New Product

SURFACE MOUNT SHIELDED POWER INDUCTOR SERIES STS705

FEATURES

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

ELECTRICAL SPECIFICATIONS

| - Inductance range | 0.68uH to 6.8uH |
|--------------------|-------------------------|
| - Test condition | 100kHz @ 1Vrms |
| -Testequipment | Quadtech 1750 LCR Meter |

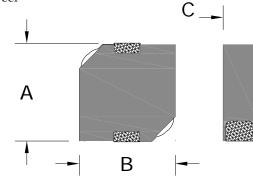
PHYSICAL SPECIFICATIONS

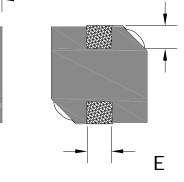
| -Operating temp. | -55°C to +125°C |
|------------------|-----------------|
| - Shielding | Mixed Material |

- -Shielding
- Core & base Mixed Material
- Packaging T & R 800 pieces per reel
- Tape & reel spec.
 - Tape 16 mm embossed carrier
 - Reel 330 mm paper reel

Dimensions in millimeters

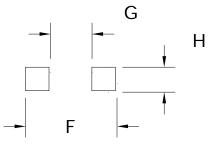
| Length A | 7.8 max |
|--------------------|---------------|
| Width B | 7.0 max |
| Height C | 5.2 max |
| Terminal length D | 1.6 ± 0.5 |
| Terminal width E | 2.1 ± 0.5 |
| Footprint length F | 8.7 ref |
| Pad spacing G | 3.7 ref |
| Pad width H | 3.5 ref |





D

Suggested PCB layout



Notes:

1. Based on ΔT approximately 40°C

2. L drops 20% typical

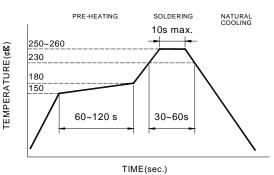
All test data based on 25°C ambient

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.

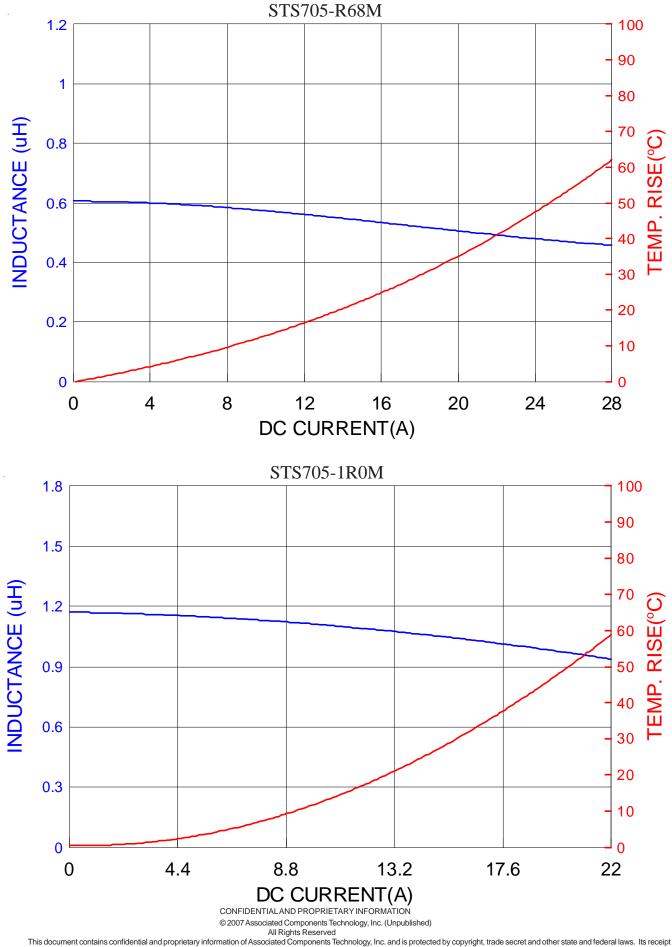
SPECIFICATIONS

| | | Tol | DCR | Rated | Saturation |
|-------------|-------|------------|--------|-------------|-------------|
| Part Number | L(uH) | % <u>+</u> | (ohms) | Current (A) | Current (A) |
| | | | max | (Note 1) | (Note 2) |
| STS705-R68M | 0.68 | 20 | 0.0038 | 18 | 25 |
| STS705-1R0M | 1.0 | 20 | 0.0042 | 15 | 20 |
| STS705-2R2M | 2.2 | 20 | 0.0082 | 13 | 14 |
| STS705-3R3M | 3.3 | 20 | 0.0152 | 10 | 12 |
| STS705-4R7M | 4.7 | 20 | 0.0186 | 7 | 8 |
| STS705-6R8M | 6.8 | 20 | 0.0300 | 6 | 6 |

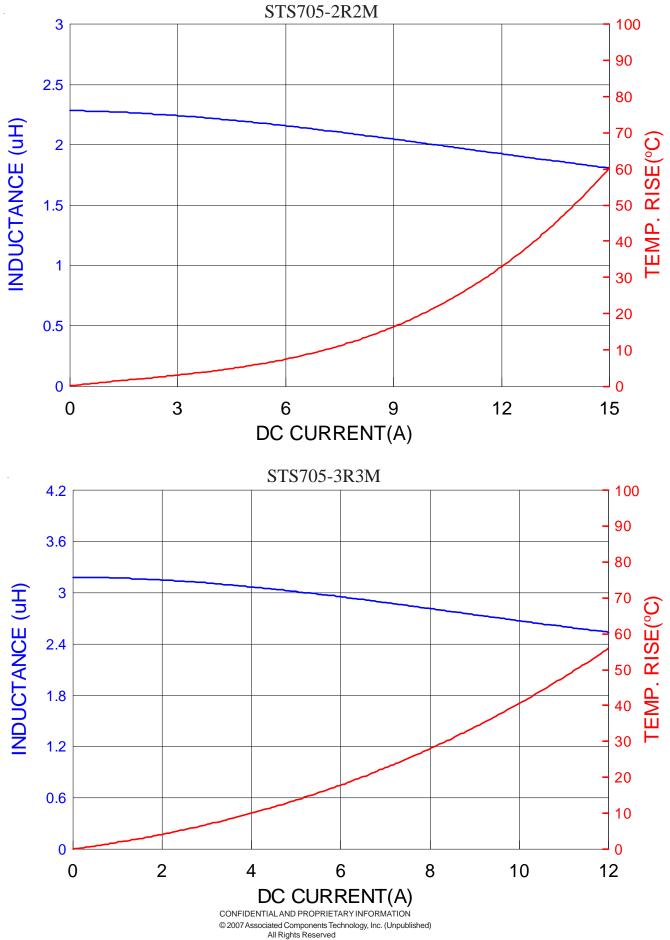
Suggested Reflow Profile



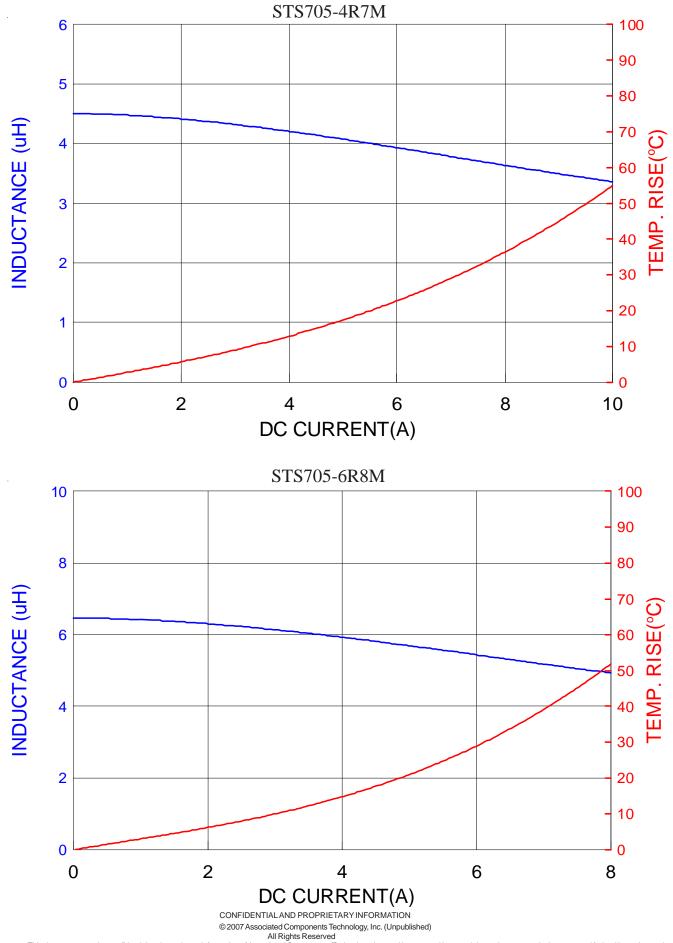
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