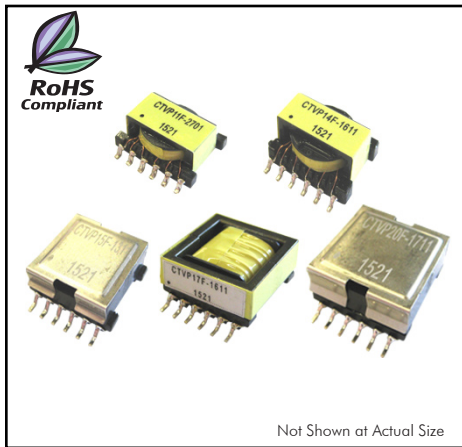


CTVP Series



CHARACTERISTICS

Description: SMD six winding transformers and inductors

Applications (Transformer): flyback, feed forward, push-pull, multiple, etc.

Applications (Inductor): buck, boost, coupled, choke, filter, differential, forward, common mode.

Features:

- High efficiency, low profile and low radiation
- Frequency range to over 1MHz
- 500VAC isolation winding to winding
- Can be used as Transformer or Inductor
- Ferrite core material

Operating Temperature: -40°C to +85°C

Storage Temperature: -55°C to +125°C

Solder reflow temperature: +250°C for 10 seconds maximum

Miscellaneous: **RoHS Compliant.**

Samples available. See website for ordering information.

SPECIFICATIONS

| Part Number | ⁽¹⁾ Inductance Nom. (μ H) | ⁽²⁾ Isat Typ. (A) | ⁽³⁾ Leakage Inductance Typ. (μ H) | ⁽⁴⁾ DCR Max. (Ω) | ⁽⁵⁾ Irms Typ. (A) |
|--------------|-------------------------------------------------|------------------------------------|---------------------------------------------------------|--------------------------------------------|------------------------------------|
| CTVP11F-2011 | 201.6 \pm 30% | 0.04 | 0.22 | 0.35 | 0.55 |
| CTVP11F-9001 | 89.6 \pm 30% | 0.06 | 0.10 | 0.15 | 0.85 |
| CTVP11F-2701 | 27.4 \pm 20% | 0.29 | 0.22 | 0.35 | 0.55 |
| CTVP11F-1201 | 12.2 \pm 20% | 0.43 | 0.10 | 0.15 | 0.85 |
| CTVP11F-1501 | 14.7 \pm 20% | 0.53 | 0.22 | 0.35 | 0.55 |
| CTVP11F-0651 | 6.5 \pm 20% | 0.80 | 0.10 | 0.15 | 0.85 |
| CTVP11F-1101 | 10.9 \pm 20% | 0.72 | 0.22 | 0.35 | 0.55 |
| CTVP11F-0491 | 4.9 \pm 20% | 1.06 | 0.10 | 0.15 | 0.85 |
| CTVP11F-0851 | 8.5 \pm 20% | 0.92 | 0.22 | 0.35 | 0.55 |
| CTVP11F-0381 | 3.8 \pm 20% | 1.37 | 0.10 | 0.15 | 0.85 |
| CTVP14F-1611 | 160 \pm 30% | 0.07 | 0.17 | 0.16 | 0.95 |
| CTVP14F-7801 | 78.4 \pm 30% | 0.10 | 0.09 | 0.09 | 1.26 |
| CTVP14F-2201 | 21.6 \pm 20% | 0.53 | 0.17 | 0.16 | 0.95 |
| CTVP14F-1101 | 10.6 \pm 20% | 0.76 | 0.09 | 0.09 | 1.26 |
| CTVP14F-1201 | 11.6 \pm 20% | 0.99 | 0.17 | 0.16 | 0.95 |
| CTVP14F-0601 | 5.7 \pm 20% | 1.41 | 0.09 | 0.09 | 1.26 |
| CTVP14F-0831 | 8.3 \pm 20% | 1.39 | 0.17 | 0.16 | 0.95 |
| CTVP14F-0411 | 4.1 \pm 20% | 1.95 | 0.09 | 0.09 | 1.26 |
| CTVP14F-0661 | 6.6 \pm 20% | 1.74 | 0.17 | 0.16 | 0.95 |
| CTVP14F-0321 | 3.2 \pm 20% | 2.50 | 0.09 | 0.09 | 1.26 |

SPECIFICATIONS

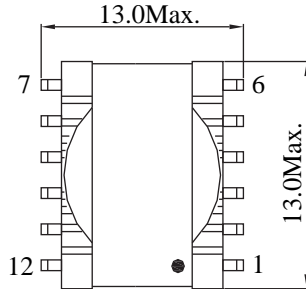
| Part Number | ⁽¹⁾ Inductance Nom. (μ H) | ⁽²⁾ I _{sat} Typ. (A) | ⁽³⁾ Leakage Inductance Typ. (μ H) | ⁽⁴⁾ DCR Max. (Ω) | ⁽⁵⁾ I _{rms} Typ. (A) |
|--------------|-------------------------------------------------|------------------------------------------------|---------------------------------------------------------|--------------------------------------------|------------------------------------------------|
| CTVP15F-1311 | 132 \pm 30% | 0.07 | 0.13 | 0.14 | 0.97 |
| CTVP15F-6301 | 63.2 \pm 30% | 0.10 | 0.06 | 0.06 | 1.47 |
| CTVP15F-2301 | 23.3 \pm 20% | 0.41 | 0.13 | 0.14 | 0.97 |
| CTVP15F-1101 | 11.2 \pm 20% | 0.59 | 0.06 | 0.06 | 1.47 |
| CTVP15F-1401 | 14.2 \pm 20% | 0.67 | 0.13 | 0.14 | 0.97 |
| CTVP15F-0681 | 6.8 \pm 20% | 0.97 | 0.06 | 0.06 | 1.47 |
| CTVP15F-0931 | 9.3 \pm 20% | 1.02 | 0.13 | 0.14 | 0.97 |
| CTVP15F-0451 | 4.5 \pm 20% | 1.46 | 0.06 | 0.06 | 1.47 |
| CTVP15F-0791 | 7.94 \pm 20% | 1.19 | 0.13 | 0.14 | 0.97 |
| CTVP15F-0381 | 3.8 \pm 20% | 1.73 | 0.06 | 0.06 | 1.47 |
| CTVP17F-1611 | 159.7 \pm 30% | 0.11 | 0.16 | 0.09 | 1.41 |
| CTVP17F-8701 | 87.0 \pm 30% | 0.15 | 0.08 | 0.06 | 1.70 |
| CTVP17F-2401 | 23.7 \pm 20% | 0.65 | 0.16 | 0.09 | 1.41 |
| CTVP17F-1101 | 11.3 \pm 20% | 0.95 | 0.08 | 0.06 | 1.70 |
| CTVP17F-1301 | 12.7 \pm 20% | 1.21 | 0.16 | 0.09 | 1.41 |
| CTVP17F-0601 | 6.1 \pm 20% | 1.75 | 0.08 | 0.06 | 1.70 |
| CTVP17F-1001 | 10.1 \pm 20% | 1.52 | 0.16 | 0.09 | 1.41 |
| CTVP17F-0491 | 4.9 \pm 20% | 2.18 | 0.08 | 0.06 | 1.70 |
| CTVP17F-0791 | 7.94 \pm 20% | 1.94 | 0.16 | 0.09 | 1.41 |
| CTVP17F-0381 | 3.8 \pm 20% | 2.81 | 0.08 | 0.06 | 1.70 |
| CTVP20F-1711 | 173 \pm 30% | 0.14 | 0.24 | 0.07 | 1.70 |
| CTVP20F-7701 | 76.8 \pm 30% | 0.20 | 0.11 | 0.05 | 2.08 |
| CTVP20F-2201 | 22.3 \pm 20% | 1.05 | 0.24 | 0.07 | 1.70 |
| CTVP20F-0991 | 9.9 \pm 20% | 1.60 | 0.11 | 0.05 | 2.08 |
| CTVP20F-1201 | 12 \pm 20% | 1.96 | 0.24 | 0.07 | 1.70 |
| CTVP20F-0531 | 5.3 \pm 20% | 2.95 | 0.11 | 0.05 | 2.08 |
| CTVP20F-0971 | 9.65 \pm 20% | 2.43 | 0.24 | 0.07 | 1.70 |
| CTVP20F-0431 | 4.3 \pm 20% | 3.63 | 0.11 | 0.05 | 2.08 |
| CTVP20F-0761 | 7.63 \pm 20% | 3.07 | 0.24 | 0.07 | 1.70 |
| CTVP20F-0301 | 3.4 \pm 20% | 4.59 | 0.11 | 0.05 | 2.08 |

NOTES FROM TABLES

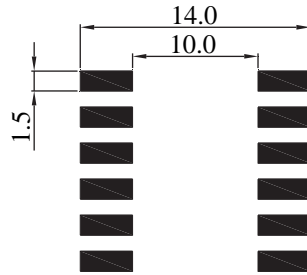
1. L(nom) = Nominal Inductance of a single winding.
2. Peak current that will result in 30% saturation of the core. This current value assumes that equal current flows in all six windings.
3. CTVP11F and CTVP14F: Pins 4-1 with other pins shorted.
CTVP15F, CTVP17F and CTVP20F: Pins 1-12 with other pins shorted.
4. Maximum DC Resistance of each winding.
5. RMS current that results in a surface temperature of approximately 40°C above ambient. The 40°C rise occurs when the specified current flows through each of the six windings.

PHYSICAL DIMENSIONS

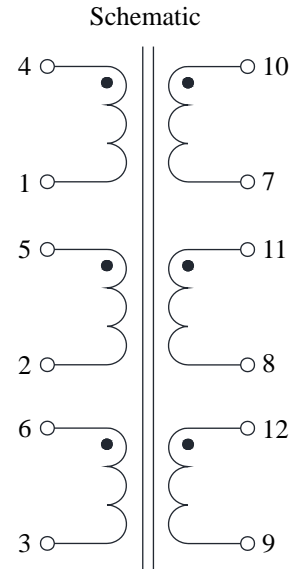
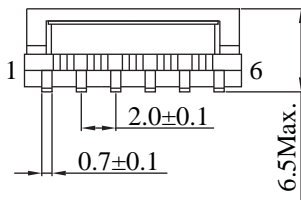
CTVP11F Series (Unit: mm)



Top View

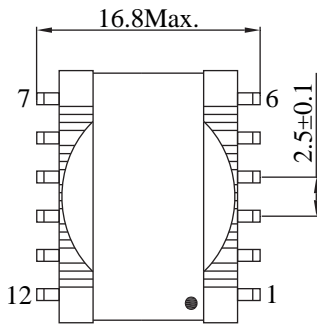


Suggested Pad Layout

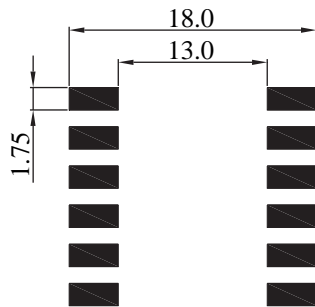


1:1:1:1:1±3%

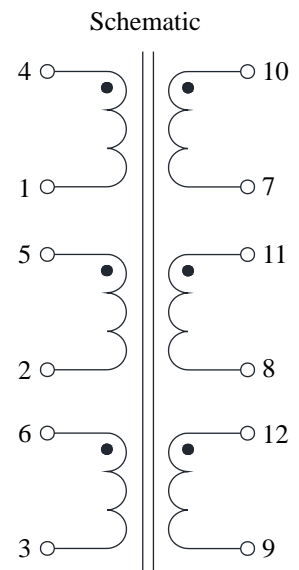
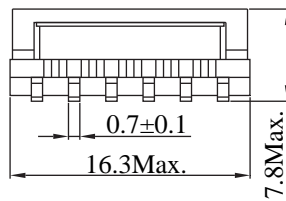
CTVP14F Series (Unit: mm)



Top View



Suggested Pad Layout

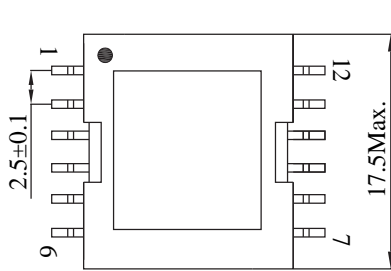


1:1:1:1:1±3%

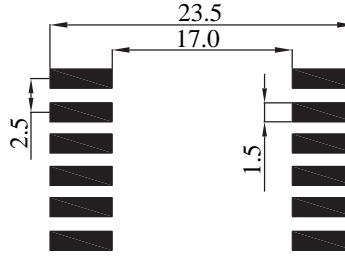
PHYSICAL DIMENSIONS

CTVP15F Series

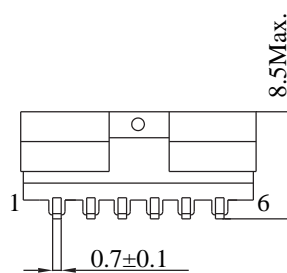
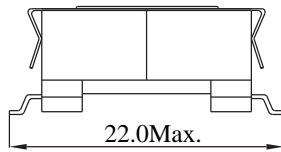
(Unit: mm)



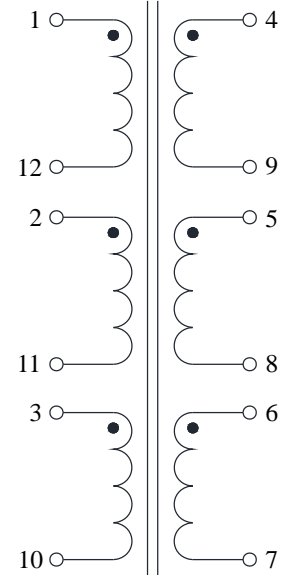
Top View



Suggested Pad Layout



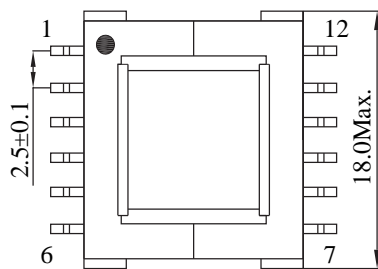
Schematic



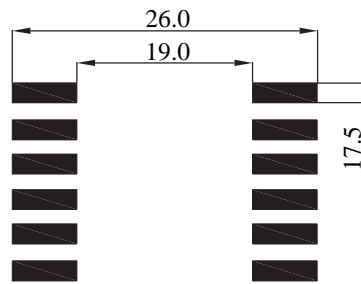
1:1:1:1:1:1±3%

CTVP17F Series

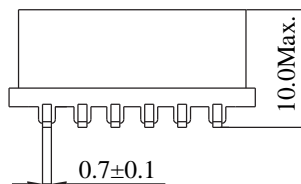
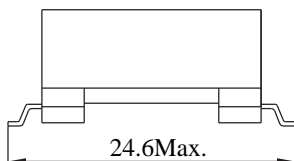
(Unit: mm)



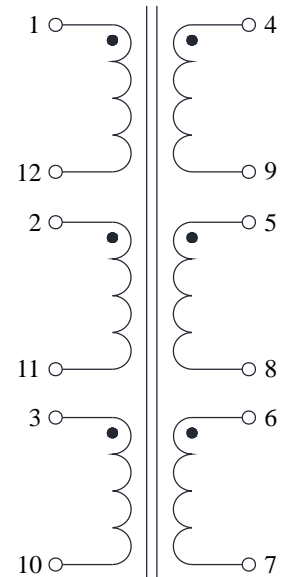
Top View



Suggested Pad Layout



Schematic



1:1:1:1:1:1±3%

PHYSICAL DIMENSIONS

CTVP20F Series (Unit: mm)

