

## CTH8VF Series

From 3.9 $\mu$ H to 100,000 $\mu$ H



### SPECIFICATIONS

Parts are available in  $\pm 10\%$  tolerance only

| Part Number | Inductance ( $\mu$ H) | L Test Freq. (kHz) | SRF Min. (MHz) | DCR Max. ( $\Omega$ ) | Saturation DC (A) | Rated AC (A) |
|-------------|-----------------------|--------------------|----------------|-----------------------|-------------------|--------------|
| CTH8VF-3R9K | 3.9                   | 1.0                | 34             | .01                   | 15                | 4.0          |
| CTH8VF-4R7K | 4.7                   | 1.0                | 31             | .01                   | 14                | 4.0          |
| CTH8VF-5R6K | 5.6                   | 1.0                | 29             | .01                   | 12                | 4.0          |
| CTH8VF-6R8K | 6.8                   | 1.0                | 26             | .01                   | 11                | 4.0          |
| CTH8VF-8R2K | 8.2                   | 1.0                | 23             | .01                   | 9.9               | 4.0          |
| CTH8VF-100K | 10                    | 1.0                | 20             | .02                   | 8.7               | 4.0          |
| CTH8VF-120K | 12                    | 1.0                | 17             | .02                   | 8.2               | 4.0          |
| CTH8VF-150K | 15                    | 1.0                | 14             | .02                   | 7.3               | 4.0          |
| CTH8VF-180K | 18                    | 1.0                | 11             | .02                   | 6.6               | 4.0          |
| CTH8VF-220K | 22                    | 1.0                | 10             | .03                   | 6.1               | 4.0          |
| CTH8VF-270K | 27                    | 1.0                | 9.0            | .03                   | 5.3               | 4.0          |
| CTH8VF-330K | 33                    | 1.0                | 9.0            | .03                   | 4.8               | 4.0          |
| CTH8VF-390K | 39                    | 1.0                | 8.0            | .03                   | 4.3               | 4.0          |
| CTH8VF-470K | 47                    | 1.0                | 7.0            | .04                   | 1.0               | 4.0          |
| CTH8VF-560K | 56                    | 1.0                | 6.0            | .04                   | 3.6               | 3.2          |
| CTH8VF-680K | 68                    | 1.0                | 5.0            | .05                   | 3.3               | 2.5          |
| CTH8VF-820K | 82                    | 1.0                | 4.0            | .06                   | 3.1               | 2.0          |
| CTH8VF-101K | 100                   | 1.0                | 3.0            | .09                   | 2.8               | 1.6          |
| CTH8VF-121K | 120                   | 1.0                | 3.0            | .11                   | 2.5               | 1.6          |
| CTH8VF-151K | 150                   | 1.0                | 3.0            | .13                   | 2.2               | 1.6          |
| CTH8VF-181K | 180                   | 1.0                | 2.0            | .15                   | 2.0               | 1.6          |
| CTH8VF-221K | 220                   | 1.0                | 2.0            | .16                   | 1.9               | 1.6          |
| CTH8VF-271K | 270                   | 1.0                | 2.0            | .21                   | 1.6               | 1.6          |
| CTH8VF-331K | 330                   | 1.0                | 2.0            | .21                   | 1.5               | 1.6          |
| CTH8VF-391K | 390                   | 1.0                | 2.0            | .28                   | 1.4               | 1.6          |
| CTH8VF-471K | 470                   | 1.0                | 1.0            | .38                   | 1.2               | 1.2          |
| CTH8VF-561K | 560                   | 1.0                | 1.0            | .42                   | 1.2               | 1.0          |
| CTH8VF-681K | 680                   | 1.0                | 1.0            | .55                   | 1.0               | 1.0          |
| CTH8VF-821K | 820                   | 1.0                | 1.0            | .66                   | .97               | .80          |
| CTH8VF-102K | 1000                  | 1.0                | 1.0            | .84                   | .87               | .80          |
| CTH8VF-122K | 1200                  | 1.0                | 1.0            | 1.0                   | .79               | .60          |
| CTH8VF-152K | 1500                  | 1.0                | .75            | 1.2                   | .70               | .60          |
| CTH8VF-182K | 1800                  | 1.0                | .72            | 1.6                   | .64               | .60          |
| CTH8VF-222K | 2200                  | 1.0                | .70            | 2.0                   | .58               | .50          |
| CTH8VF-272K | 2700                  | 1.0                | .65            | 2.1                   | .53               | .40          |
| CTH8VF-332K | 3300                  | 1.0                | .60            | 2.6                   | .47               | .40          |
| CTH8VF-392K | 3900                  | 1.0                | .55            | 2.8                   | .43               | .40          |
| CTH8VF-472K | 4700                  | 1.0                | .50            | 3.2                   | .39               | .40          |
| CTH8VF-562K | 5600                  | 1.0                | .40            | 3.9                   | .36               | .32          |
| CTH8VF-682K | 6800                  | 1.0                | .35            | 5.7                   | .32               | .25          |
| CTH8VF-822K | 8200                  | 1.0                | .30            | 6.3                   | .29               | .25          |
| CTH8VF-103K | 10000                 | 1.0                | .30            | 7.3                   | .26               | .25          |
| CTH8VF-123K | 12000                 | 1.0                | .30            | 10                    | .26               | .16          |
| CTH8VF-153K | 15000                 | 1.0                | .30            | 11                    | .23               | .16          |
| CTH8VF-183K | 18000                 | 1.0                | .20            | 15                    | .21               | .13          |
| CTH8VF-223K | 22000                 | 1.0                | .20            | 17                    | .19               | .13          |
| CTH8VF-273K | 27000                 | 1.0                | .15            | 19                    | .17               | .13          |
| CTH8VF-333K | 33000                 | 1.0                | .15            | 27                    | .15               | .10          |
| CTH8VF-393K | 39000                 | 1.0                | .15            | 29                    | .14               | .10          |
| CTH8VF-473K | 47000                 | 1.0                | .10            | 32                    | .13               | .10          |
| CTH8VF-563K | 56000                 | 1.0                | .10            | 43                    | .12               | .08          |
| CTH8VF-683K | 68000                 | 1.0                | .10            | 47                    | .11               | .08          |
| CTH8VF-823K | 82000                 | 1.0                | .10            | 65                    | .10               | .07          |
| CTH8VF-104K | 100000                | 1.0                | .10            | 72                    | .10               | .07          |

### CHARACTERISTICS

**Description:** Axial leaded power line inductor (clear varnish coated)

**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 +125°C

**Inductance Tolerance:**  $\pm 10\%$

**Testing:** Inductance is tested on a HP4284A at 1.0kHz

**Packaging:** Bulk pack standard, Tape & Reel available. Lead length (dimension C) is 15mm max. for parts packaged tape & reel.

**Marking:** Marked with color dots

**Saturation Current:** Lowers inductance by 5%

**Bobbin:** High saturation, allows for high inductance with low DC resistance

**Miscellaneous:** RoHS Compliant. Higher current parts available

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

**Samples available. See website for ordering information.**

### PHYSICAL DIMENSIONS

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

