

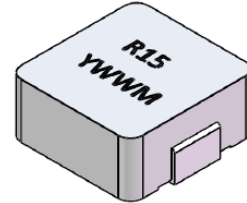


SM2506A Series



1. Features of SM2506A series:

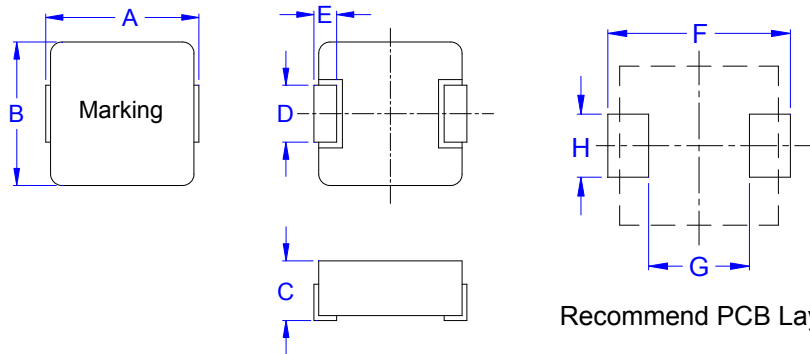
- 7.30x6.80mm foot Print, 1.50mm Max. height SMD Power Inductor for high frequency application. Operating frequency up to 5MHz.
- Inductance range from 45.0nH to 220.0nH. Custom values are welcomed.
- High saturation current characteristics by distributed gapped metal dust core.
- Ideal for portable device, Pad, E-reader and high density DC to DC Converter
- Tape & Reel Quantity: 1500 piece per 13 inches reel. RoHS and HF compliant.



2. Electrical Characteristics of SM2506A series:

ITG Part Number	Inductance (nH) ± 20%	Test Condition @25°C	DCR (mΩ) Typ. @25°C	DCR (mΩ) Max. @25°C	Heat Rating Current 1 I _{rms} (A) Typ.	Saturation Current ² Isat1 (A) Typ.	Saturation Current ³ Isat2 (A) Typ.
SM2506A-R045MHF	45.00	3MHz/0.25V	1.00	1.30	32.00	36.00	45.00
SM2506A-R065MHF	65.00	1MHz/0.25V	1.45	1.90	26.00	29.00	36.00
SM2506A-R10MHF	100.00	1MHz/0.25V	2.30	2.90	22.00	25.00	32.00
SM2506A-R15MHF	150.00	1MHz/0.25V	3.25	3.90	19.00	23.00	30.00
SM2506A-R22MHF	220.00	1MHz/0.25V	4.50	5.40	16.00	20.00	27.00

3. Mechanical Dimensions of SM2506A series (unit: mm):



Pad Dimension	SM2506A
F	8.40 Typ.
G	3.70 Typ.
H	3.50 Typ.

Type	A	B	C	D	E
SM2506A	7.00 ± 0.30	6.60 ± 0.20	1.30 ± 0.20	3.00 ± 0.30	1.60 ± 0.30

Notes:

1. I_{rms}: DC current that will cause an approximate ΔT of 40°C (T_a=25°C).
2. Isat1: DC current that causes inductance to drop 30% (Typ.) from OCL (T_a=25°C).
3. Isat2: DC current that causes inductance to drop 40% (Typ.) from OCL (T_a=25°C).
4. Operating Temperature Range: -55°C to 125°C .

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
● 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 A: August 29 , 2016

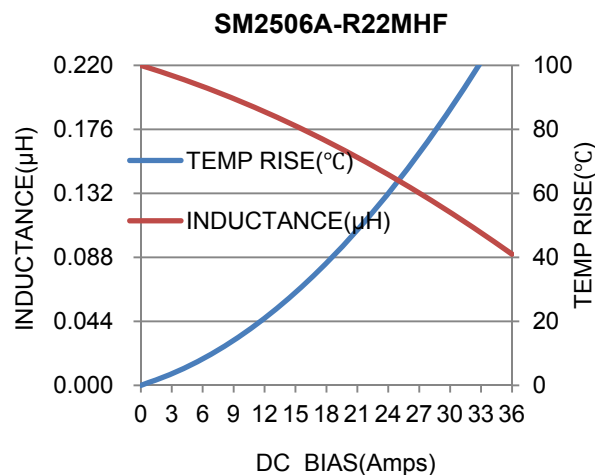
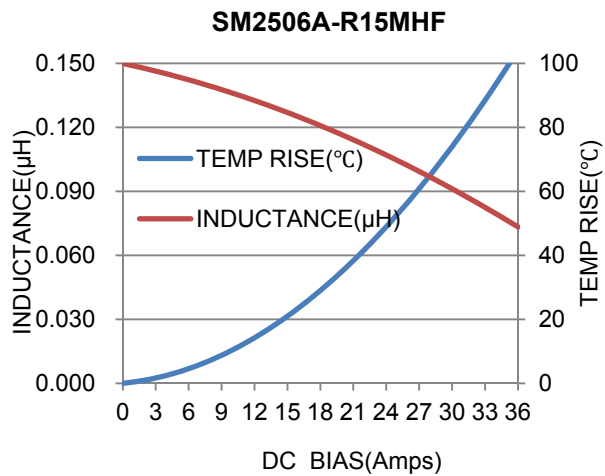
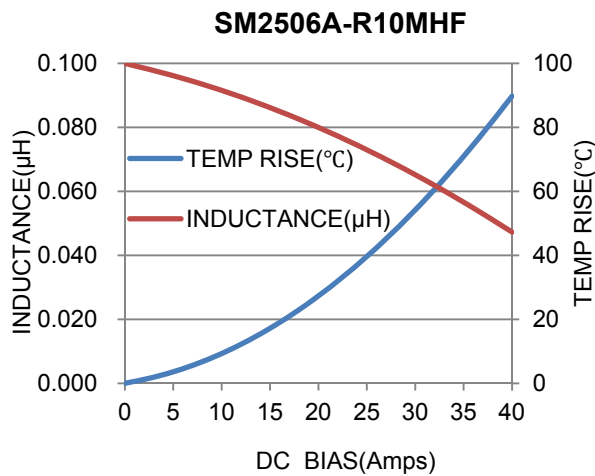
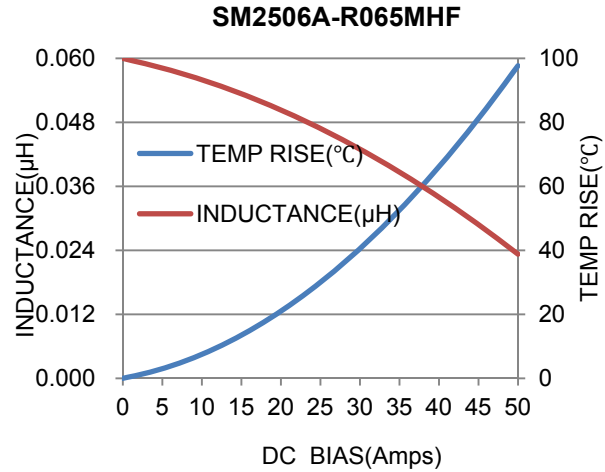
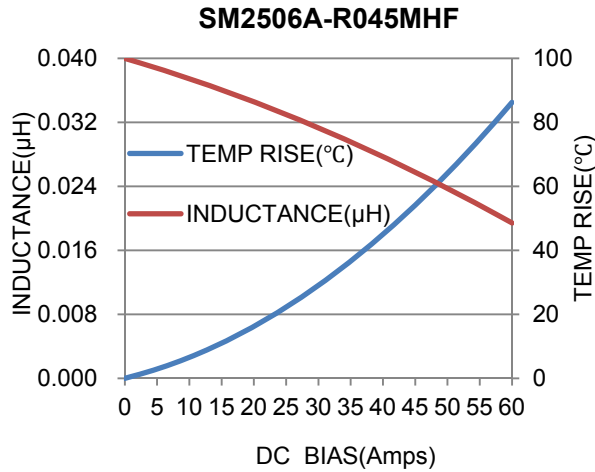
**Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.*



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4. Inductance vs. Current vs. Temperature Rise Characteristics of SM2506A Series:



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