**New Product** 

### SURFACE MOUNT SHIELDED POWER INDUCTOR SERIES STS1465

#### **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 10uH
- Test conditions	0.25Vrms @ 100kHz
-Test equipment	Quadtech 1750 LCR Meter

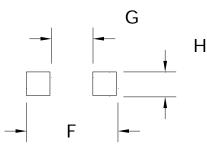
## **PHYSICAL SPECIFICATIONS**

-Operating temp.	-55°C to	o +125°C		
- Shielding	Mixed Material			
- Core & base	Mixed Material			
- Packaging	T & R	400 pieces per reel		
- Tape & reel spec.	Tape	16 mm embossed carrier		
	Reel	330 mm paper reel		

## **Dimensions in millimeters**

Length A	13.7 max
Width B	13.7 max
Height C	7.0 max
Terminal length D	$2.5 \pm 0.5$
Terminal width E	$3.0 \pm 0.5$
Footprint length F	15 ref
Pad spacing G	7 ref
Pad width H	4.5 ref

# Suggested PCB layout



#### Notes:

1. Based on  $\Delta T$  approximately 40°C

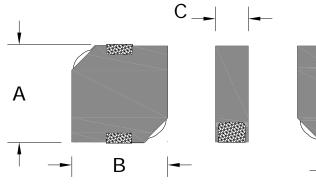
2. L drops 30% typical

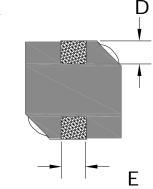
All test data based on 25°C ambient

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.

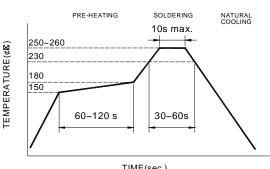
#### **SPECIFICATIONS**

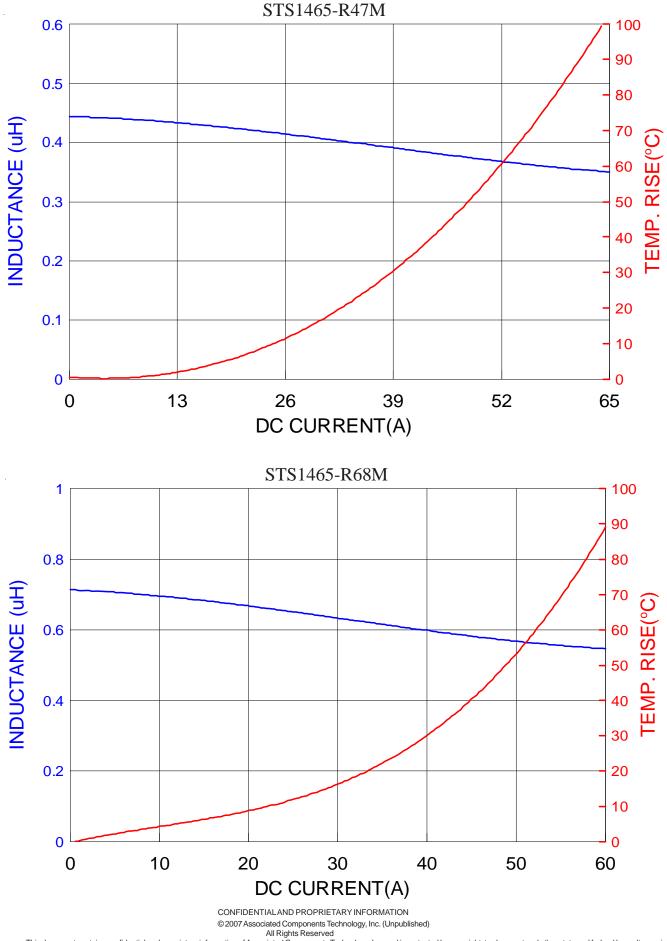
		Tol	DCR	Rated	Saturation
Part Number	L(uH)	% <u>+</u>	(ohms)	Current (A)	Current (A)
			max	(Note 1)	(Note 2)
STS1465-R47M	0.47	20	0.0012	41	65
STS1465-R68M	0.68	20	0.0016	35	60
STS1465-1R0M	1.0	20	0.0021	32	50
STS1465-1R5M	1.5	20	0.0026	27	48
STS1465-2R2M	2.2	20	0.0042	22	40
STS1465-3R3M	3.3	20	0.0068	18	35
STS1465-4R7M	4.7	20	0.0112	15	30
STS1465-6R8M	6.8	20	0.0140	12	21
STS1465-100M	10	20	0.0168	10	16



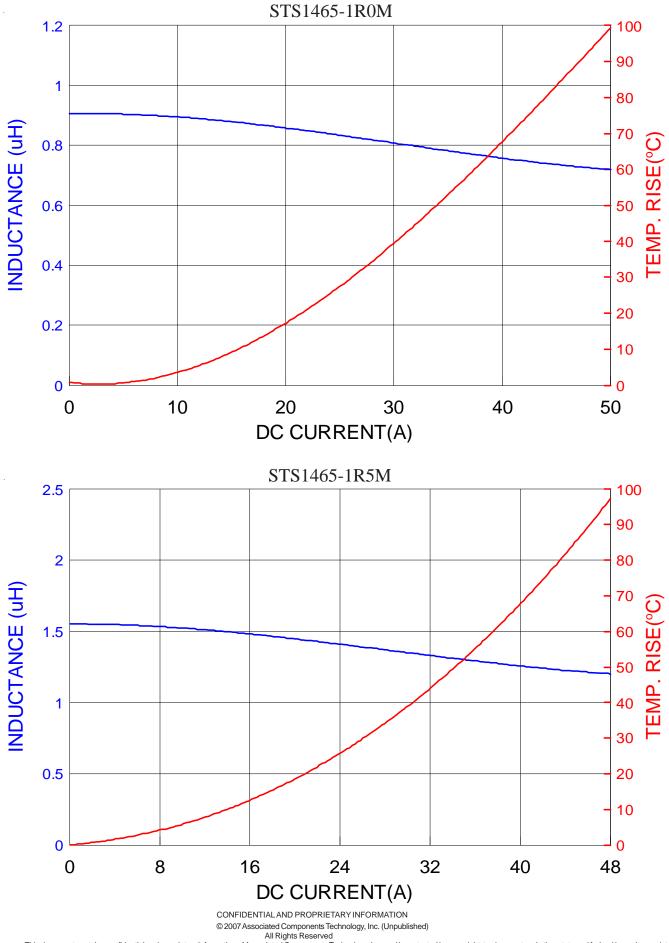


# **Suggested Reflow Profile**

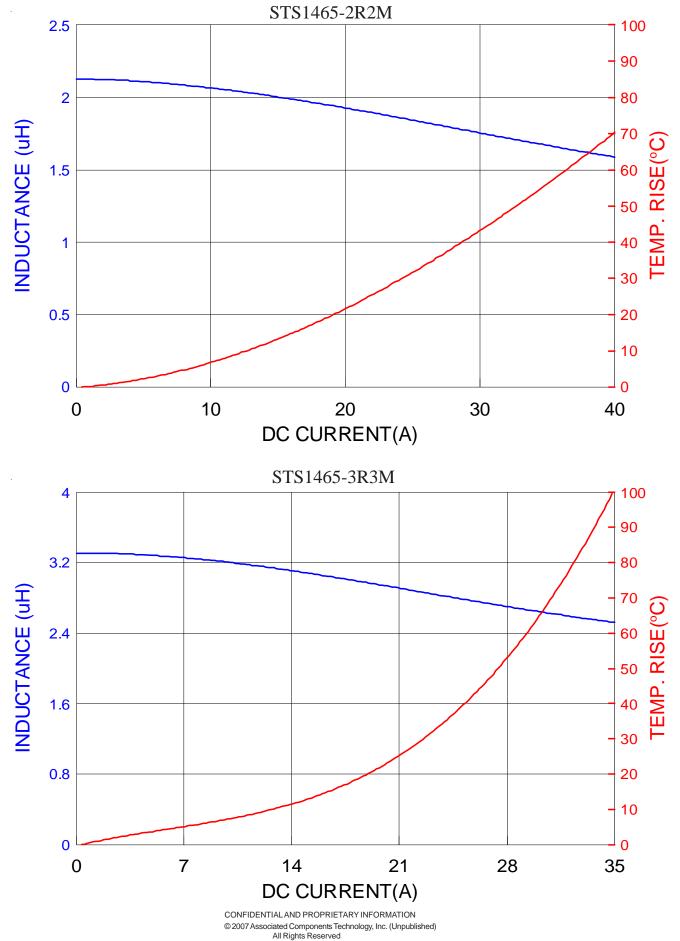




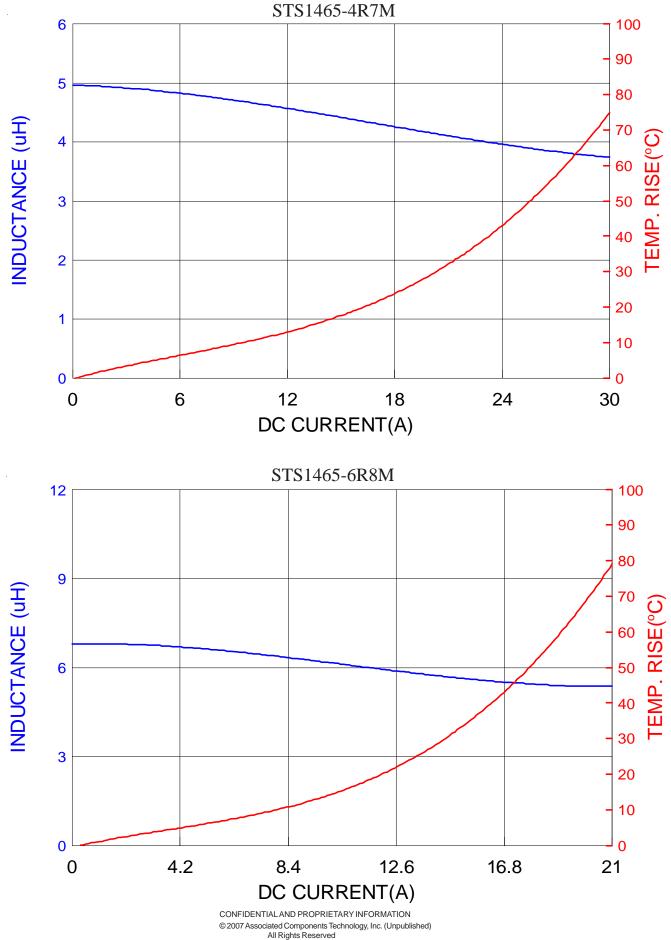
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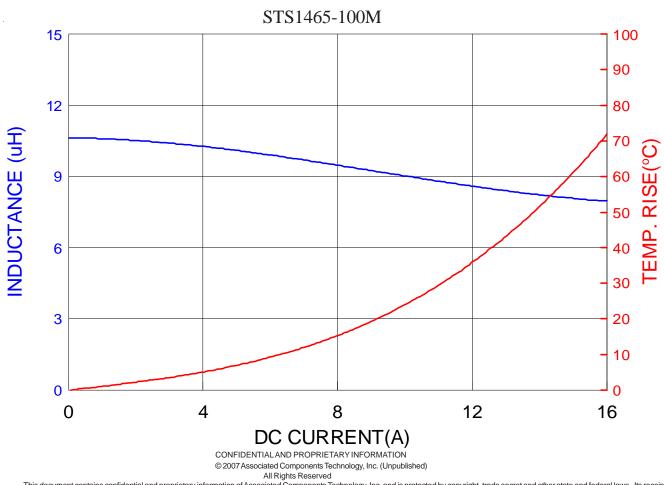
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