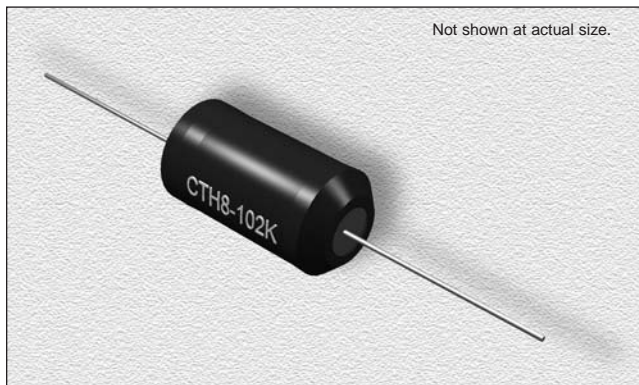


CTH8 Series

From 3.9 μH to 100,000 μH

ENGINEERING KIT #3



CHARACTERISTICS

- Description:** Axial leaded power line inductor (UL sleeved)
- Applications:** Used in switching regulators, power amplifiers, power supplies, SCR and Triac controls, speaker crossover networks, RFI suppression and filters. Various applications
- Operating Temperature:** -55°C to +100°C
- Inductance Tolerance:** $\pm 10\%$
- Testing:** Inductance is tested on an HP4284A at 1.0 kHz
- Packaging:** Bulk pack
- Marking:** Coils are sleeved in heat resistant polyolefin and labeled with the part number
- Saturation Current:** Lowers inductance by 5%
- Bobbin:** High saturation, allows for high inductance with low DC resistance
- Miscellaneous:** Higher current parts available
- Additional Information:** Additional electrical & physical information available upon request
- Samples available.** See website for ordering information.

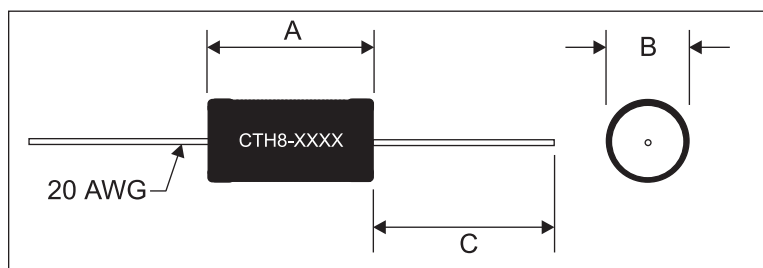
SPECIFICATIONS

Parts are marked to indicate tolerance available.
K = $\pm 10\%$, M = $\pm 20\%$

| Part Number | Inductance (μH) | L Test Freq. (kHz) | SRF Min. (MHz) | DCR Max. (Ω) | Saturation DC (A) | Rated AC (A) |
|-------------|------------------------------|--------------------|----------------|-----------------------|-------------------|--------------|
| CTH8-3R9K | 3.9 | 1.0 | 34 | .01 | 15 | 4.0 |
| CTH8-4R7K | 4.7 | 1.0 | 31 | .01 | 14 | 4.0 |
| CTH8-5R6K | 5.6 | 1.0 | 29 | .01 | 12 | 4.0 |
| CTH8-6R8K | 6.8 | 1.0 | 26 | .01 | 11 | 4.0 |
| CTH8-8R2K | 8.2 | 1.0 | 23 | .01 | 9.9 | 4.0 |
| CTH8-100K | 10 | 1.0 | 20 | .02 | 8.7 | 4.0 |
| CTH8-120K | 12 | 1.0 | 17 | .02 | 8.2 | 4.0 |
| CTH8-150K | 15 | 1.0 | 14 | .02 | 7.3 | 4.0 |
| CTH8-180K | 18 | 1.0 | 11 | .02 | 6.6 | 4.0 |
| CTH8-220K | 22 | 1.0 | 10 | .03 | 6.1 | 4.0 |
| CTH8-270K | 27 | 1.0 | 9.0 | .03 | 5.3 | 4.0 |
| CTH8-330K | 33 | 1.0 | 9.0 | .03 | 4.8 | 4.0 |
| CTH8-390K | 39 | 1.0 | 8.0 | .03 | 4.3 | 4.0 |
| CTH8-470K | 47 | 1.0 | 7.0 | .04 | 4.0 | 4.0 |
| CTH8-560K | 56 | 1.0 | 6.0 | .04 | 3.6 | 3.2 |
| CTH8-680K | 68 | 1.0 | 5.0 | .05 | 3.3 | 2.5 |
| CTH8-820K | 82 | 1.0 | 4.0 | .06 | 3.1 | 2.0 |
| CTH8-101K | 100 | 1.0 | 3.0 | .09 | 2.8 | 1.6 |
| CTH8-121K | 120 | 1.0 | 3.0 | .11 | 2.5 | 1.6 |
| CTH8-151K | 150 | 1.0 | 3.0 | .13 | 2.2 | 1.6 |
| CTH8-181K | 180 | 1.0 | 2.0 | .15 | 2.0 | 1.6 |
| CTH8-221K | 220 | 1.0 | 2.0 | .16 | 1.9 | 1.6 |
| CTH8-271K | 270 | 1.0 | 2.0 | .21 | 1.6 | 1.6 |
| CTH8-331K | 330 | 1.0 | 2.0 | .21 | 1.5 | 1.6 |
| CTH8-391K | 390 | 1.0 | 2.0 | .28 | 1.4 | 1.6 |
| CTH8-471K | 470 | 1.0 | 1.0 | .38 | 1.2 | 1.2 |
| CTH8-561K | 560 | 1.0 | 1.0 | .42 | 1.2 | 1.0 |
| CTH8-681K | 680 | 1.0 | 1.0 | .55 | 1.0 | 1.0 |
| CTH8-821K | 820 | 1.0 | 1.0 | .66 | .97 | .80 |
| CTH8-102K | 1000 | 1.0 | 1.0 | .84 | .87 | .80 |
| CTH8-122K | 1200 | 1.0 | 1.0 | 1.0 | .79 | .60 |
| CTH8-152K | 1500 | 1.0 | .75 | 1.2 | .70 | .60 |
| CTH8-182K | 1800 | 1.0 | .72 | 1.6 | .64 | .60 |
| CTH8-222K | 2200 | 1.0 | .70 | 2.0 | .58 | .50 |
| CTH8-272K | 2700 | 1.0 | .65 | 2.1 | .53 | .40 |
| CTH8-332K | 3300 | 1.0 | .60 | 2.6 | .47 | .40 |
| CTH8-392K | 3900 | 1.0 | .55 | 2.8 | .43 | .40 |
| CTH8-472K | 4700 | 1.0 | .50 | 3.2 | .39 | .40 |
| CTH8-562K | 5600 | 1.0 | .40 | 3.9 | .36 | .32 |
| CTH8-682K | 6800 | 1.0 | .35 | 5.7 | .32 | .25 |
| CTH8-822K | 8200 | 1.0 | .30 | 6.3 | .29 | .25 |
| CTH8-103K | 10000 | 1.0 | .30 | 7.3 | .26 | .25 |
| CTH8-123K | 12000 | 1.0 | .30 | 10 | .26 | .16 |
| CTH8-153K | 15000 | 1.0 | .30 | 11 | .23 | .16 |
| CTH8-183K | 18000 | 1.0 | .20 | 15 | .21 | .13 |
| CTH8-223K | 22000 | 1.0 | .20 | 17 | .19 | .13 |
| CTH8-273K | 27000 | 1.0 | .15 | 19 | .17 | .13 |
| CTH8-333K | 33000 | 1.0 | .15 | 27 | .15 | .10 |
| CTH8-393K | 39000 | 1.0 | .15 | 29 | .14 | .10 |
| CTH8-473K | 47000 | 1.0 | .10 | 32 | .13 | .10 |
| CTH8-563K | 56000 | 1.0 | .10 | 43 | .12 | .08 |
| CTH8-683K | 68000 | 1.0 | .10 | 47 | .11 | .08 |
| CTH8-823K | 82000 | 1.0 | .10 | 65 | .10 | .07 |
| CTH8-104K | 100000 | 1.0 | .10 | 72 | .10 | .07 |

PHYSICAL DIMENSIONS

| Size | A Max. | B Max. | C Typ. | 20 AWG Nom. |
|--------|--------|--------|--------|-------------|
| mm | 22.8 | 11.4 | 29.2 | 0.813 |
| inches | 0.9 | 0.45 | 1.15 | 0.03 |



12.14.01