

SMD Inductors

Fixed Inductor for Surface Mounting

SPE252012

Construction

- SMD Magnetic-resin shielded type

Features

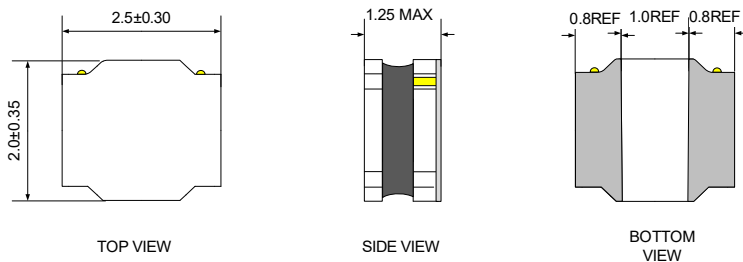
- Operating temperature -40 ~ +125°C
- Qualified to AEC-Q200
- High magnetic shield construction achieved by a ferrite magnetic material and compatible with high-density mounting
- Metallization on ferrite core results in excellent shock resistance and damage-free durability



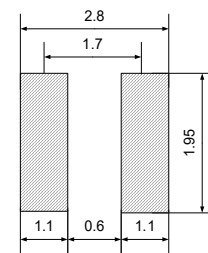
Applications

- Automotive systems / PDA / Notebook systems
- DC/DC converters(LCD/LED/OLED display,STB)
- 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,MAX)	Isat*1(A,MAX)	Irms*2(A,MAX)	Marking
SPE252012-R24N	0.24±30%	28.0	4.05	3.50	-
SPE252012-R33N	0.33±30%	40.0	4.00	3.00	-
SPE252012-R47N	0.47±30%	40.0	3.60	2.90	-
SPE252012-R56N	0.56±30%	40.0	3.30	2.80	-
SPE252012-R68N	0.68±30%	45.0	3.28	2.60	-
SPE252012-1R0M	1.0±30%	60.0	2.45	2.40	-
SPE252012-1R5M	1.5±30%	84.0	2.05	1.90	-
SPE252012-2R2M	2.2±30%	110	1.90	1.80	-
SPE252012-3R3M	3.3±30%	155	1.50	1.40	-
SPE252012-4R7M	4.7±20%	228	1.35	1.20	-
SPE252012-6R8M	6.8±20%	325	1.00	0.90	-
SPE252012-100M	10.0±20%	480	0.79	0.75	-
SPE252012-150M	15±20%	625	0.65	0.55	-
SPE252012-180M	18±20%	1000	0.55	0.50	-
SPE252012-220M	22±20%	1020	0.50	0.45	-
SPE252012-330M	33±20%	1400	0.38	0.37	-
SPE252012-470M	47±20%	2000	0.30	0.29	-

※Test Equipment

*Inductance : Agilent 4284A (1MHz, 1.0V)

*DCR Meter : ABM3245 (20mΩ~2MΩ)

*Bias Current : Agilent 4284A + Agilent 42841A

*SRF : Agilent HP8753ES

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

*Notes

*1.Isat : DC current at which the inductance drops approximate 35%

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

Revised 08/28/21

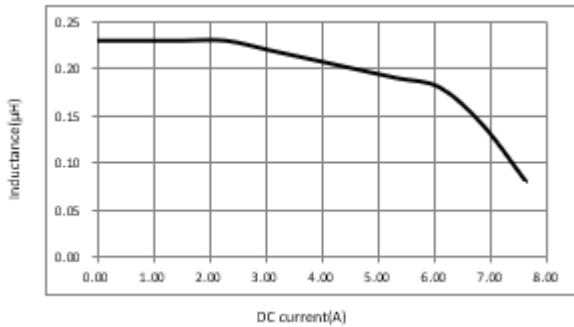
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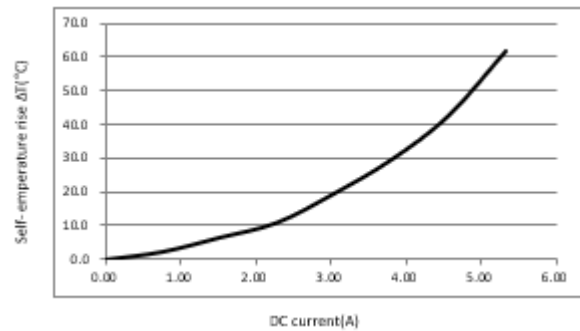
SPE252012

*SPE252012-R24N

Inductance vs DC current

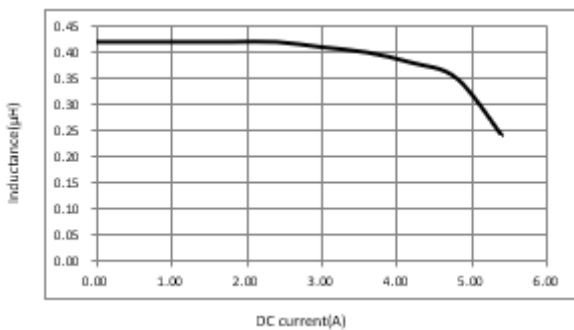


DC current vs Temperature

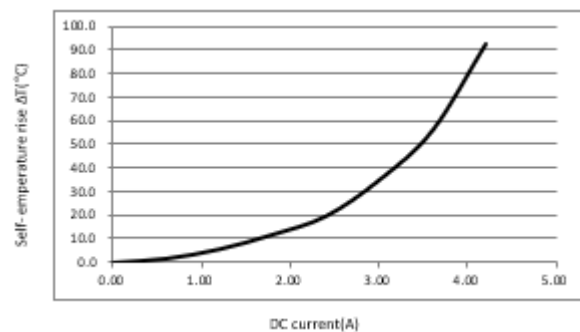


*SPE252012-R33N

Inductance vs DC current

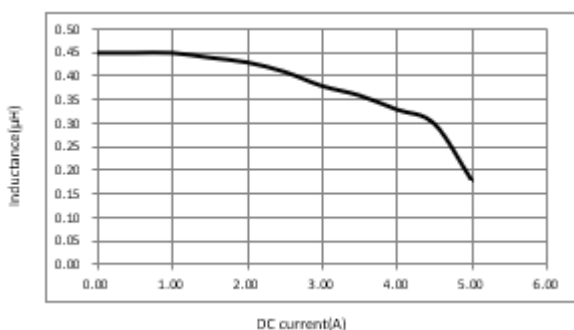


DC current vs Temperature

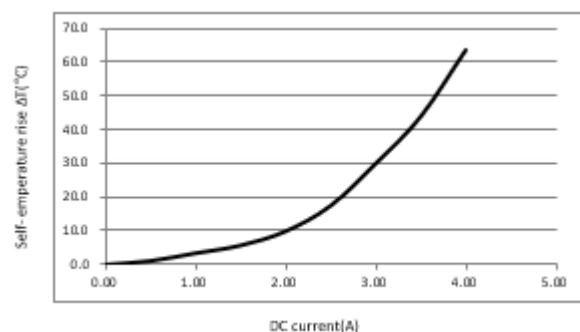


*SPE252012-R47N

Inductance vs DC current



DC current vs Temperature



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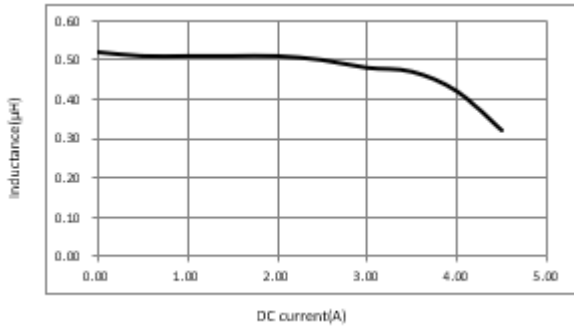
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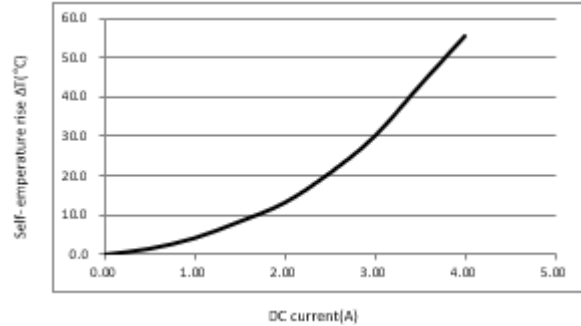
SPE252012

*SPE252012-R56N

Inductance vs DC current

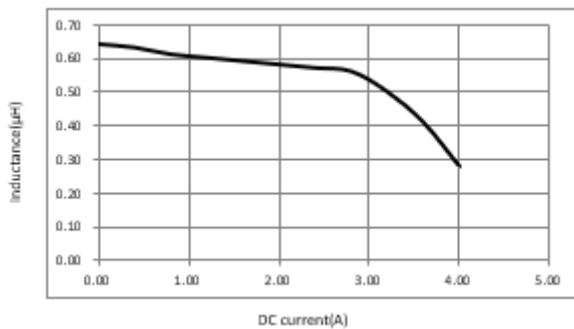


DC current vs Temperature

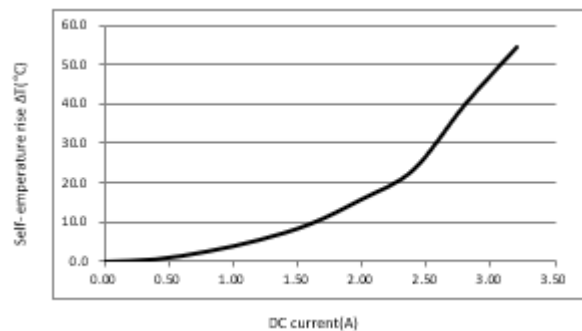


*SPE252012-R68N

Inductance vs DC current

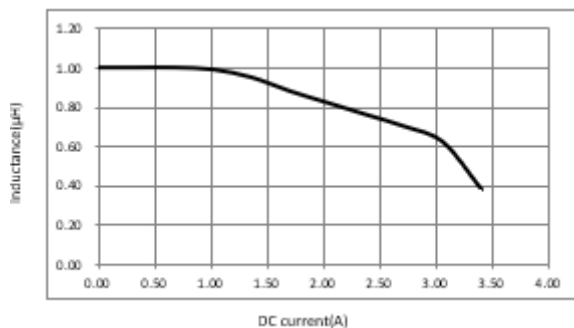


DC current vs Temperature

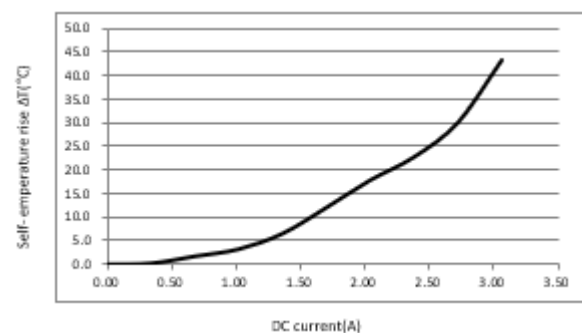


*SPE252012-1R0M

Inductance vs DC current



DC current vs Temperature



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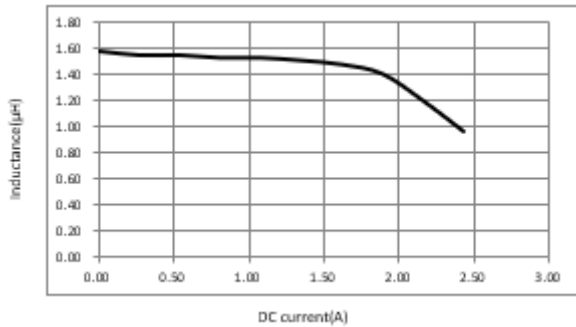
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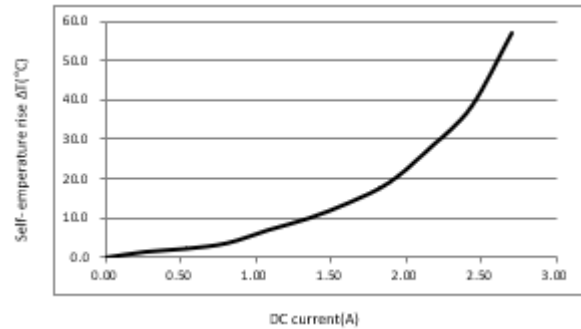
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*SPE252012-1R5M

Inductance vs DC current

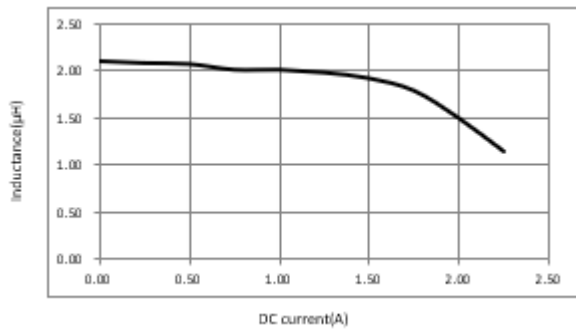


DC current vs Temperature

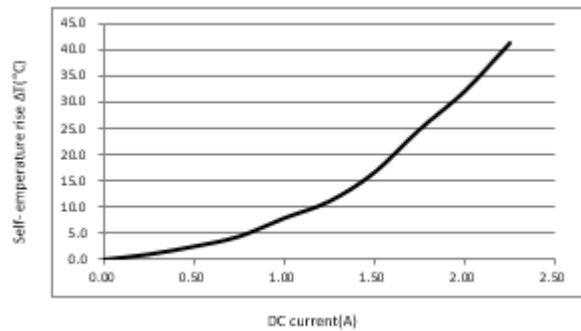


*SPE252012-2R2M

Inductance vs DC current

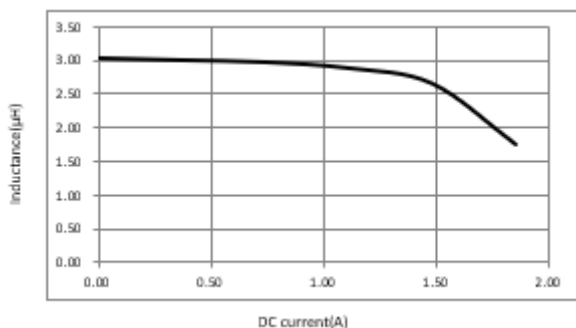


DC current vs Temperature

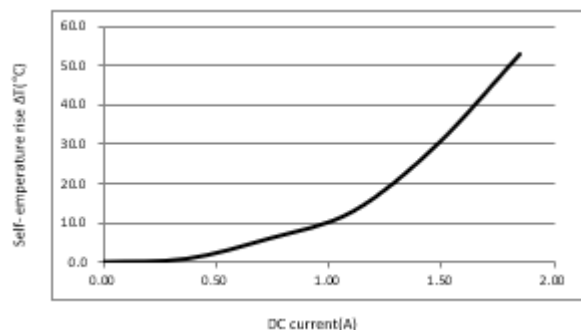


*SPE252012-3R3M

Inductance vs DC current



DC current vs Temperature



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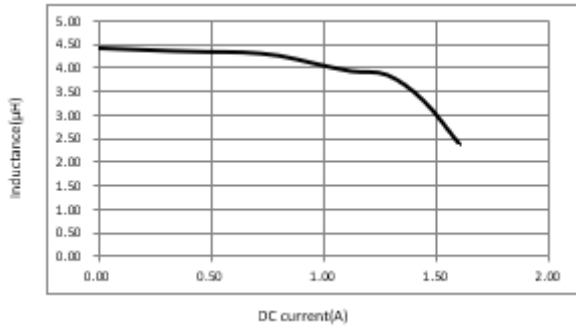
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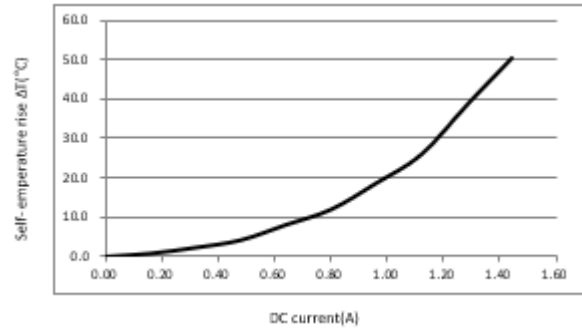
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*SPE252012-4R7M

Inductance vs DC current

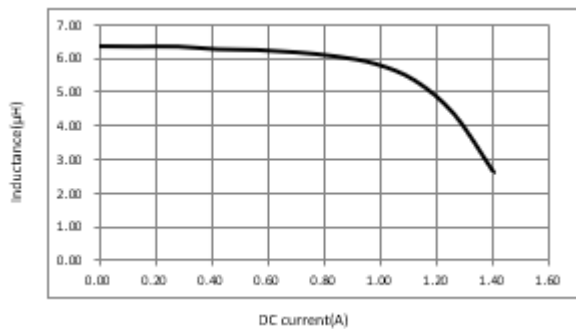


DC current vs Temperature

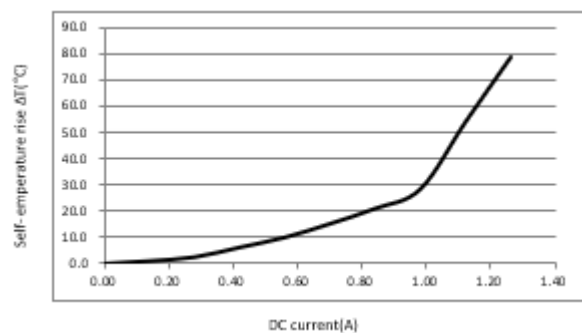


*SPE252012-6R8M

Inductance vs DC current

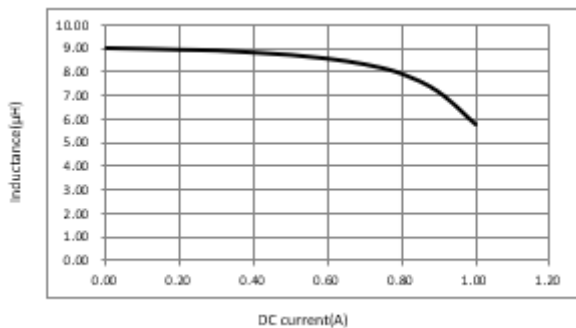


DC current vs Temperature

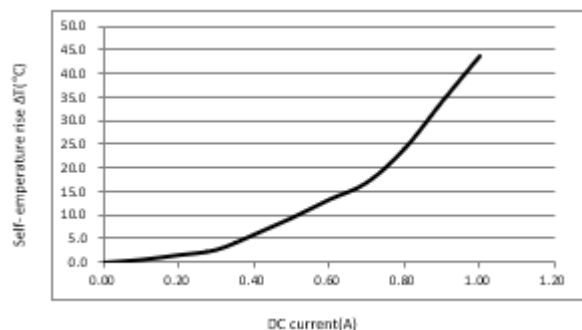


*SPE252012-100M

Inductance vs DC current



DC current vs Temperature



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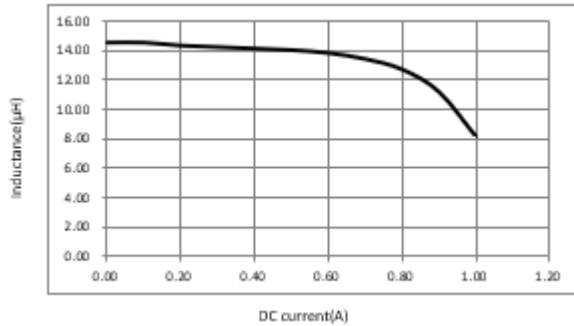
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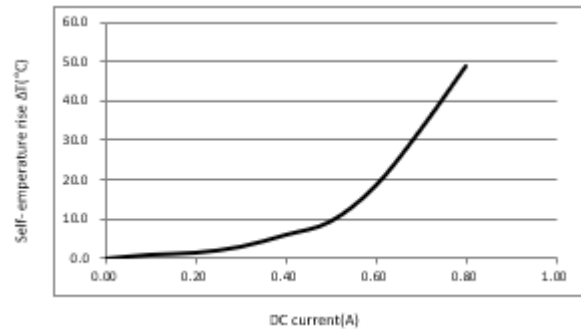
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*SPE252012-150M

Inductance vs DC current

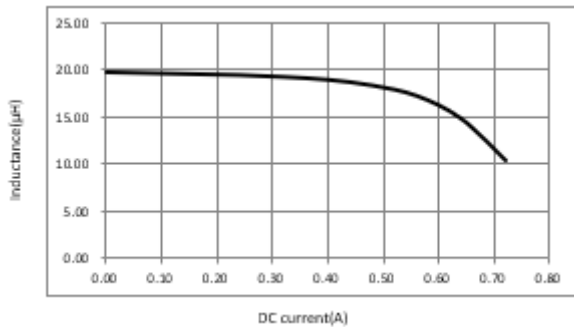


DC current vs Temperature

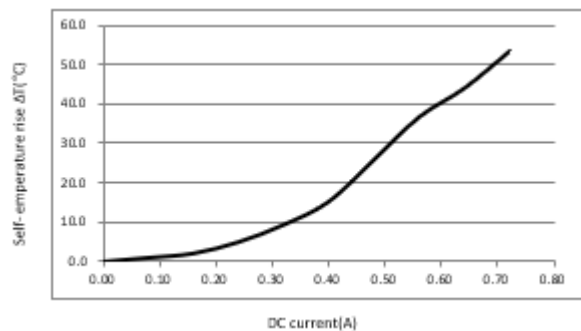


*SPE252012-180M

Inductance vs DC current

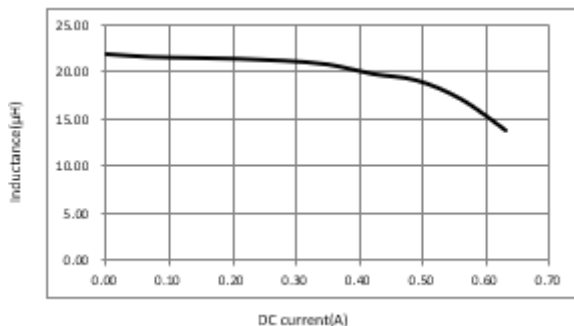


DC current vs Temperature

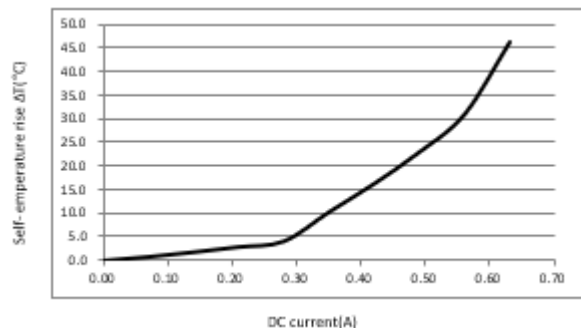


*SPE252012-220M

Inductance vs DC current



DC current vs Temperature



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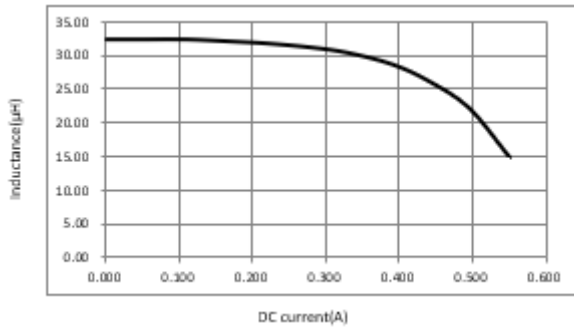
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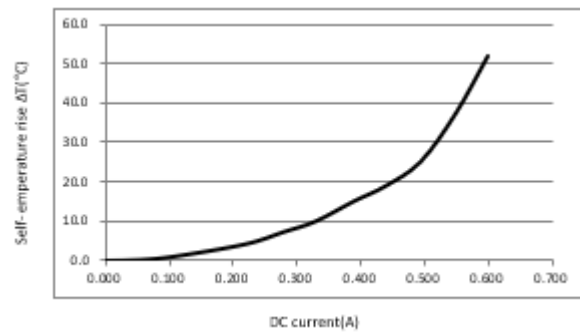
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*SPE252012-330M

Inductance vs DC current

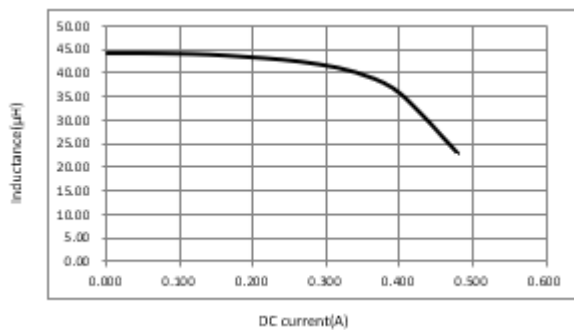


DC current vs Temperature

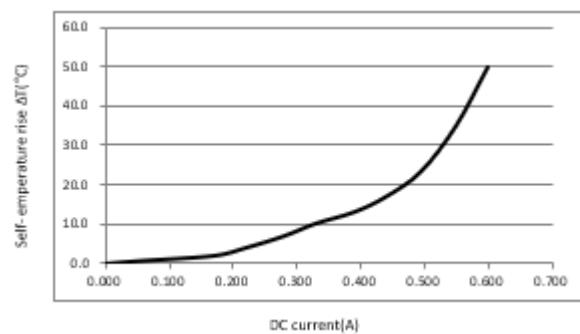


*SPE252012-470M

Inductance vs DC current



DC current vs Temperature



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