

SMD Inductor

Fixed Inductor for Surface Mounting

SPE252016 Series

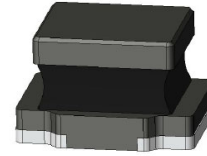
Construction

- SMD Magnetic-resin shielded type



Features

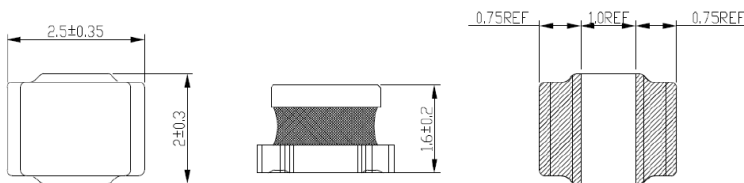
- Operating temperature $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Qualified to AEC-Q200
- Solder reflow temperature 260°C peak
- High magnetic shield construction achieved by a ferrite magnetic material and compatible with high-density mounting
- Available on tape and reel for automatic insertion



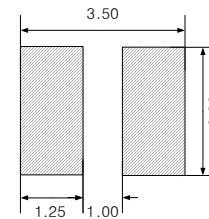
Applications

- 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)	Tolerance (%)	Test Frequency (MHz)	Q (Min)	DCR (Ω,Max)	Rated DC Current (mA,Max)	Self Resonant Frequency (MHz,Min)
SPE252016-R39□	0.39	±5% / ±10%	25.2	30.0	0.40	375.0	290.0
SPE252016-R68□	0.68	±5% / ±10%	25.2	30.0	0.52	320.0	200.0
SPE252016-1R0□	1.00	±5% / ±10%	7.96	30.0	0.75	250.0	150.0
SPE252016-2R2□	2.20	±5% / ±10%	7.96	30.0	1.30	210.0	105.0
SPE252016-2R7□	2.70	±5% / ±10%	7.96	30.0	1.40	200.0	90.0

※Test Equipment

*Inductance : Agilent 4285A

*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.Inductance Tolerance Class J : ±5% / Class K : ±10%

*2.Isat : DC current (A) that will cause L0 to drop approximately 10%

Revised 04/02/25

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SPE252016-3R3□	3.30	±5% / ±10%	7.96	30.0	1.60	190.0	80.0
SPE252016-3R9□	3.90	±5% / ±10%	7.96	30.0	1.70	185.0	75.0
SPE252016-220□	22.0	±5% / ±10%	2.52	25.0	3.60	125.0	21.0
SPE252016-330□	33.0	±5% / ±10%	2.52	25.0	4.70	110.0	17.0
SPE252016-470□	47.0	±5% / ±10%	2.52	25.0	8.80	80.0	14.0
SPE252016-560□	56.0	±5% / ±10%	2.52	25.0	10.0	75.0	12.5
SPE252016-151□	150.0	±5% / ±10%	0.796	15.0	22.0	50.0	7.50
SPE252016-221□	220.0	±5% / ±10%	0.796	15.0	28.0	44.0	6.50

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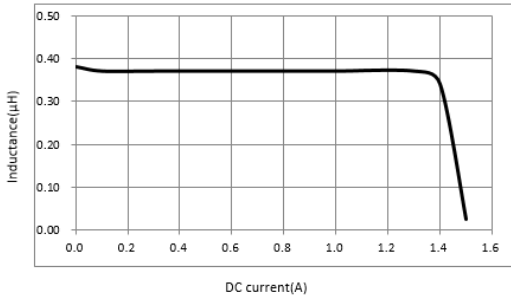
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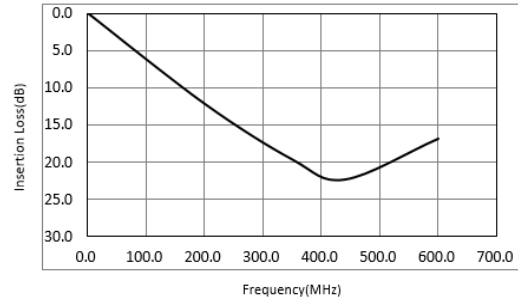
SPE252016 Series

* SPE252016-R39□

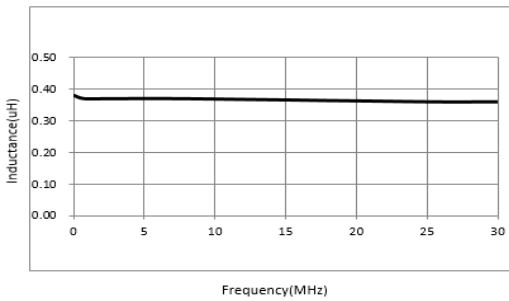
Inductance vs DC current



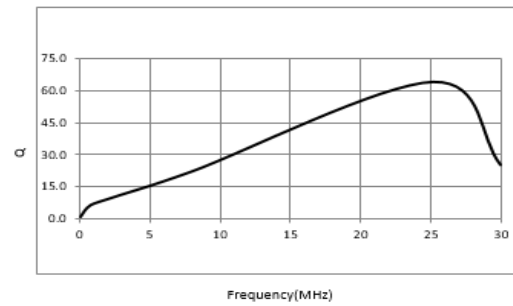
SRF(Self Resonance Frequency)



Inductance vs Frequency

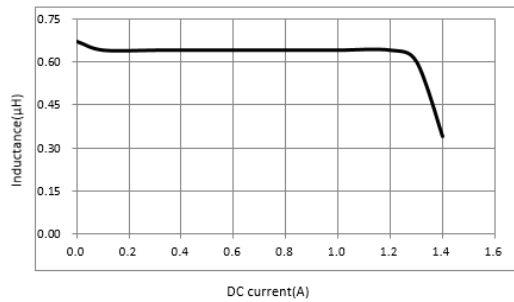


Q vs Frequency

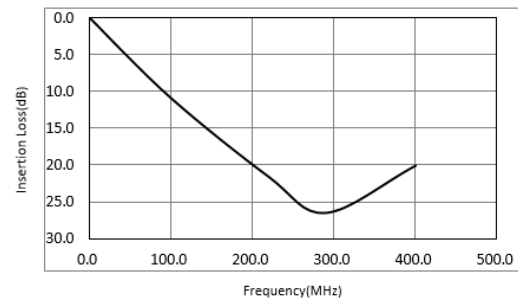


* SPE252016-R68□

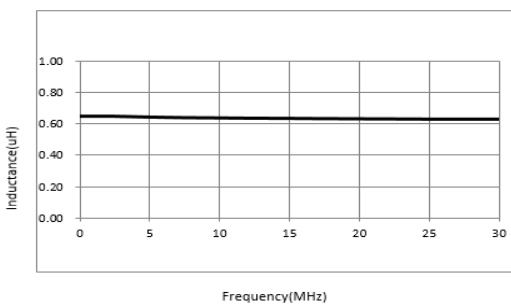
Inductance vs DC current



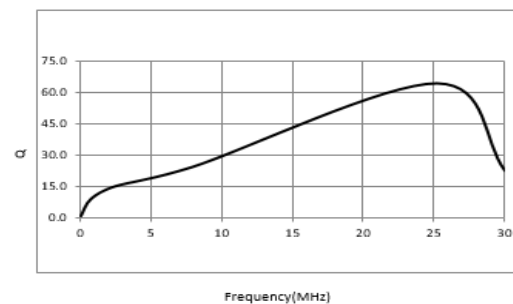
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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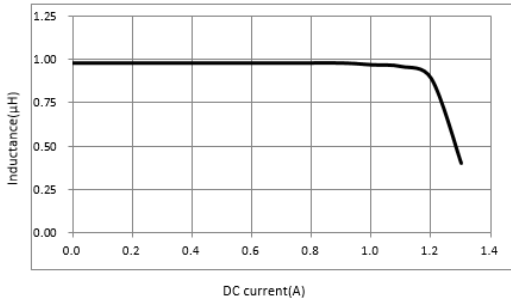
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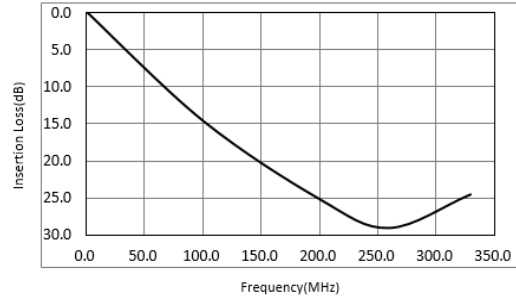
SPE252016 Series

* SPE252016-1R0□

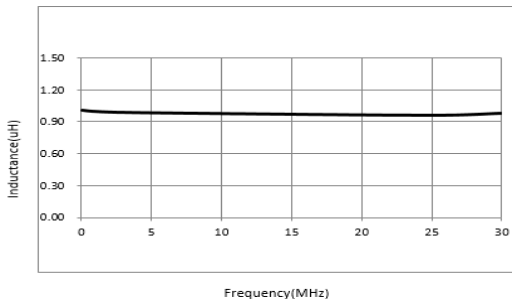
Inductance vs DC current



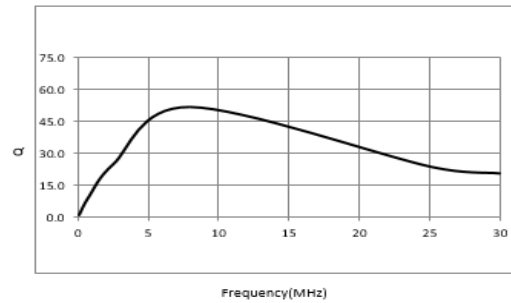
SRF(Self Resonance Frequency)



Inductance vs Frequency

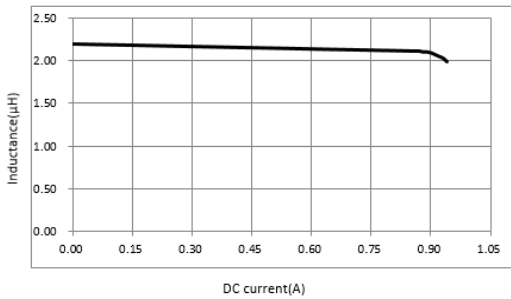


Q vs Frequency

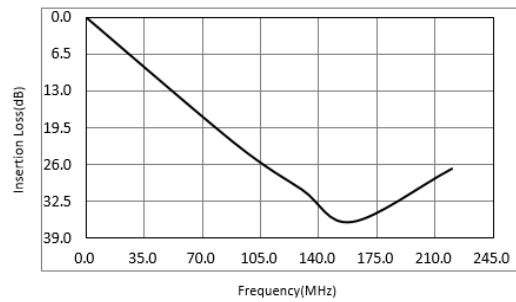


* SPE252016-2R2□

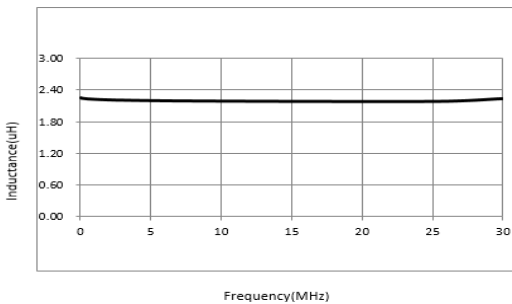
Inductance vs DC current



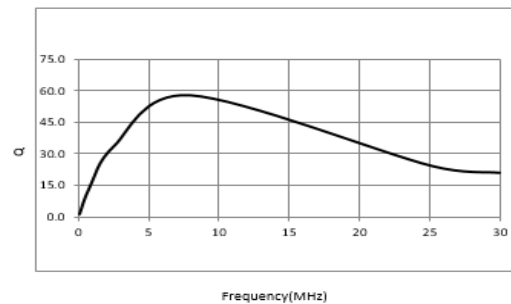
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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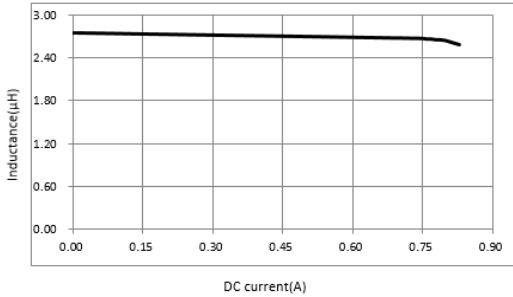
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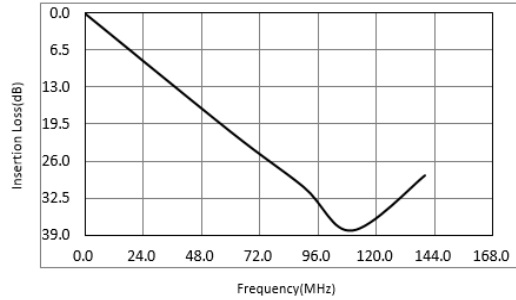
SPE252016 Series

* SPE252016-2R7□

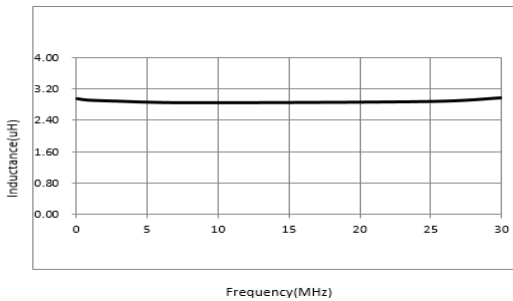
Inductance vs DC current



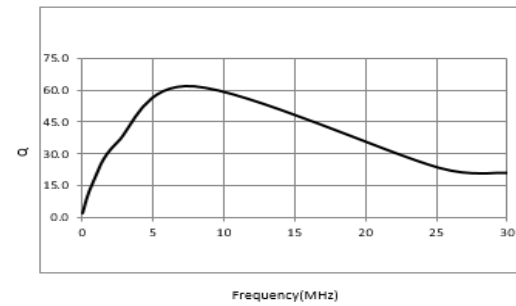
SRF(Self Resonance Frequency)



Inductance vs Frequency

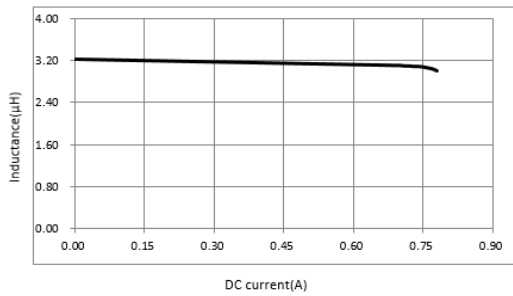


Q vs Frequency

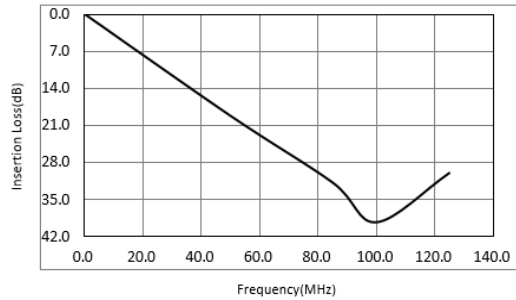


* SPE252016-3R3□

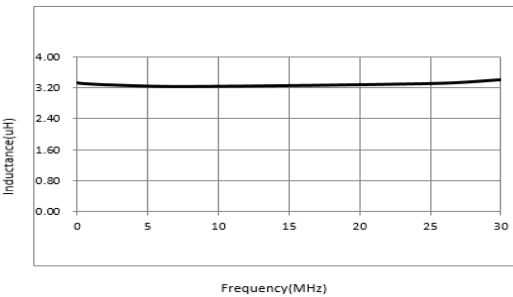
Inductance vs DC current



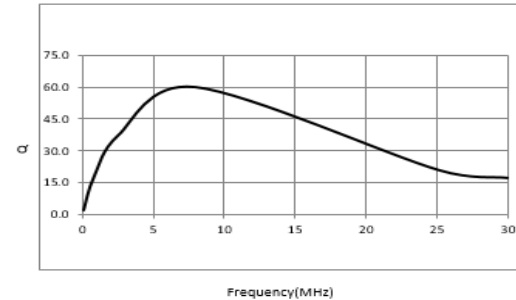
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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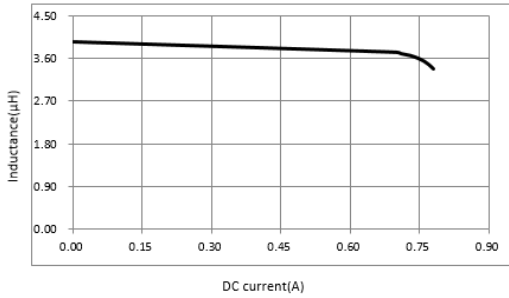
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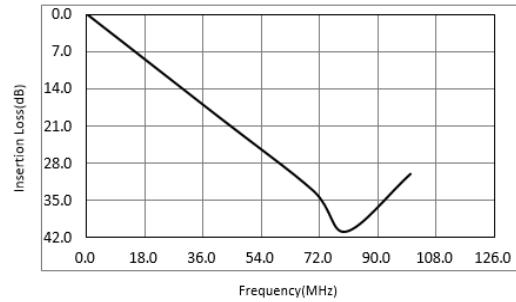
SPE252016 Series

* SPE252016-3R9□

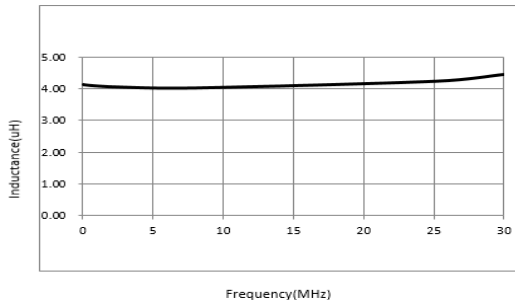
Inductance vs DC current



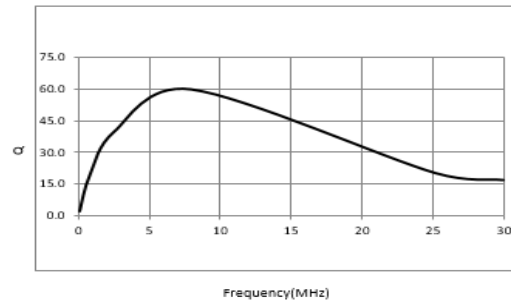
SRF(Self Resonance Frequency)



Inductance vs Frequency

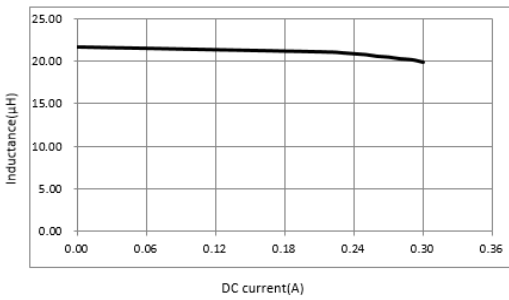


Q vs Frequency

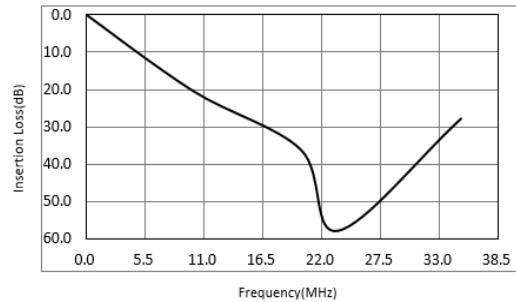


* SPE252016-220□

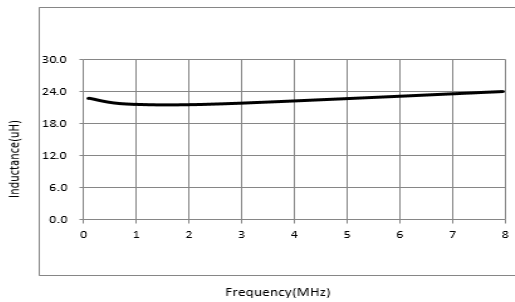
Inductance vs DC current



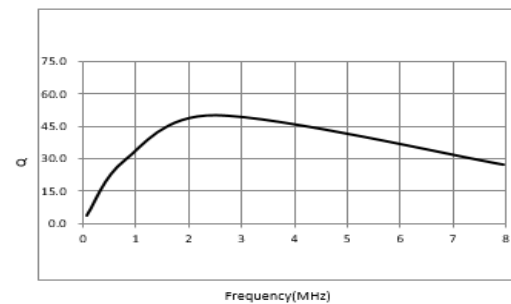
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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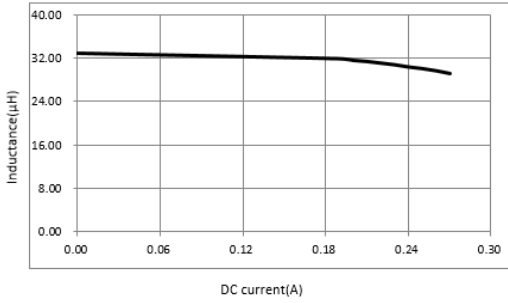
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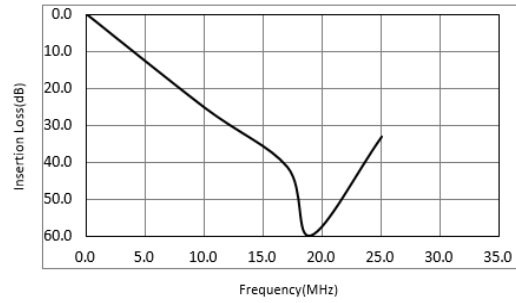
SPE252016 Series

* SPE252016-330□

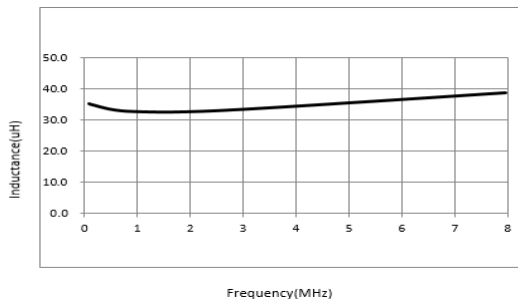
Inductance vs DC current



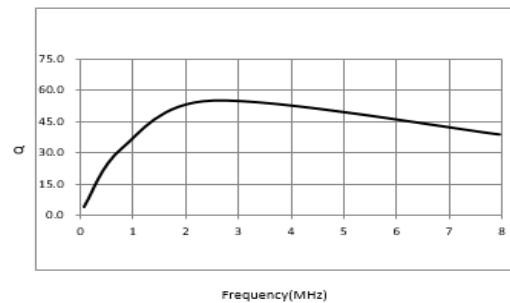
SRF(Self Resonance Frequency)



Inductance vs Frequency

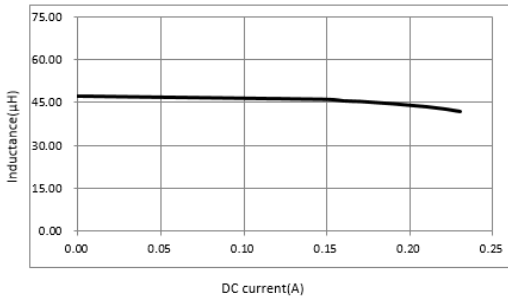


Q vs Frequency

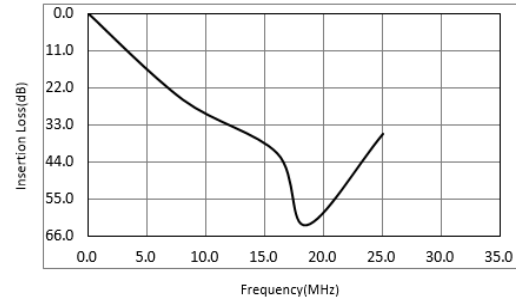


* SPE252016-470□

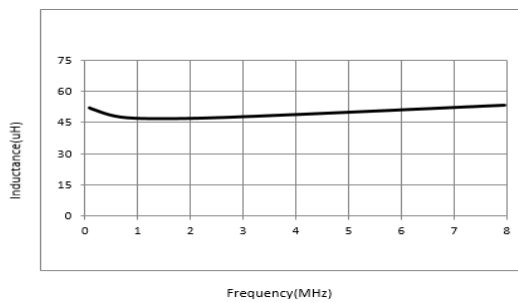
Inductance vs DC current



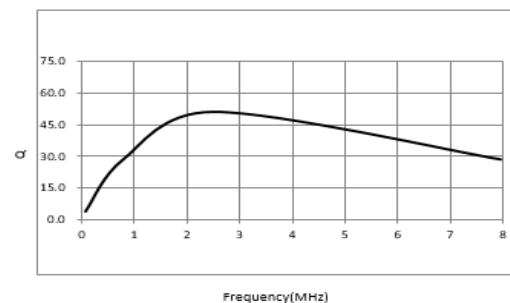
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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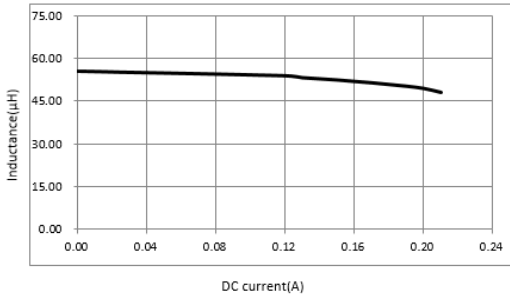
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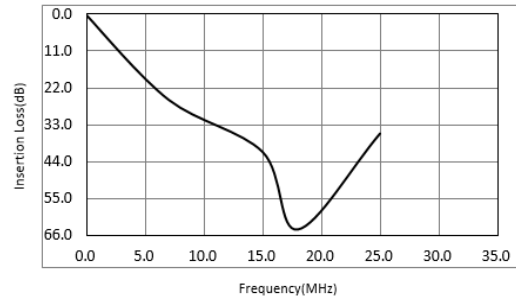
SPE252016 Series

* SPE252016-560□

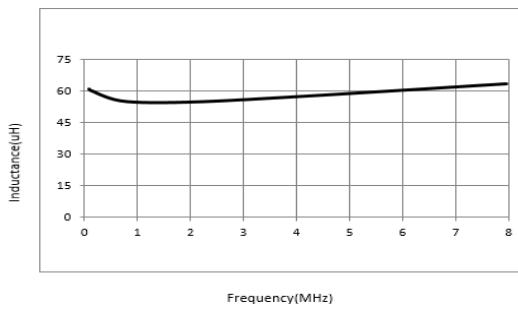
Inductance vs DC current



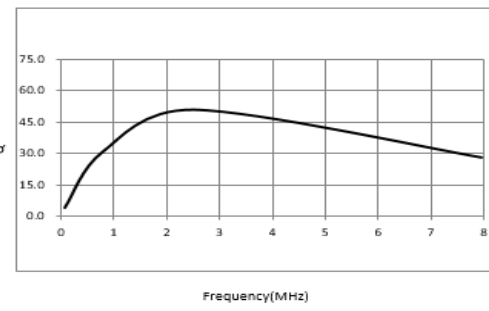
SRF(Self Resonance Frequency)



Inductance vs Frequency

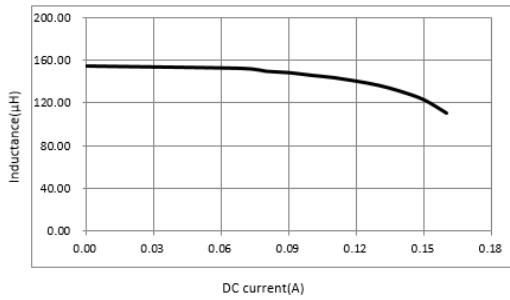


Q vs Frequency

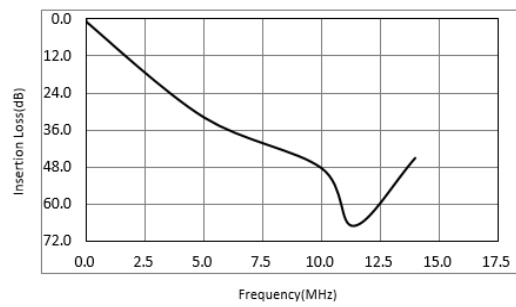


* SPE252016-151□

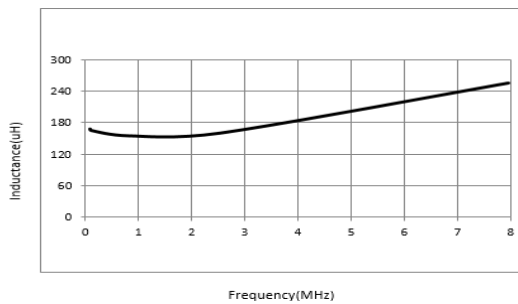
Inductance vs DC current



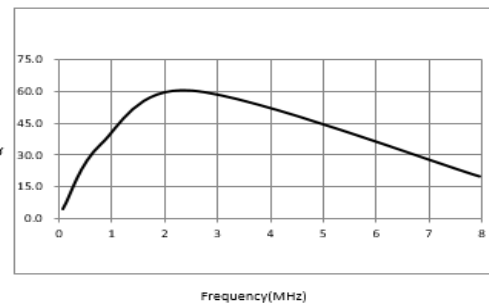
SRF(Self Resonance Frequency)



Inductance vs Frequency



Q vs Frequency



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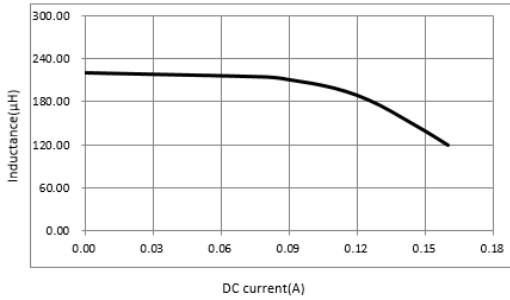
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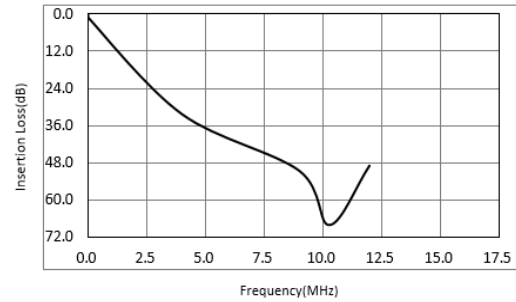
SPE252016 Series

* SPE252016-221□

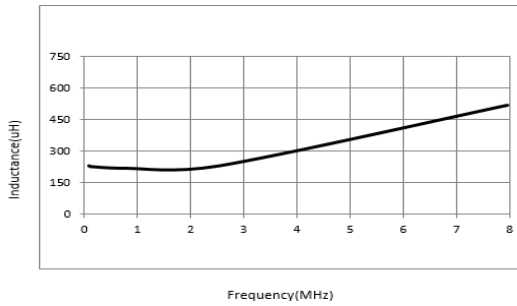
Inductance vs DC current



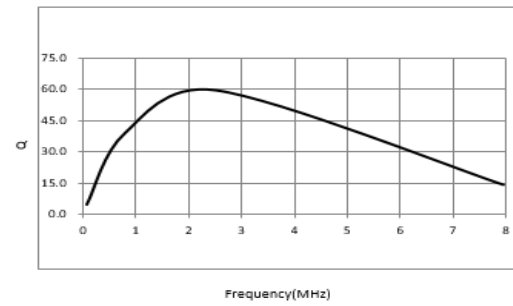
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