

High Current Power Inductors TL0906SG

FEATURES:

- Package size (9.6x6.45x8.0 mm)
- Operating temperature range - 40°C to + 125°C
- Storage temperature - 40°C to +125°C
- RSH 260 °C
- Frequency range up to 2.0 MHz
- Solder reflow per J-STD-202D

APPLICATIONS:

- PDA/notebook/desktop/server applications
- High current POL converters
- Low profile, high current power supplies
- Battery powered devices
- DC/DC converters in distributed power system
- DC/DC converter for Field Programmable Gate Array(FPGA)



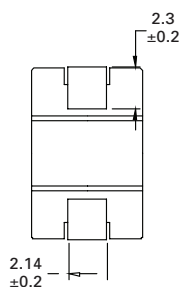
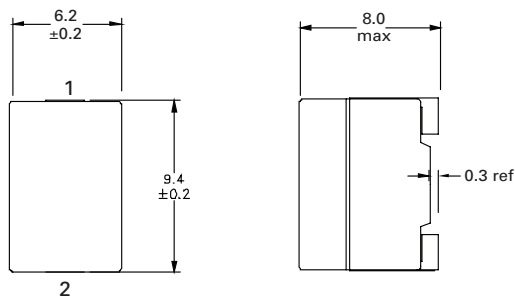
Specifications(25 °C):

Part Number ¹	Inductance ² (nH) ±10%	Inductance ³ (nH) ±10%	Isat	Rated Current (A) ⁴	Isat @25 °C (A) ⁵	Isat @125 °C (A) ⁶	DCR (mΩ)
TL0906SG-R10K	100	72		51	94	81	0.29
TL0906SG-R12K	120	80		51	79	68	0.29
TL0906SG-R15K	150	108		51	65	55	0.29
TL0906SG-R18K	180	129		51	55	45	0.29
TL0906SG-R22K	220	155		51	44	37.5	0.29
TL0906SG-R28K	280	200		51	34	29	0.29
TL0906SG-R30K	300	218		51	32.5	27.5	0.29

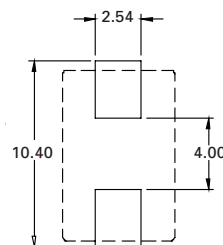
Notes

1. TL0906SG-R15KD
TL- Inductor code, 0906 - Series code, SG- SMD Green, R15 - 150 nH, K- Tolerance = ±10%, D- 13" reel
 2. Inductance measured at 100kHz 0(A) at 25 °C
 3. Inductance measured at 100kHz at Isat current at 25 °C
 4. DC current (A) that will cause an approximate ΔT of 40 °C
 5. Peak current (A) that will cause L_0 to drop approximately 20% at 25 °C
 6. Peak current (A) that will cause L_0 to drop approximately 20% at 125 °C
- The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature, which should be verified in the application

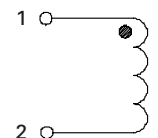
DIMENSIONS: mm



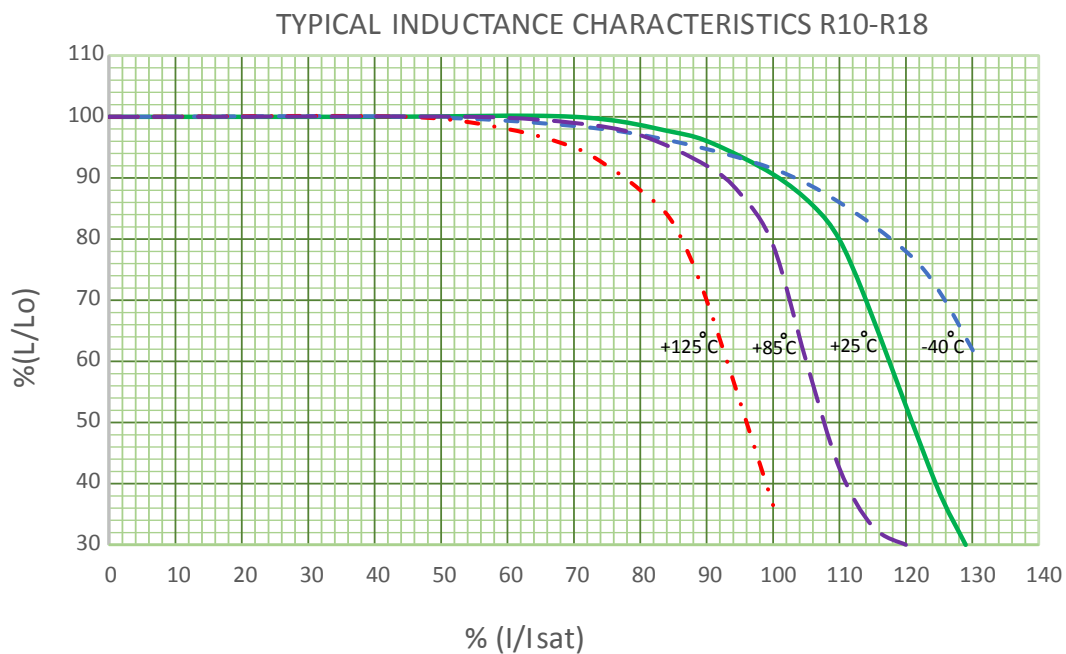
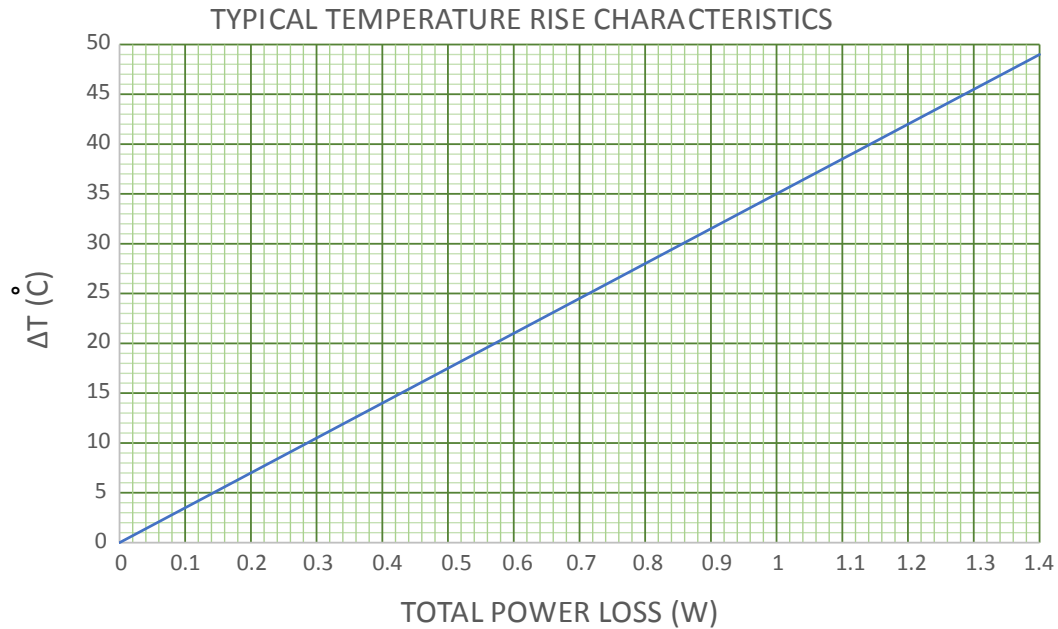
Recommended pad layout



Schematic



Low Profile High Current Shielded Inductors TL0906SG



Low Profile High Current Shielded Inductors TL0906SG

