

## CTGS53F Series

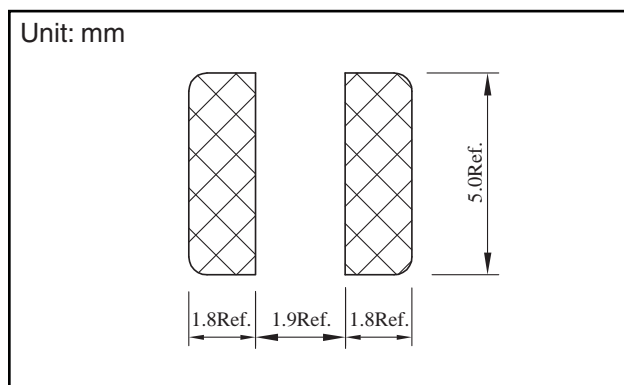
### From 10µH to 15000µH



### CHARACTERISTICS

- Description:** SMD power inductor.
- Applications:** LCD televisions, PC notebooks, portable communication equipment, camcorders, car radios, DC/DC converters, etc.
- Operating Temperature:** -40°C to +125°C (temp. rise included)
- Testing:** Inductance is tested on an HP4284A at specified frequency.
- Packaging:** Tape & Reel.
- Marking:** Marked with inductance code.
- IDC:** Based on  $\Delta L/LOA=10\%$  max. and temp. rise 40°C max.
- Miscellaneous:** RoHS Compliant.
- Additional Information:** Additional electrical & physical information available upon request.
- Samples available. See website for ordering information.**

### PAD LAYOUT



### SPECIFICATIONS

Part numbers indicate available inductance tolerance.  
J = ±5%, K = ±10%, M = ±20%

| Part Number  | Inductance (µH) | Q Ref. | L Test Freq. (kHz) | Q Test Freq. (.Hz) | SRF Nom. (MHz) | DCR Max. (Ω) | IDC Max. (A) |
|--------------|-----------------|--------|--------------------|--------------------|----------------|--------------|--------------|
| CTGS53F-100M | 10              | 20     | 1.0                | 2.520M             | 30.0           | 0.130        | 1.300        |
| CTGS53F-120M | 12              | 20     | 1.0                | 2.520M             | 29.0           | 0.160        | 1.200        |
| CTGS53F-150M | 15              | 20     | 1.0                | 2.520M             | 27.0           | 0.190        | 1.050        |
| CTGS53F-180M | 18              | 20     | 1.0                | 2.520M             | 24.0           | 0.210        | 0.950        |
| CTGS53F-220M | 22              | 20     | 1.0                | 2.520M             | 22.0           | 0.280        | 0.900        |
| CTGS53F-270M | 27              | 20     | 1.0                | 2.520M             | 20.0           | 0.320        | 0.800        |
| CTGS53F-330K | 33              | 15     | 1.0                | 2.520M             | 17.5           | 0.380        | 0.700        |
| CTGS53F-390K | 39              | 15     | 1.0                | 2.520M             | 17.0           | 0.420        | 0.650        |
| CTGS53F-470K | 47              | 20     | 1.0                | 2.520M             | 14.0           | 0.600        | 0.600        |
| CTGS53F-560K | 56              | 20     | 1.0                | 2.520M             | 13.0           | 0.710        | 0.500        |
| CTGS53F-680K | 68              | 20     | 1.0                | 2.520M             | 12.0           | 0.760        | 0.450        |
| CTGS53F-820K | 82              | 15     | 1.0                | 2.520M             | 10.0           | 0.880        | 0.420        |
| CTGS53F-101K | 100             | 40     | 1.0                | 0.796M             | 8.50           | 1.600        | 0.400        |
| CTGS53F-121K | 120             | 40     | 1.0                | 0.796M             | 8.00           | 1.700        | 0.370        |
| CTGS53F-151K | 150             | 40     | 1.0                | 0.796M             | 7.20           | 2.000        | 0.330        |
| CTGS53F-181K | 180             | 40     | 1.0                | 0.796M             | 6.90           | 2.300        | 0.300        |
| CTGS53F-221K | 220             | 35     | 1.0                | 0.796M             | 6.20           | 2.500        | 0.250        |
| CTGS53F-271K | 270             | 35     | 1.0                | 0.796M             | 5.70           | 2.900        | 0.230        |
| CTGS53F-331K | 330             | 30     | 1.0                | 0.796M             | 5.30           | 3.300        | 0.210        |
| CTGS53F-391K | 390             | 30     | 1.0                | 0.796M             | 4.90           | 3.700        | 0.190        |
| CTGS53F-471K | 470             | 30     | 1.0                | 0.796M             | 4.60           | 4.900        | 0.180        |
| CTGS53F-561K | 560             | 30     | 1.0                | 0.796M             | 4.20           | 5.700        | 0.160        |
| CTGS53F-681K | 680             | 30     | 1.0                | 0.796M             | 3.90           | 7.500        | 0.140        |
| CTGS53F-821K | 820             | 40     | 1.0                | 0.796M             | 3.30           | 10.000       | 0.120        |
| CTGS53F-102K | 1000            | 40     | 1.0                | 0.252M             | 3.10           | 11.500       | 0.110        |
| CTGS53F-122J | 1200            | 40     | 1.0                | 0.252M             | 3.00           | 12.000       | 0.063        |
| CTGS53F-152J | 1500            | 40     | 1.0                | 0.252M             | 2.40           | 13.000       | 0.059        |
| CTGS53F-182J | 1800            | 40     | 1.0                | 0.252M             | 2.20           | 15.000       | 0.055        |
| CTGS53F-222J | 2200            | 40     | 1.0                | 0.252M             | 2.30           | 22.000       | 0.053        |
| CTGS53F-272J | 2700            | 40     | 1.0                | 0.252M             | 2.10           | 26.000       | 0.050        |
| CTGS53F-332J | 3300            | 40     | 1.0                | 0.252M             | 1.90           | 38.000       | 0.045        |
| CTGS53F-392J | 3900            | 40     | 1.0                | 0.252M             | 1.50           | 40.000       | 0.042        |
| CTGS53F-472J | 4700            | 40     | 1.0                | 0.252M             | 1.40           | 48.000       | 0.040        |
| CTGS53F-562J | 5600            | 40     | 1.0                | 0.252M             | 1.30           | 72.000       | 0.038        |
| CTGS53F-682J | 6800            | 40     | 1.0                | 0.252M             | 1.20           | 80.000       | 0.034        |
| CTGS53F-822J | 8200            | 40     | 1.0                | 0.252M             | 1.00           | 92.000       | 0.030        |
| CTGS53F-103J | 10000           | 30     | 1.0                | 79.60K             | 0.95           | 110.000      | 0.027        |
| CTGS53F-123J | 12000           | 30     | 1.0                | 79.60K             | 0.85           | 148.000      | 0.025        |
| CTGS53F-153J | 15000           | 30     | 1.0                | 79.60K             | 0.80           | 168.000      | 0.020        |

### PHYSICAL DIMENSIONS

