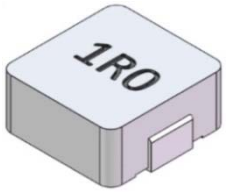
SM2518 Series

1. Features of SM2518 series



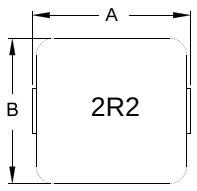
- Molded inductor structure. No audible noise.
- Inductance Range: 0.47 uH up to 10.0 uH, custom values are welcomed
- High saturation current from by distributed gap metal dust core.
- Low profile: 5.0 mm max. height.
- Working frequency of up to 5.0 MHz.
- Ideal for DC/DC converters, PDA, notebook, and server applications.
- T&R quantity: 500 pieces per reel. RoHS and HF Compliant

2. Electrical Characteristics of SM2518 series:

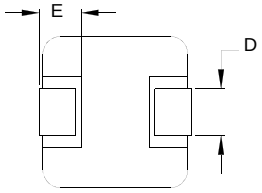
ITG Part Number	L ± 20% (μH) @0A	DCR Typ. (mΩ)	DCR Max. (mΩ)	Irms (A)	Isat1 (A)	Isat2 (A)	Dimension
SM2518-R47MHF	0.47	2.60	2.90	21.0	24.0	32.0	2
SM2518-R56MHF	0.56	3.40	3.60	20.0	18.0	23.0	1
SM2518-R68MHF	0.68	4.20	4.50	18.0	17.5	21.0	1
SM2518-R82MHF	0.82	4.60	4.90	16.5	17.0	20.0	1
SM2518-1R0MHF	1.00	5.60	6.50	13.0	15.0	17.0	1
SM2518-1R2MHF	1.20	6.70	7.50	12.0	13.0	18.0	2
SM2518-1R5MHF	1.50	8.60	9.00	12.0	12.0	14.0	1
SM2518-2R2MHF	2.20	13.00	13.60	10.0	10.0	13.0	1
SM2518-3R3MHF	3.30	19.90	20.90	8.0	8.0	12.0	1
SM2518-4R7MHF	4.70	28.90	30.30	6.5	7.0	8.5	1
SM2518-5R6MHF	5.60	32.70	34.40	6.0	7.0	7.5	1
SM2518-6R8MHF	6.80	42.50	44.60	5.5	5.5	6.5	1
SM2518-8R2MHF	8.20	43.50	45.60	5.5	5.5	6.0	1
SM2518-100MHF	10.00	67.90	71.30	4.5	4.5	5.0	1

3. Mechanical Dimensions of SM2518 (unit:mm):

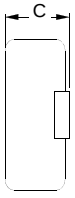
Dimension & PCB Layout	A Typ.	B Typ.	C Max.	D Typ.	E Typ.
1	6.86 ± 0.38	6.47 ± 0.25	5.00	3.18 ± 0.30	1.30 ± 0.30
2	7.40 Max.	6.60 ± 0.20	5.00	3.00 ± 0.50	2.00 ± 0.10



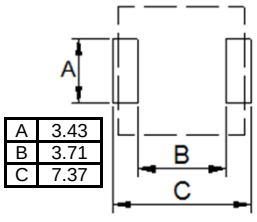
TOP VIEW



BOTTOM VIEW

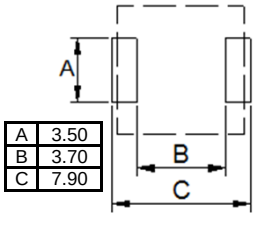


SIDE VIEW



A	3.43
B	3.71
C	7.37

Recommended Pad Layout Dimension 1



A	3.50
B	3.70
C	7.90

Recommended Pad Layout Dimension 2

Notes:

1. Irate: DC current that will cause an approximate ΔT of 40 °C.
2. Isat1: DC current that will cause inductance to drop approximately by 20%.
3. Isat2: DC current that will cause inductance to drop approximately by 30%.
4. Test conditions: 100 kHz, 0.25 V, 25 °C ambient temperature.
5. Operating Temperature Range: -55 °C ~ 150 °C.

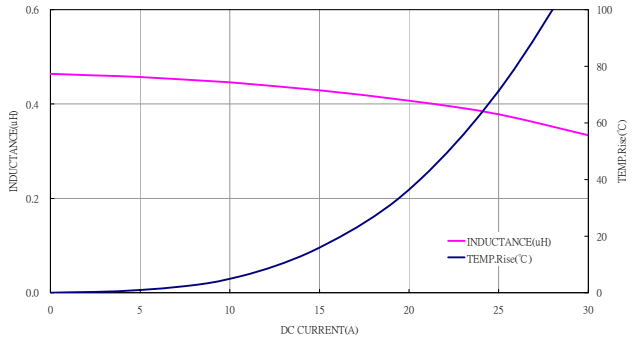
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● **Japan** *81 568 85 2830* ● **Shenzhen** *86 755 8418 6263* ● **Shanghai** *86 21 5424 5141* ● **Hong Kong** *852 9688 9767*
● sales@ITG-Electronics.com ● www.ITG-Electronics.com *Revision C: October 28, 2016*

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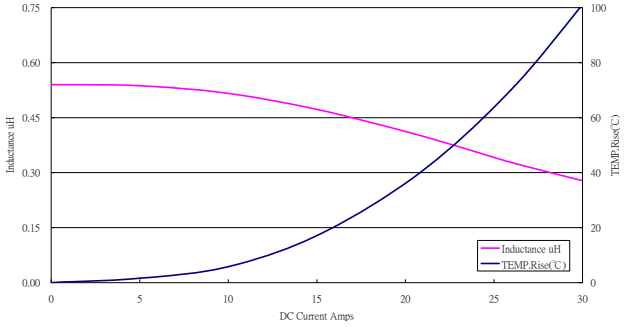
SM2518 Series

4. Inductance vs. Temperature Rise Characteristics of SM2518 Series

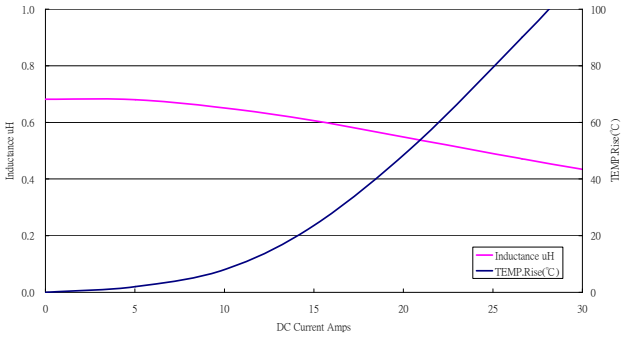
SM2518-R47MHF



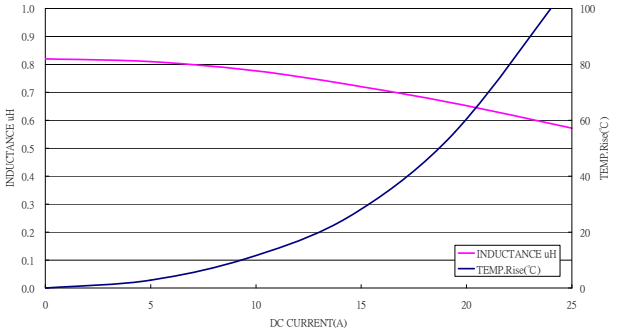
SM2518-R56MHF



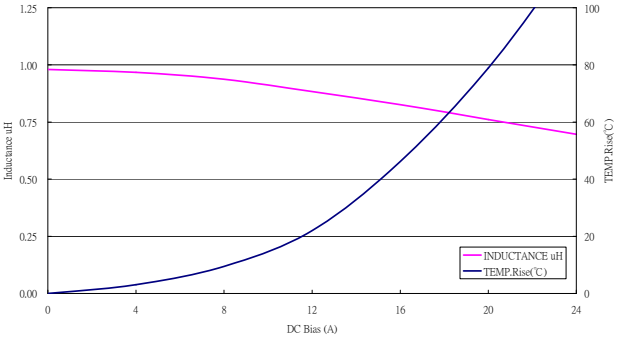
SM2518-R68MHF



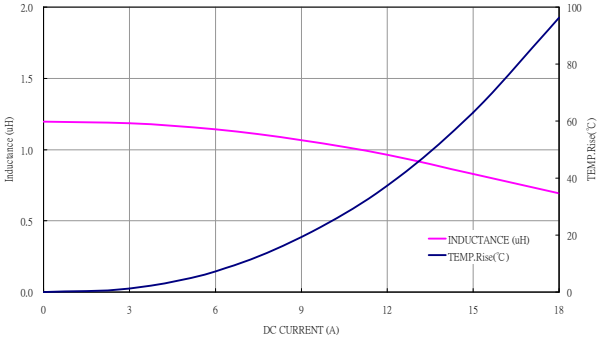
SM2518-R82MHF



SM2518-1R0MHF



SM2518-1R2MHF



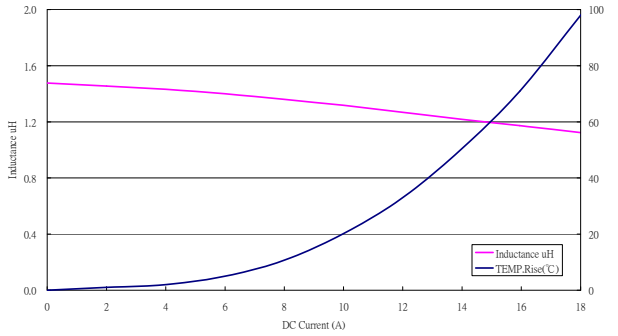
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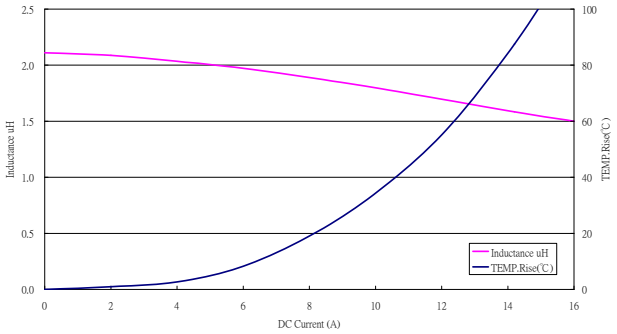
SM2518 Series

4. Inductance vs. Temperature Rise Characteristics of SM2518 Series (Continued)

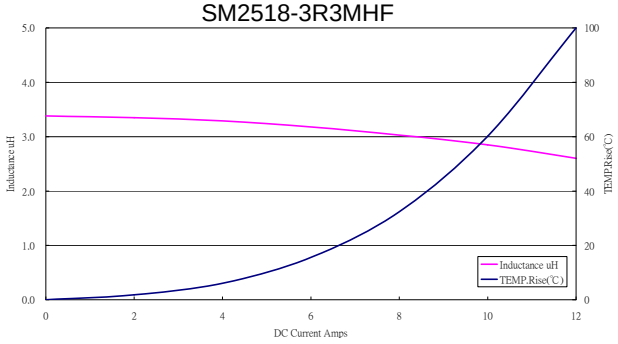
SM2518-1R5MHF



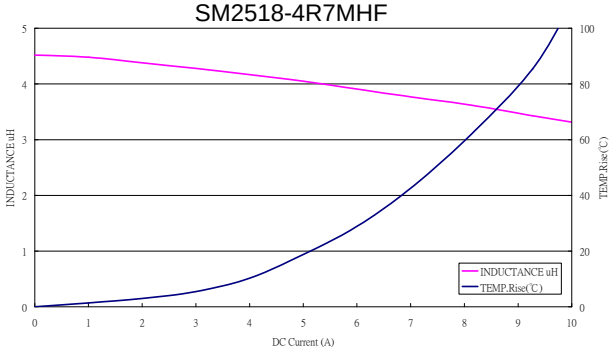
SM2518-2R2MHF



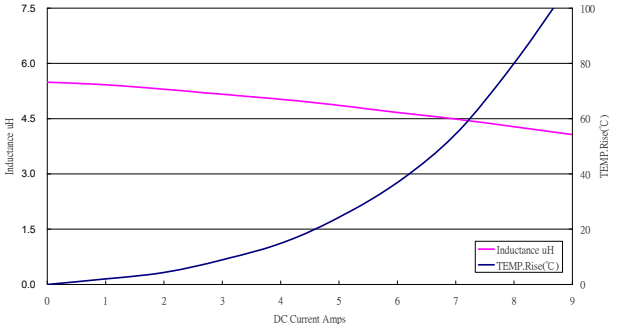
SM2518-3R3MHF



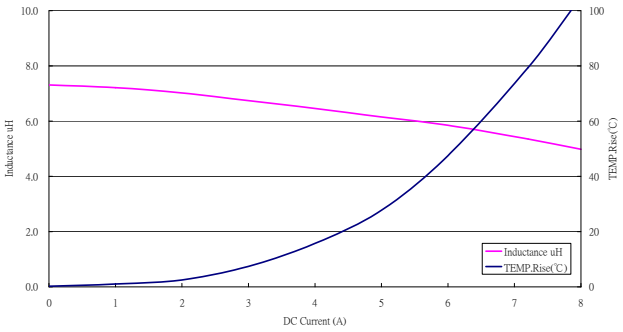
SM2518-4R7MHF



SM2518-5R6MHF



SM2518-6R8MHF

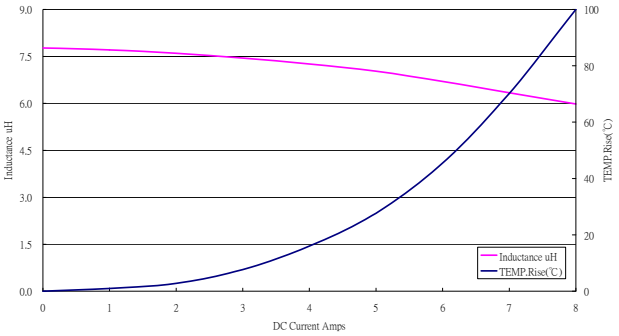


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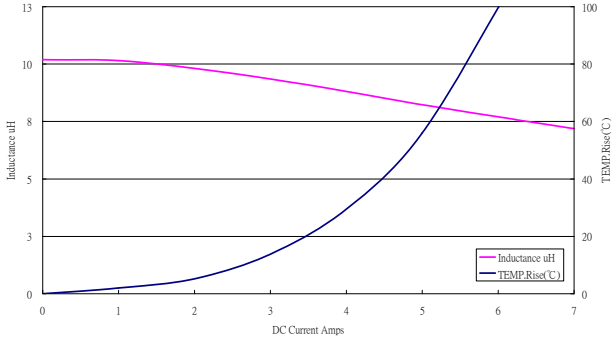
SM2518 Series

4. Inductance vs. Temperature Rise Characteristics of SM2518 Series (Continued)

SM2518-8R2MHF



SM2518-100MHF



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