

CTIHLP2818AF Series

From 0.47 μH to 22 μH



CHARACTERISTICS

Description: SMD (shielded) Power Inductor.

Applications: Notebook, Desktop, Server applications, Low profile, high current power supplies, battery powered devices, DC/DC converter for Field Programmable Gate Array (FPGA).

Operating Temperature: -40°C to +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. Part temperature should be verified in the end application)

Inductance Tolerance: $\pm 20\%$

Testing: Inductance is tested on an HP4285A at 100KHz, 1.0V

Packaging: Tape & Reel.

Marking: Parts are marked with inductance code.

Miscellaneous: **RoHS Compliant.**

Additional Information: Additional electrical & physical information available upon request.

Samples available. See website for ordering information.

SPECIFICATIONS

Parts are available in $\pm 20\%$ inductance tolerance only.

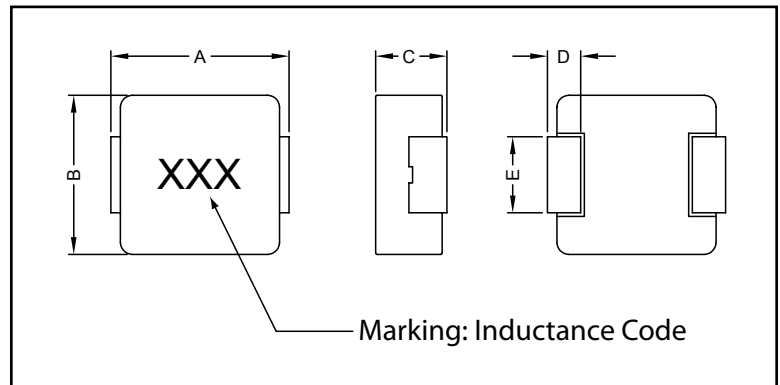
*I_{rms}: Will cause the coil temp. rise approximately ΔT of 40°C. (Keep 1 Min)

**I_{sat}: Will cause L₀ to drop 20% typical. (Keep quickly)

| Part Number | Inductance (μH) | *I _{rms} (A) Typ. | **I _{sat} (A) Typ. | DCR (m Ω) Typ. | DCR (m Ω) Max. |
|-------------------|------------------------------|----------------------------|-----------------------------|------------------------|------------------------|
| CTIHLP2818AF-R47M | 0.47 | 22 | 30 | 3.5 | 3.9 |
| CTIHLP2818AF-R56M | 0.56 | 20 | 27 | 3.6 | 4.2 |
| CTIHLP2818AF-R60M | 0.60 | 19 | 25 | 3.8 | 4.3 |
| CTIHLP2818AF-R68M | 0.68 | 18 | 24 | 4.0 | 4.5 |
| CTIHLP2818AF-R82M | 0.82 | 16.5 | 22 | 4.6 | 4.9 |
| CTIHLP2818AF-1R0M | 1.00 | 15 | 20 | 6.1 | 6.5 |
| CTIHLP2818AF-1R2M | 1.20 | 14 | 18 | 6.7 | 7.5 |
| CTIHLP2818AF-1R5M | 1.50 | 12 | 16.5 | 8.6 | 9.0 |
| CTIHLP2818AF-2R2M | 2.20 | 10 | 14 | 11.2 | 12.0 |
| CTIHLP2818AF-3R3M | 3.30 | 8 | 12 | 19 | 20.9 |
| CTIHLP2818AF-4R7M | 4.70 | 6.5 | 10 | 28 | 30.8 |
| CTIHLP2818AF-5R6M | 5.60 | 6.0 | 9.0 | 43.5 | 49 |
| CTIHLP2818AF-6R8M | 6.80 | 5.5 | 8.5 | 46 | 51.5 |
| CTIHLP2818AF-8R2M | 8.20 | 5.0 | 8.0 | 56 | 63 |
| CTIHLP2818AF-100M | 10.0 | 4.0 | 7.5 | 60 | 69 |
| CTIHLP2818AF-220M | 22.0 | 2.5 | 5.5 | 140 | 170 |

PHYSICAL DIMENSIONS

| Size | A | B | C | D | E |
|--------|------------------|------------------|------------------|-------------------|------------------|
| mm | 7.3 \pm 0.3 | 6.6 \pm 0.3 | 4.8 \pm 0.2 | 1.8 \pm 0.3 | 3.0 \pm 0.3 |
| inches | 0.29 \pm 0.012 | 0.26 \pm 0.012 | 0.19 \pm 0.008 | 0.071 \pm 0.012 | 0.12 \pm 0.012 |



PAD LAYOUT

