# CTHSC1107F Series From 0.12µH to 0.40µH



## **CHARACTERISTICS**

**Description:** SMD power inductors

**Applications:** Voltage regulator modules (VRMs) for servers and microprocessors, High frequency switching power supplies, etc. **Features:** 

- Designed for high speed, high current switch mode applications requiring lower inductance.
- Gapped ferrite cores for maximum efficiency.
   Operating Temperature: -40°C to 125°C (including

self - temperature rise)
Inductance Tolerance: ±15%

OCL Testing: 100kHz, 0.25Vrms, 0Adc and Isat at 20°C Note: DC current for an approximate  $\Delta T$  of 40°C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, airflow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 155°C under worst case operating conditions verified in the end application.

Packaging: Tape & Reel.

Miscellaneous: RoHS Compliant.

Additional Information: Additional electrical & physical

information available upon request.

Samples available. See website for ordering information.

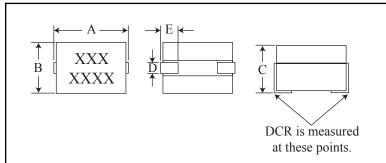
# **SPECIFICATIONS**

Parts are available in ±15% inductance tolerance only.

Part Number	Inductance (µH)	L Test Freq. (kHz)	DCR ±7% (mΩ)	Isat Max. (A)	Irms Max. (A)	
CTHSC1107F-R12L	0.12	100	0.37	60	37	
CTHSC1107F-R18L	0.18	100	0.37	50	37	
CTHSC1107F-R22L	0.22	100	0.37	40	37	
CTHSC1107F-R33L	0.33	100	0.37	28	37	
CTHSC1107F-R40L	0.40	100	0.37	21	37	
	Number CTHSC1107F-R12L CTHSC1107F-R18L CTHSC1107F-R22L CTHSC1107F-R33L	Number         (μH)           CTHSC1107F-R12L         0.12           CTHSC1107F-R18L         0.18           CTHSC1107F-R2L         0.22           CTHSC1107F-R3L         0.33	Part Number         Inductance (μΗ)         Freq. (kHz)           CTHSC1107F-R12L         0.12         100           CTHSC1107F-R18L         0.18         100           CTHSC1107F-R22L         0.22         100           CTHSC1107F-R33L         0.33         100	Part Number         Inductance (μH)         Freq. (kHz)         ±7% (mΩ)           CTHSC1107F-R12L         0.12         100         0.37           CTHSC1107F-R18L         0.18         100         0.37           CTHSC1107F-R22L         0.22         100         0.37           CTHSC1107F-R33L         0.33         100         0.37	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Part Number         Inductance (μH)         Freq. (kHz)         ±7% (mΩ)         Max. (A)           CTHSC1107F-R12L         0.12         100         0.37         60         37           CTHSC1107F-R18L         0.18         100         0.37         50         37           CTHSC1107F-R22L         0.22         100         0.37         40         37           CTHSC1107F-R33L         0.33         100         0.37         28         37

### PHYSICAL DIMENSIONS

Size	A	В	C	D	E
	Max.	Max.	Max.		
mm	11.0	7.5	7.0	1.6±0.2	2.6±0.3
inches	0.433	0.295	0.276	0.063±0.008	0.102±0.012



# **PAD LAYOUT**

