

New Product

SURFACE MOUNT SHIELDED POWER INDUCTOR SERIES STS1305

FEATURES

- RoHS Compliant
- High current handling capacity
- Low profile
- Low noise, due to composite construction
- High frequency up to 5MHz

ELECTRICAL SPECIFICATIONS

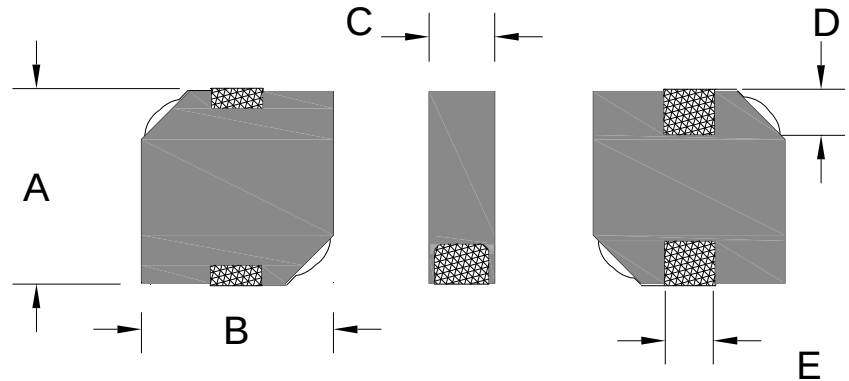
- Inductance range 0.47uH to 10.0uH
- Test condition 1Vrms @ 100kHz
- Test equipment Quadtech 1750 LCR Meter

PHYSICAL SPECIFICATIONS

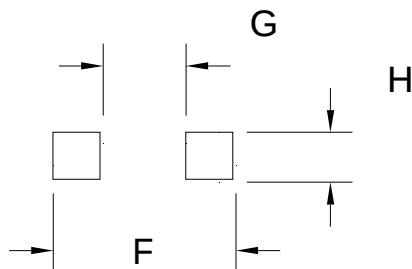
- Operating temp. -55°C to +125°C
- Core Mixed material
- Packaging T & R 500 pieces per reel
- Tape & reel spec. Tape 24 mm embossed carrier
- Reel 330 mm paper reel

Dimensions in millimeters

- Length A 13.9 max
- Width B 13.5 max
- Height C 5.2 max
- Terminal length D 2.5 ± 0.5
- Terminal width E 3.0 ± 0.5
- Footprint length F 15 ref
- Pad spacing G 7 ref
- Pad width H 4.5 ref



Suggested PCB layout



Notes:

1. Based on ΔT approximately 40°C
2. L drops 20% typical

All test data based on 25°C ambient

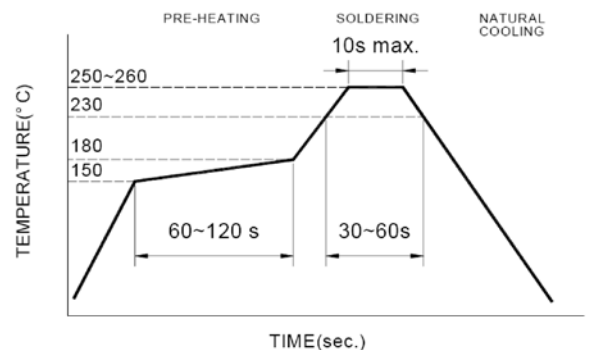
Part temperature (ambient + temp rise) must not exceed 125°C under worst case operating conditions.

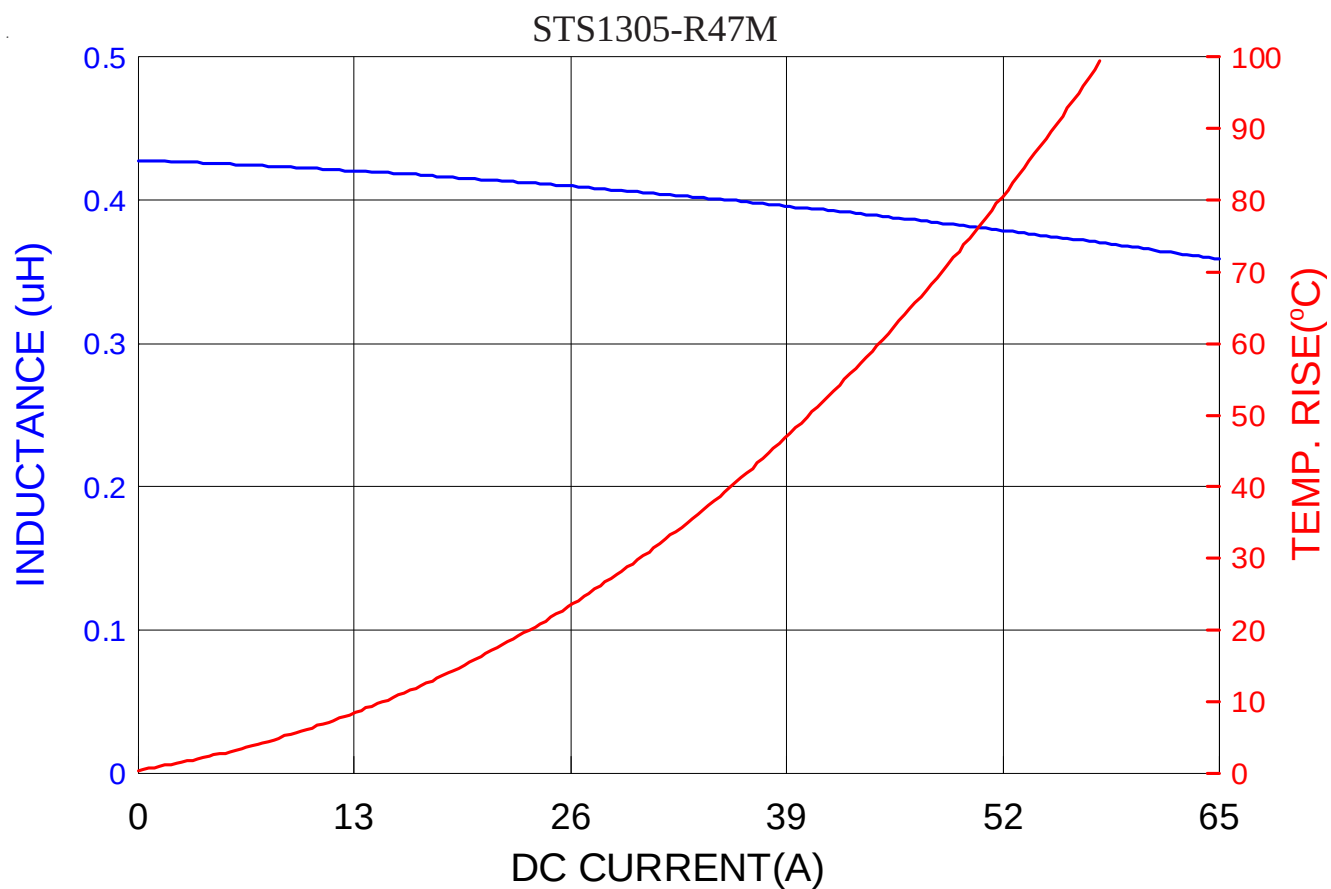
Circuit design, components, PCB trace size, airflow and other cooling provisions all effect the part temperature.

SPECIFICATIONS

Part Number	L(uH)	Tol % ±	DCR (ohms) max	Rated Current (A) (Note 1)	Saturation Current (A) (Note 2)
STS1305-R47M	0.47	20	0.0013	38	45
STS1305-R68M	0.68	20	0.0017	34	39
STS1305-1R0M	1.0	20	0.0025	29	35
STS1305-1R5M	1.5	20	0.0041	23	29
STS1305-2R2M	2.2	20	0.0055	20	27
STS1305-3R3M	3.3	20	0.0092	15	19
STS1305-4R7M	4.7	20	0.0150	12	11
STS1305-6R8M	6.8	20	0.0185	11	11
STS1305-100M	10	20	0.0255	9	12

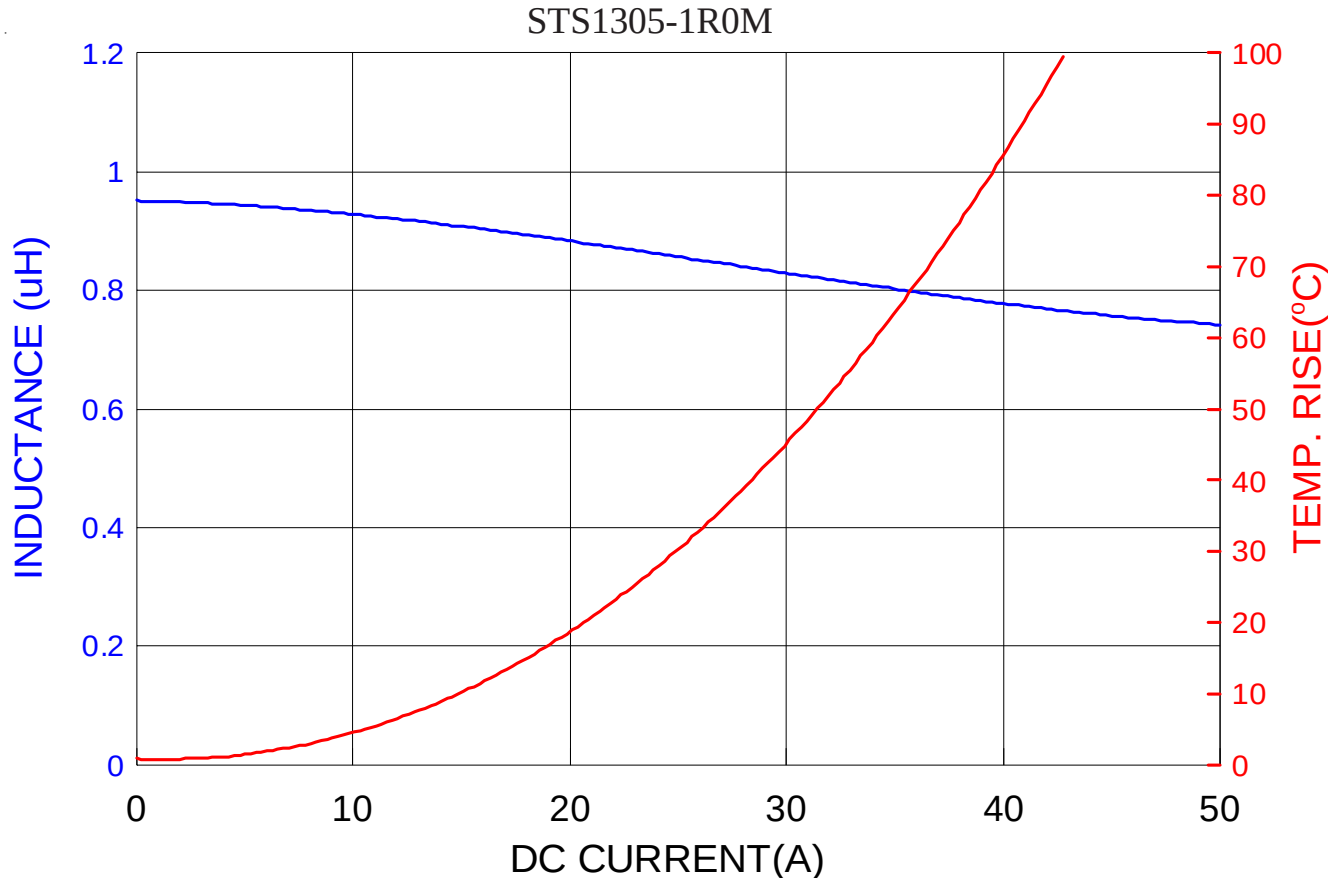
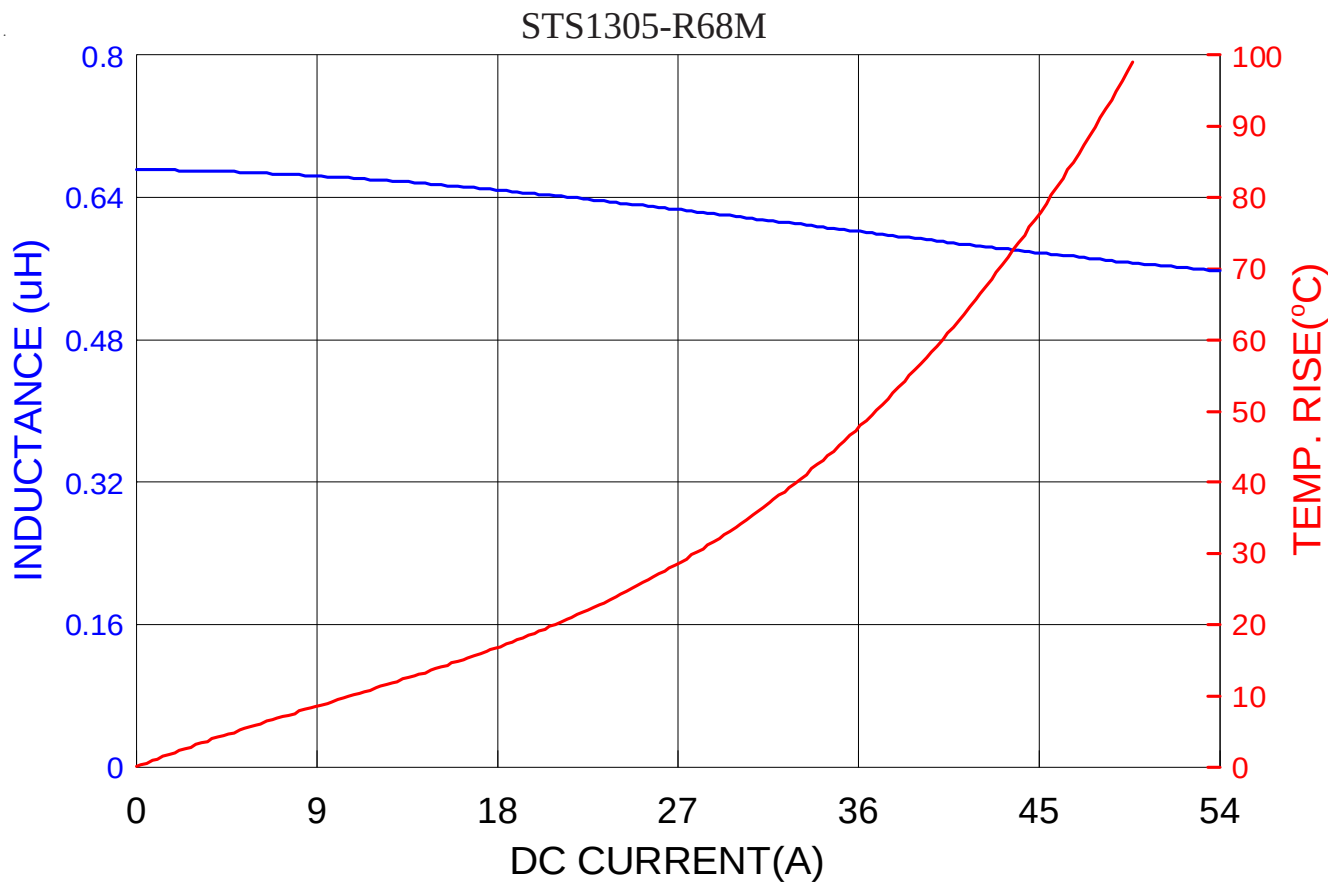
Suggested Reflow Profile





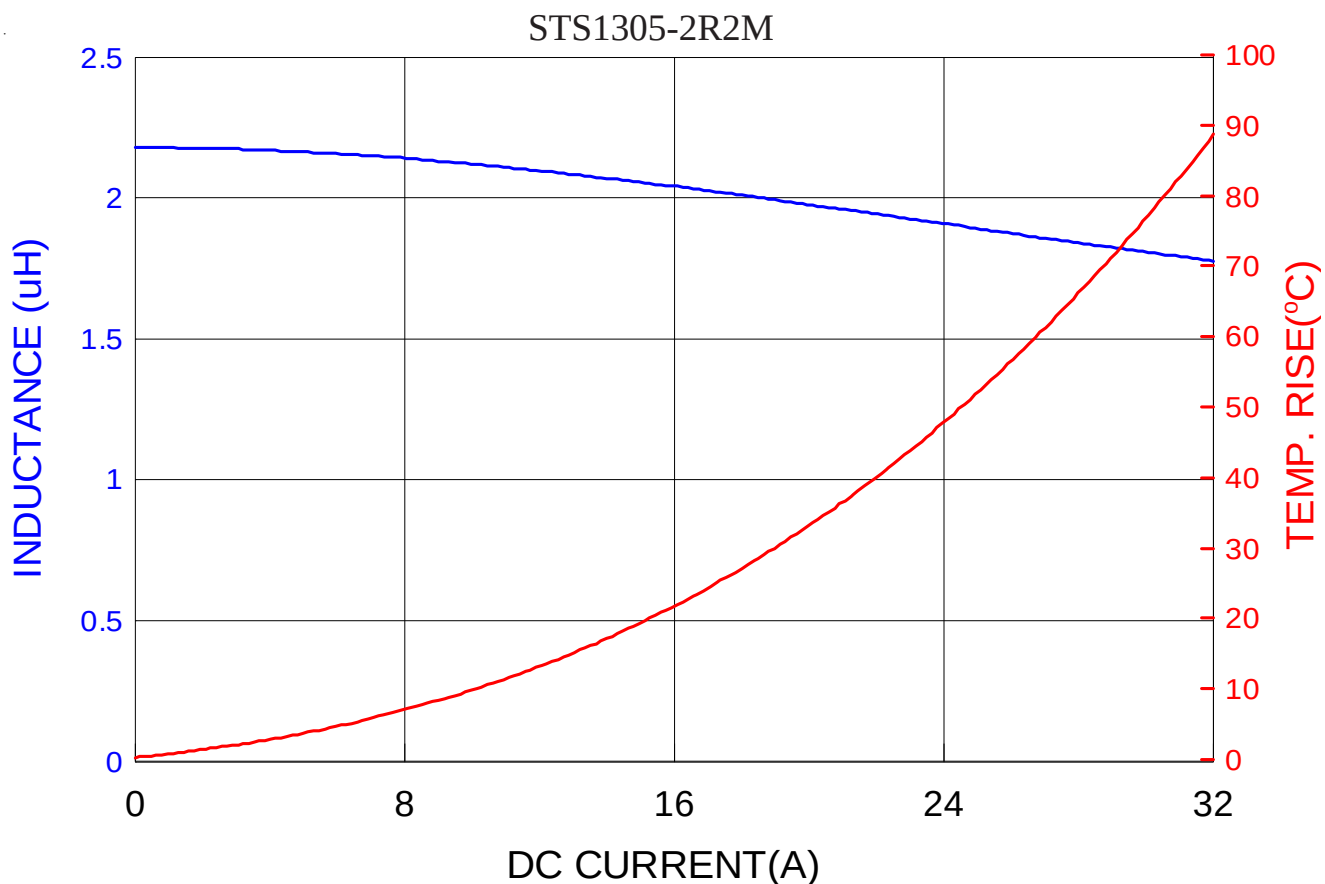
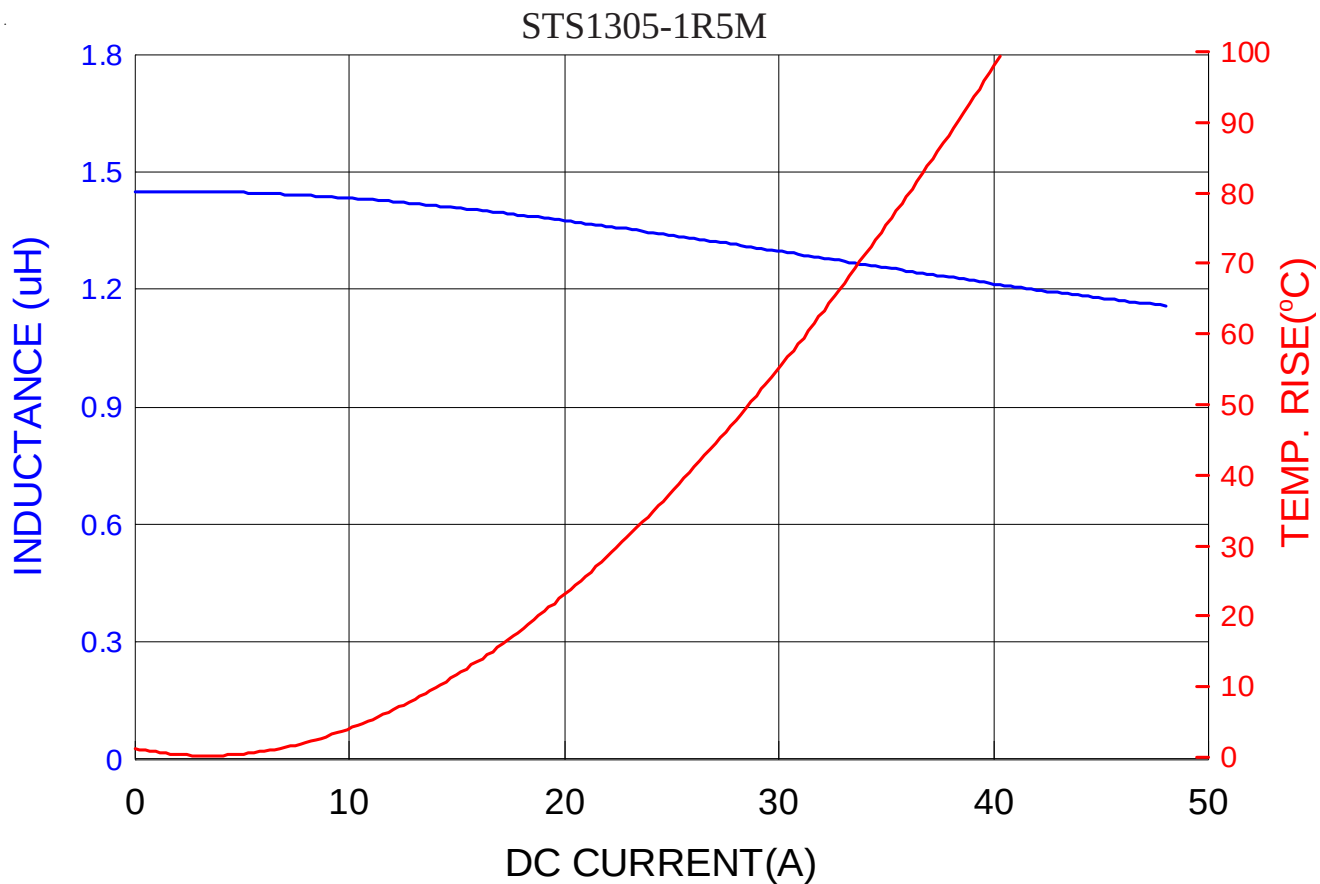
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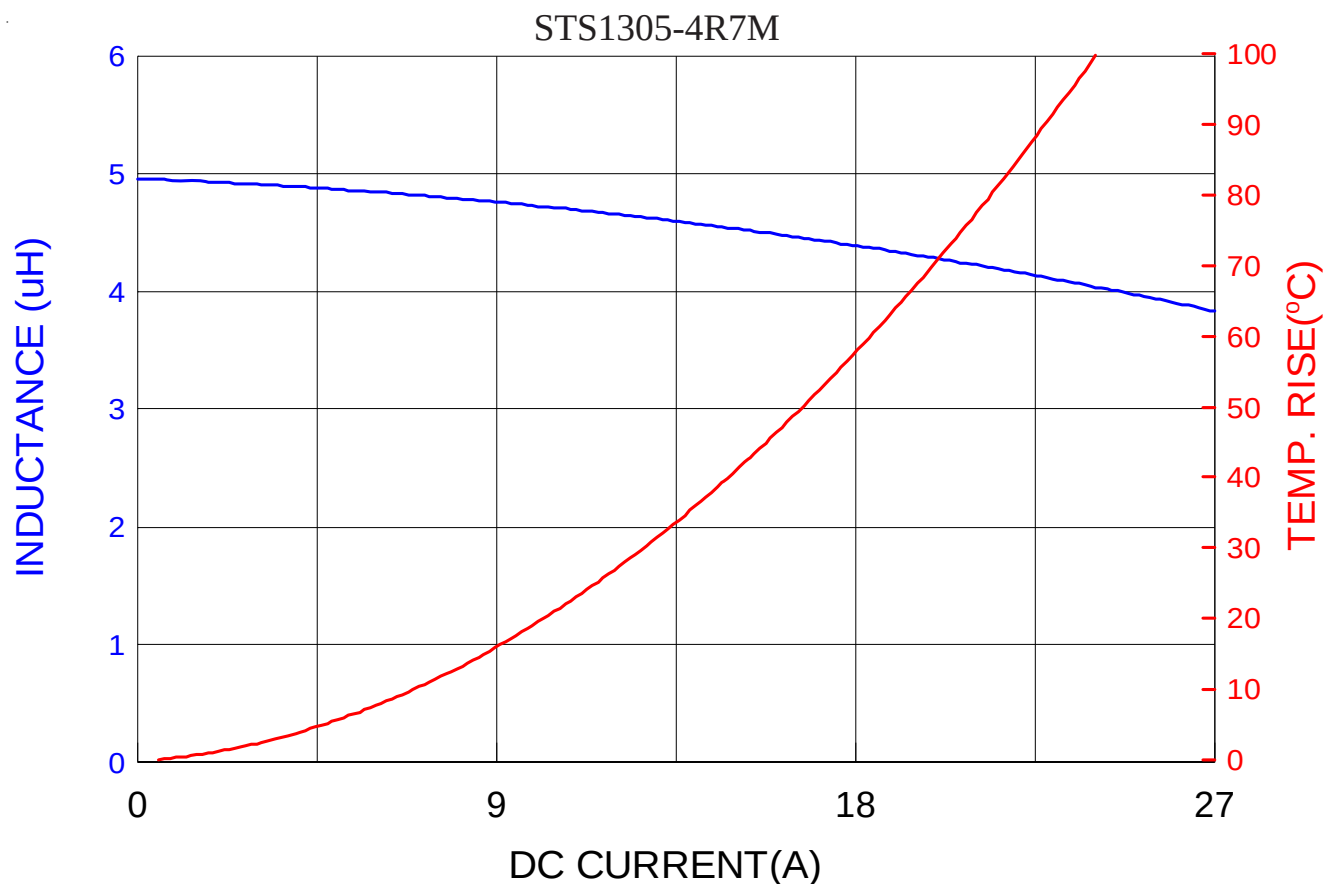
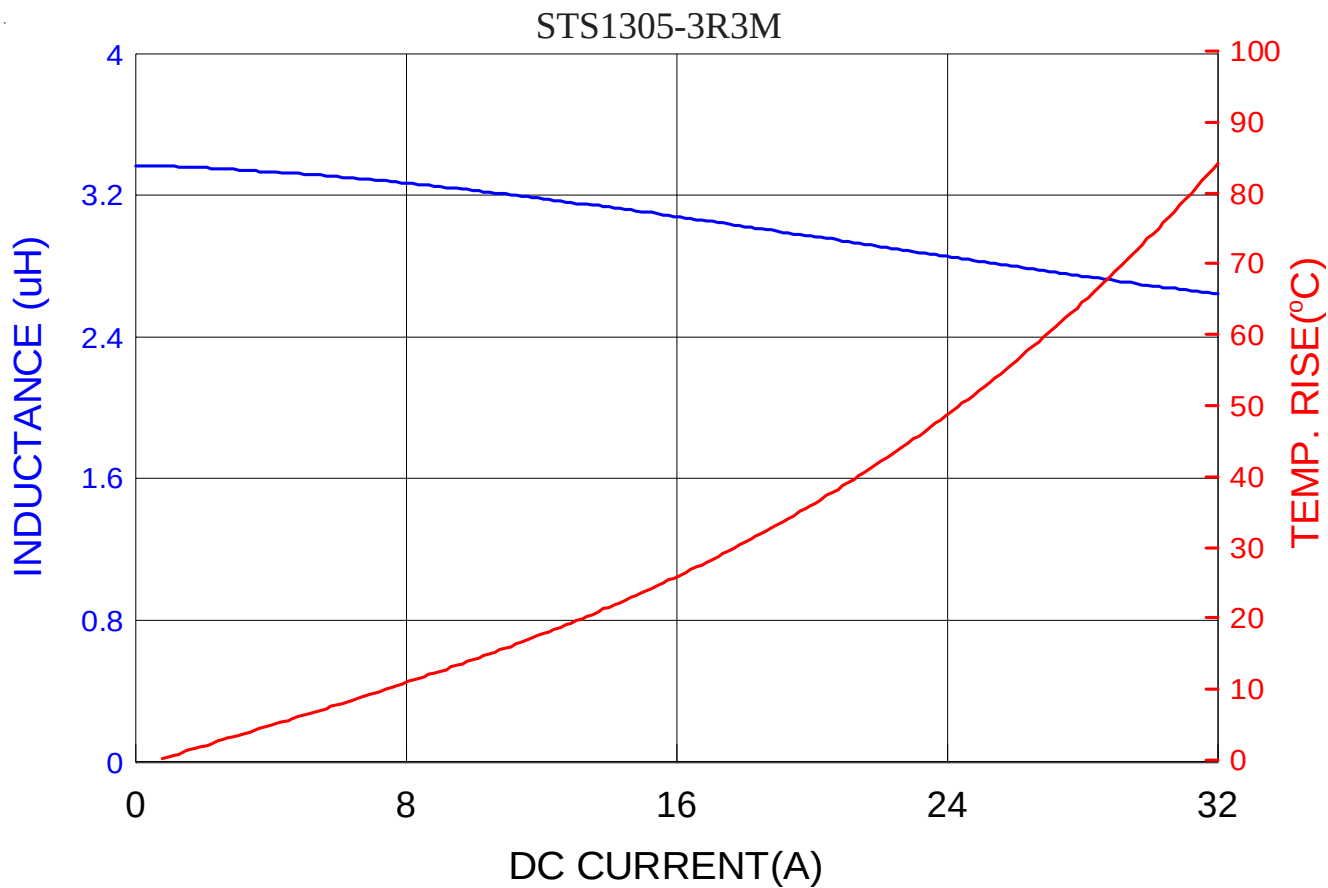
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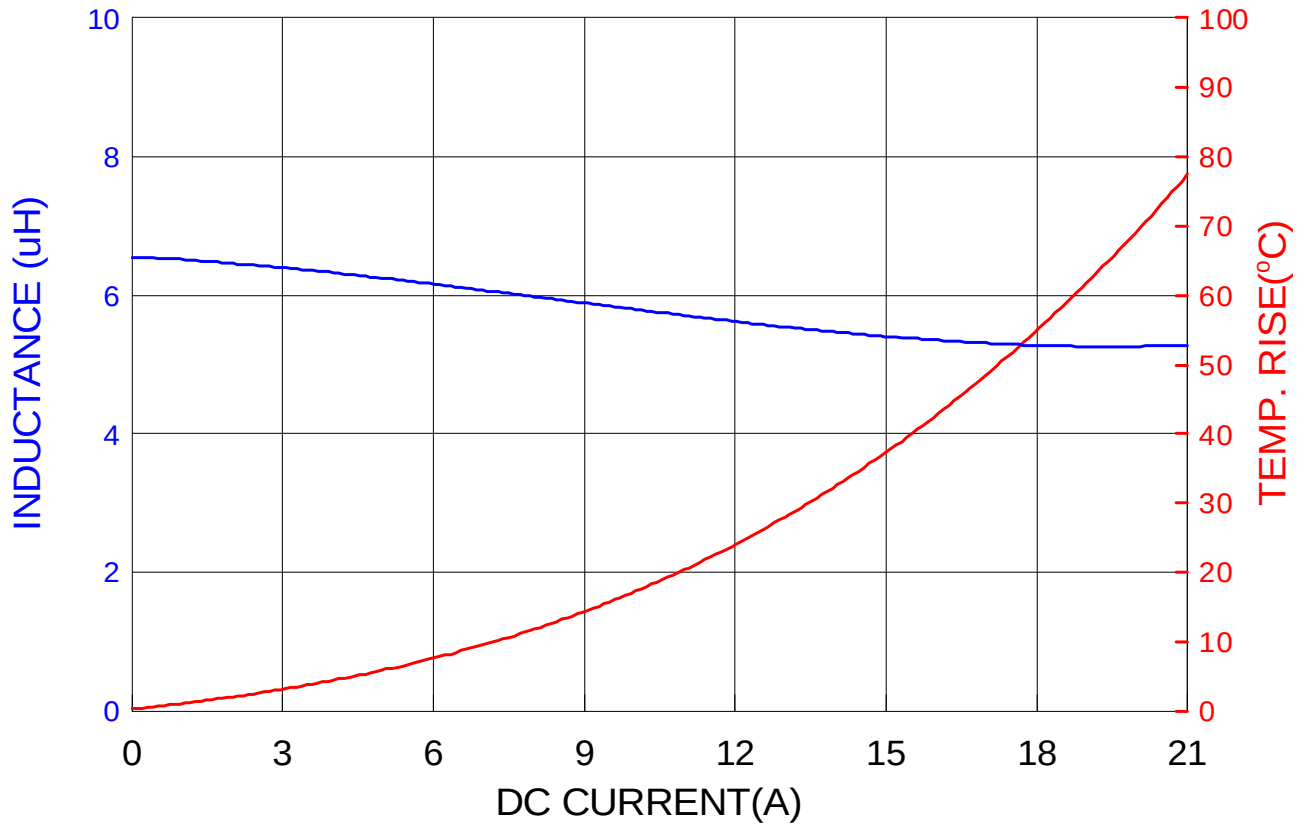
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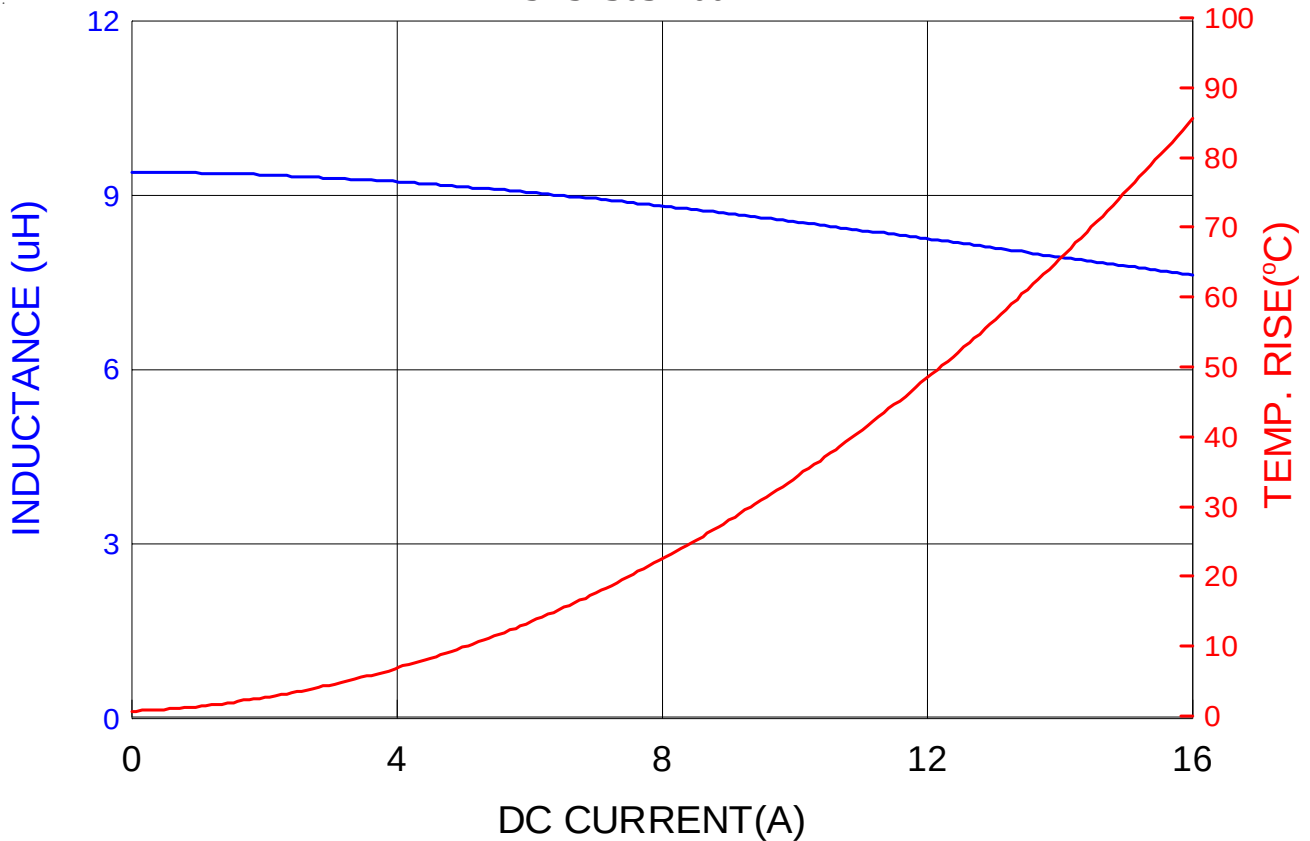
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STS1305-6R8M



STS1305-100M



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