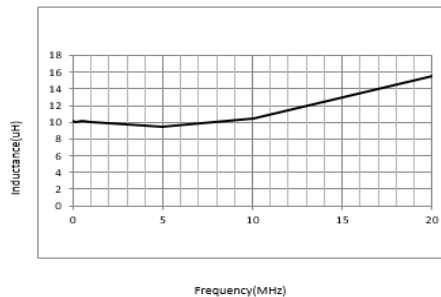
Inductance vs DC current



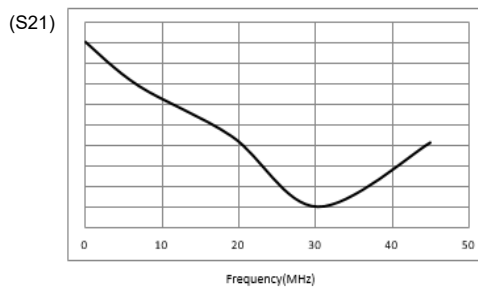
DC current vs Temperature



Inductance vs Frequency

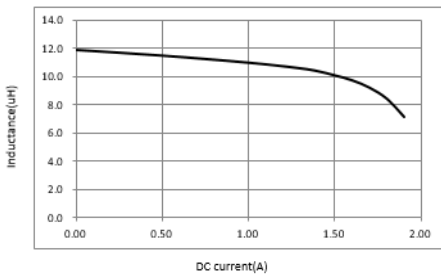


SRF(Self Resonance Frequency)

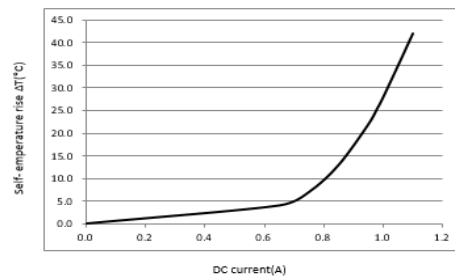


*SPE4020-120M

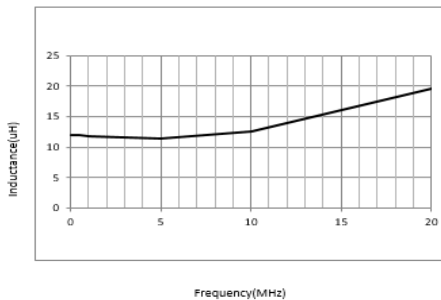
Inductance vs DC current



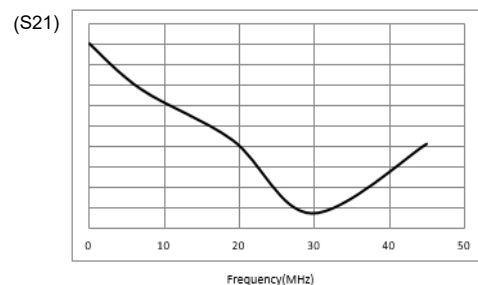
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

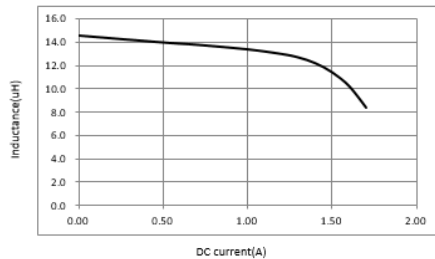
SMD Power Inductors

Fixed Inductor for Surface Mounting

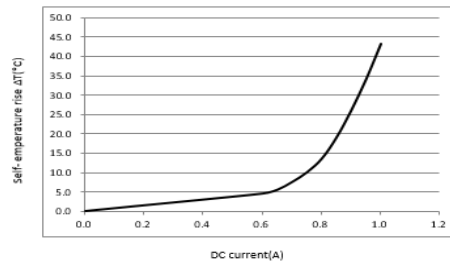
SPE4020

*SPE4020-150M

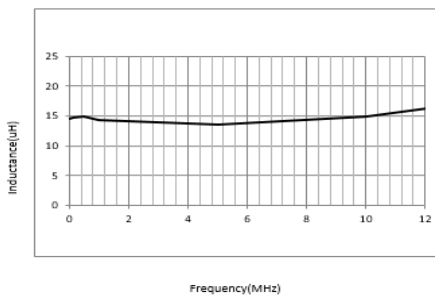
Inductance vs DC current



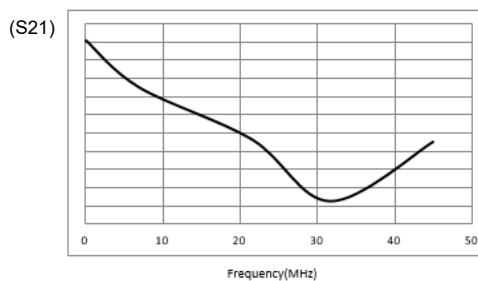
DC current vs Temperature



Inductance vs Frequency

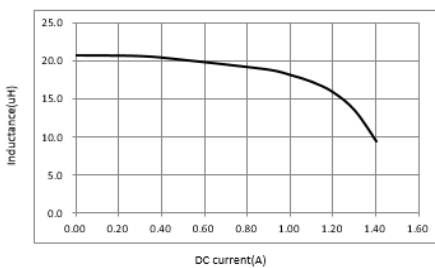


SRF(Self Resonance Frequency)

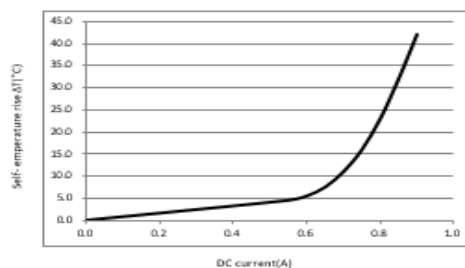


*SPE4020-220M

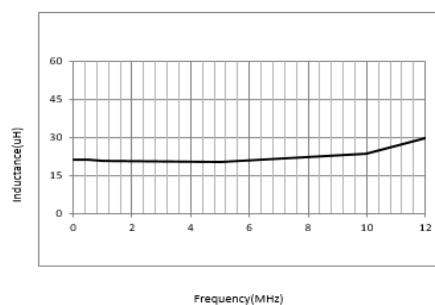
Inductance vs DC current



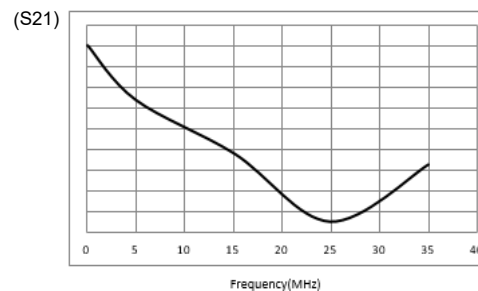
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

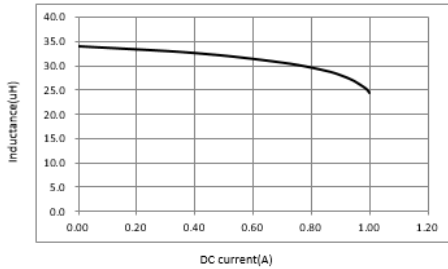
SMD Power Inductors

Fixed Inductor for Surface Mounting

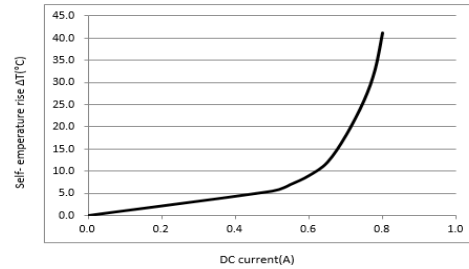
SPE4020

*SPE4020-330M

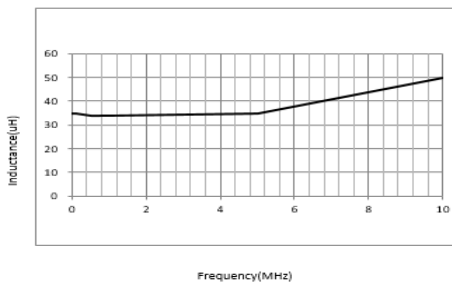
Inductance vs DC current



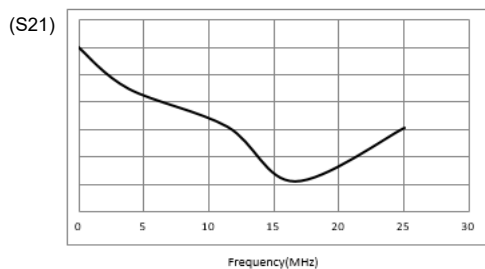
DC current vs Temperature



Inductance vs Frequency

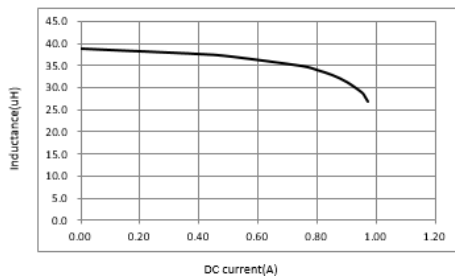


SRF(Self Resonance Frequency)

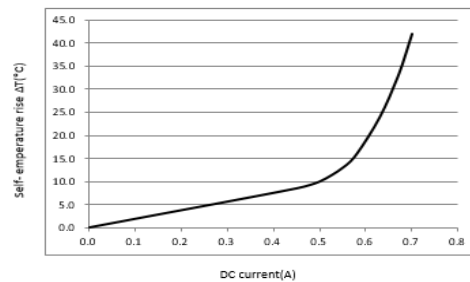


*SPE4020-390M

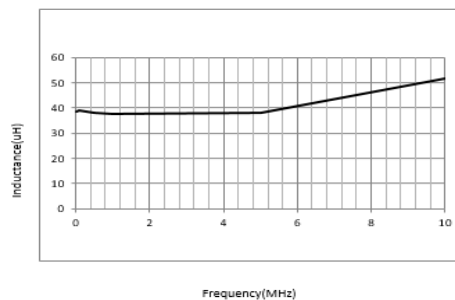
Inductance vs DC current



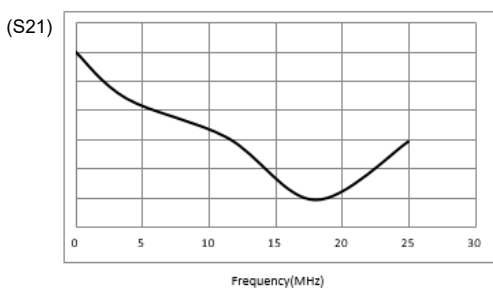
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

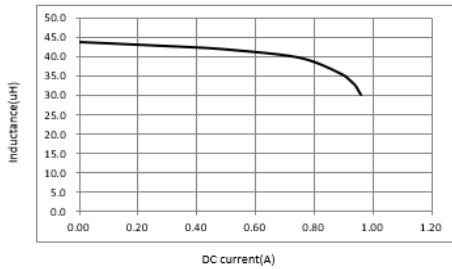
SMD Power Inductors

Fixed Inductor for Surface Mounting

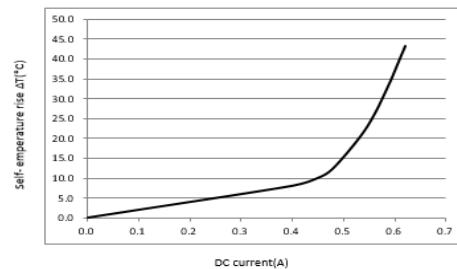
SPE4020

*SPE4020-470M

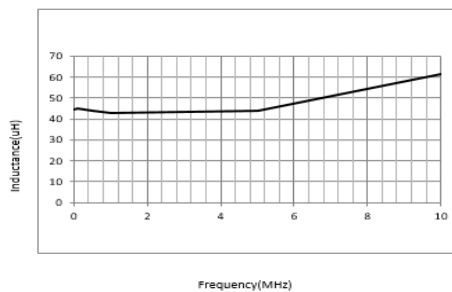
Inductance vs DC current



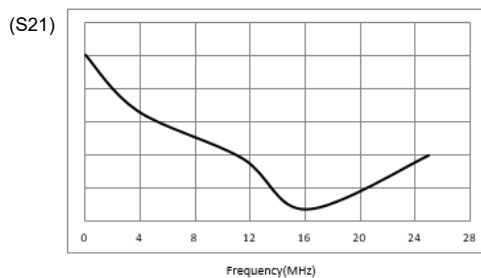
DC current vs Temperature



Inductance vs Frequency

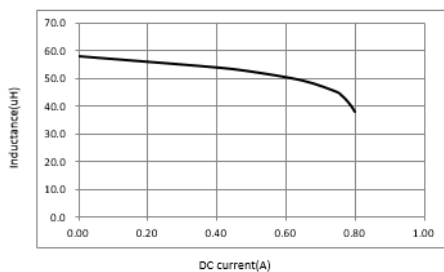


SRF(Self Resonance Frequency)

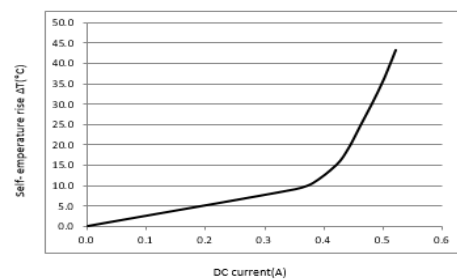


*SPE4020-560M

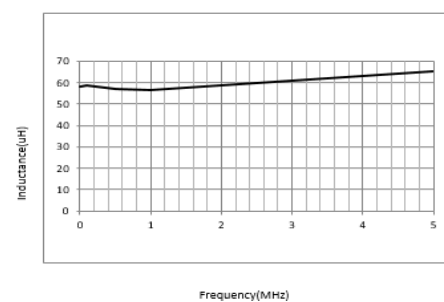
Inductance vs DC current



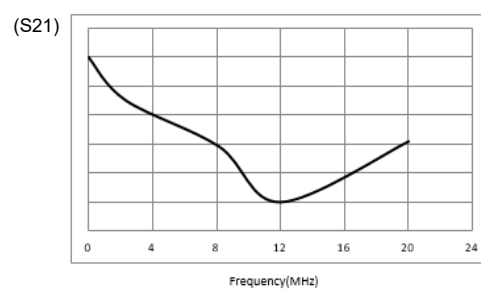
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

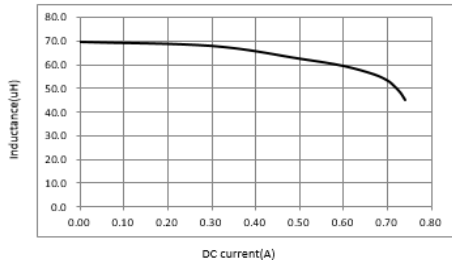
SMD Power Inductors

Fixed Inductor for Surface Mounting

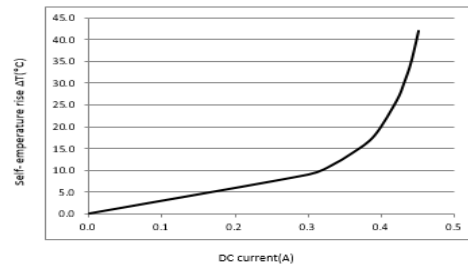
SPE4020

*SPE4020-680M

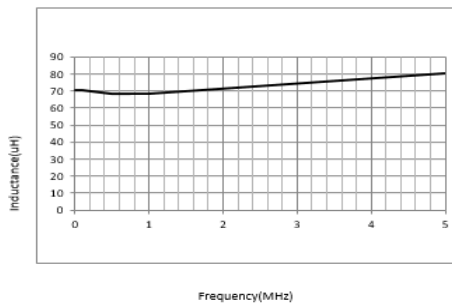
Inductance vs DC current



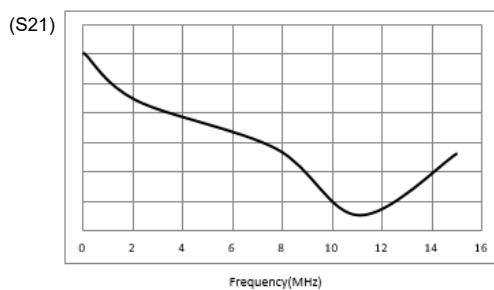
DC current vs Temperature



Inductance vs Frequency

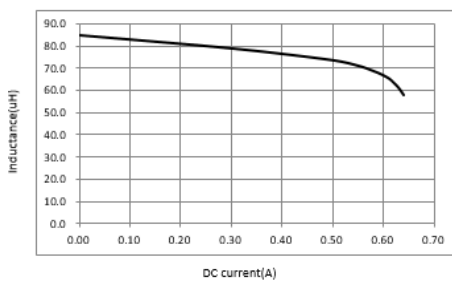


SRF(Self Resonance Frequency)

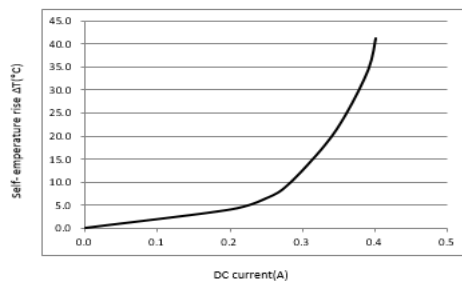


*SPE4020-820M

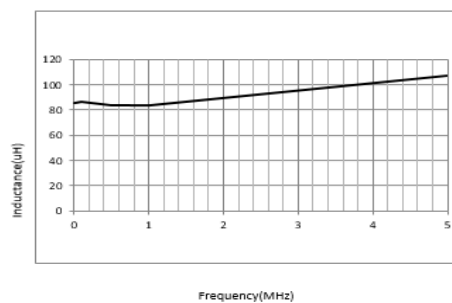
Inductance vs DC current



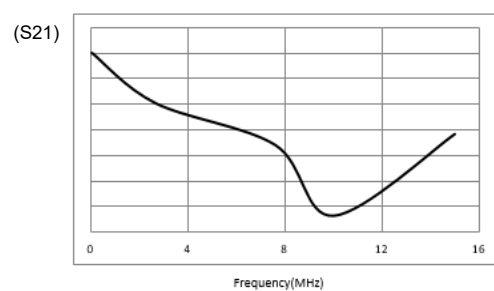
DC current vs Temperature



Inductance vs Frequency



SRF(Self Resonance Frequency)



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

Revised 10/18/21

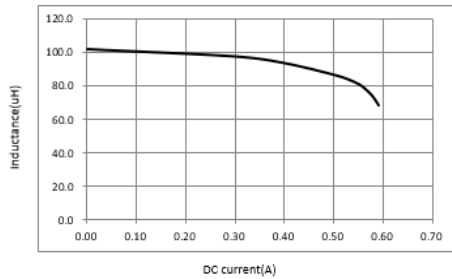
SMD Power Inductors

Fixed Inductor for Surface Mounting

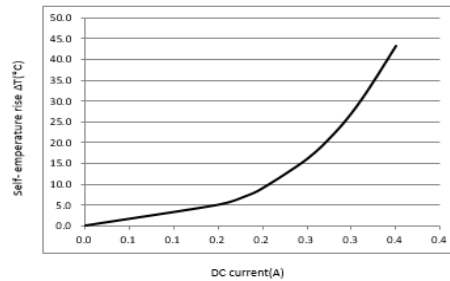
SPE4020

*SPE4020-101M

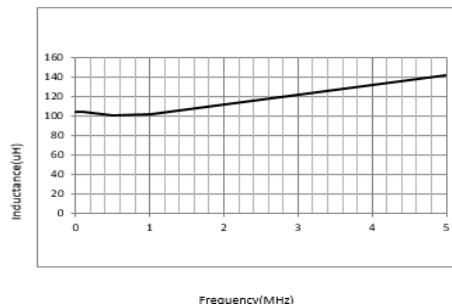
Inductance vs DC current



DC current vs Temperature

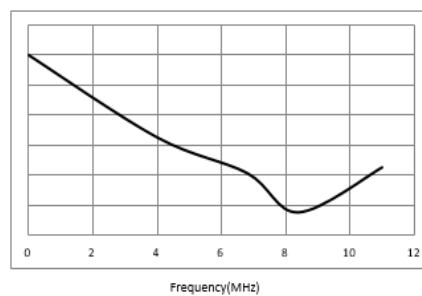


Inductance vs Frequency



SRF(Self Resonance Frequency)

(S21)



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

Revised 10/18/21