## CTIHLP2707F Series From . $33 \mu \mathrm{H}$ to $\mathbf{4 . 7} \boldsymbol{\mu H}$



## 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: $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ (The part temperature (ambient + temp. rise) should not exceed $125^{\circ} \mathrm{C}$ 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 $200 \mathrm{KHz}, 0.25 \mathrm{~V}$
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 $\pm \mathbf{2 0 \%}$ inductance tolerance only.
*Irms DC current (A) that will cause an approximate $\Delta \mathrm{T}$ of $40^{\circ} \mathrm{C}$.
**Isat DC current (A) that will cause LO to drop approximately $20 \%$.

| Part <br> Number | Inductance <br> $(\boldsymbol{\mu H})$ | LTest <br> Freq. <br> $(\mathbf{K H z})$ | DCR <br> Max. <br> $(\mathbf{m} \Omega)$ | *Irms <br> Typ. <br> $(\mathbf{A})$ | **Isat <br> Typ. <br> $(\mathbf{A})$ |
| :---: | :---: | :---: | :---: | ---: | ---: |
| CTIHLP2707F-R33M | 0.33 | 200 | 7.0 | 12.0 | 18 |
| CTIHLP2707F-R68M | 0.68 | 200 | 13.9 | 9.0 | 15 |
| CTIHLP2707F-R82M | 0.82 | 200 | 15.9 | 8.0 | 14 |
| CTIHLP2707F-1R0M | 1.0 | 200 | 18.5 | 7.0 | 11.5 |
| CTIHLP2707F-1R5M | 1.5 | 200 | 34.0 | 6.0 | 10 |
| CTIHLP2707F-2R2M | 2.2 | 200 | 46.0 | 5.0 | 8.5 |
| CTIHLP2707F-3R3M | 3.3 | 200 | 60.1 | 3.25 | 6.0 |
| CTIHLP2707F-4R7M | 4.7 | 200 | 78.0 | 3.0 | 5.5 |

## PHYSICAL DIMENSIONS

| Size | A | B | C | D | E <br> Ref. | F <br> Ref. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| max. | 7.3 | 6.8 | 1.8 | $3.2 \pm 0.2$ | 4.2 | 1.3 |
| inches | 0.290 | 0.270 | 0.071 | $0.126 \pm 0.008$ | 0.165 | 0.051 |



## PAD LAYOUT

## Unit: mm



