# CTHSC1008F Series From 0.15µH 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 Tolerances: ±10%, ±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.

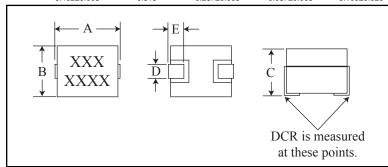
## **SPECIFICATIONS**

Part numbers indicate available inductance tolerance.

$K = \pm 10\%, L = \pm 15\%$									
Part Number	Inductance (µH)	L Test Freq. (kHz)	DCR ±6% (mΩ)	Isat Max. (A)	Irms Max. (A)				
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CTHSC1008F-R15K	0.15	100	0.29	76	56				
CTHSC1008F-R17K	0.17	100	0.29	66	56				
CTHSC1008F-R22K	0.22	100	0.29	50	56				
CTHSC1008F-R27K	0.27	100	0.29	40	56				
CTHSC1008F-R30K	0.30	100	0.29	35	56				
CTHSC1008F-R40L	0.40	100	0.29	25	56				

#### PHYSICAL DIMENSIONS

Size	A	В	C	D	E
		Max.			
mm	10.2±0.2	8.0	7.3±0.2	2.2±0.2	2.54±0.5
inches	0.402±0.008	0.315	0.287±0.008	0.087±0.008	0.100±0.020



## **PAD LAYOUT**

