

Current Sensor 12.7 mm Toroid (CST013-01 Digital Series)

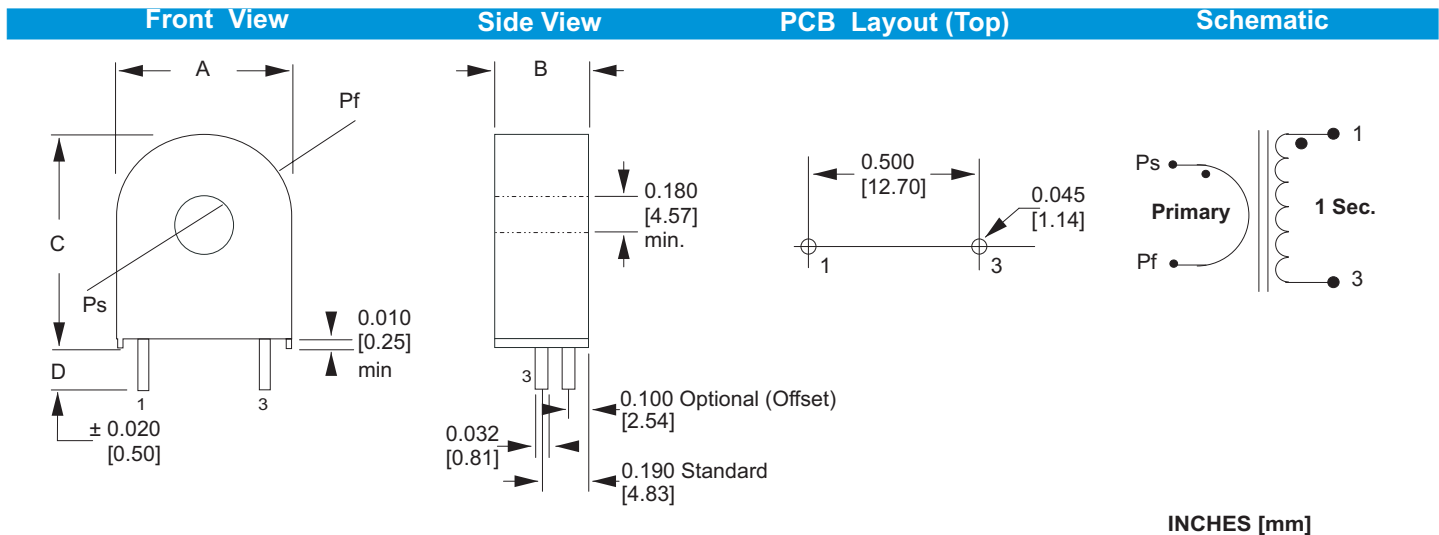
POWER MAGNETICS



MAX. DIM :
L = 17.02 mm
W = 9.90 mm
H = 20.32 mm

- Diverse applications for overload sensing, load drop, shutdown and feed-back control in switch mode power supplies.
- Frequency range from 20 KHz to 200 KHz.
- Rated current 35 Amps.
- Single secondary only
- Sensitivity 1 V/Amp adjustable by changing terminating resistor.
- Available in potted or welded construction ultrasonically.
- Dielectric strength of 3750 V between primary and secondary.

MECHANICAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS

| FALCO PART NUMBER | RoHS PART NUMBER | L(mH) ¹ min. | Freq. (KHz) | Turns Ratio | DCR (Ω max) | I _{pk} (Amp) | Unipolar A-μs | A max. in / mm | B max. in / mm | C max. in / mm | D nom. in / mm | PIN POSITION | Seal |
|-------------------|------------------|-------------------------|-------------|-------------|-------------|-----------------------|---------------|----------------|----------------|----------------|----------------|--------------|------|
| | T50213 | 3.50 | 10.00 | 50:1 | 0.34 | 30.00 | 160 | 0.680 / 17.27 | 0.390 / 9.90 | 0.800 / 20.32 | 0.175 / 4.44 | Standard | U |
| T50038 | | 5.00 | 1.00 | 50:1 | 0.70 | 30.00 | 160 | 0.670 / 17.02 | 0.380 / 9.65 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | U |
| T50080 | | 5.00 | 1.00 | 50:1 | 0.70 | 30.00 | 160 | 0.670 / 17.02 | 0.380 / 9.65 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50128 | T5L128 | 6.70 | 1.00 | 55:1 | 0.50 | 30.00 | 165 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50A11 | | 23.20 | 10.00 | 100:1 | 1.30 | 35.00 | 300 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50B11 | T5LB11 | 23.50 | 10.00 | 100:1 | 1.30 | 35.00 | 300 | 0.670 / 17.02 | 0.400 / 10.16 | 0.800 / 20.32 | 0.250 / 6.35 | Offset | P |
| T50010 | T5L010 | 20.00 | 1.00 | 100:1 | 1.40 | 35.00 | 300 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | U |
| T50011 | T5L011 | 28.05 | 1.00 | 100:1 | 1.40 | 35.00 | 300 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50012 | T5L012 | 46.00 | 10.00 | 200:1 | 4.50 | 38.00 | 600 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | U |
| T50035 | T5L035 | 57.80 | 1.00 | 140:1 | 2.70 | 35.00 | 420 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50006 | T5L006** | 80.00 | 1.00 | 200:1 | 4.50 | 38.00 | 600 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Offset | U |
| T50009 | T5L009 | 80.00 | 1.00 | 200:1 | 4.50 | 38.00 | 600 | 0.670 / 17.02 | 0.380 / 9.65 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | U |
| T50044 | | 80.00 | 1.00 | 200:1 | 4.50 | 38.00 | 600 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50041 | T5L041 | 187.00 | 1.00 | 258:1 | 6.50 | 37.00 | 780 | 0.670 / 17.02 | 0.380 / 9.65 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50007 | | 320.00 | 1.00 | 400:1 | 10.00 | 35.00 | 1200 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Offset | U |
| T50B07 | | 320.00 | 1.00 | 400:1 | 10.00 | 35.00 | 1200 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Offset | P |
| T50C07* | | 368.00 | 10.0 | 400:1 | 10.00 | 35.00 | 1200 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.125 / 3.18 | Standard | P |
| T500A1 | | 520.00 | 1.00 | 500:1 | 20.60 | 35.00 | 1500 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | U |
| T50001 | | 520.00 | 1.00 | 500:1 | 20.60 | 35.00 | 1500 | 0.670 / 17.02 | 0.380 / 9.65 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |
| T50018 | T5L018 | 850.00 | 1.00 | 545:1 | 20.00 | 30.00 | 1635 | 0.670 / 17.02 | 0.390 / 9.90 | 0.800 / 20.32 | 0.150 / 3.81 | Standard | P |

*T50C07 PIN TOL. ±0.025[0.64]

** T5L006 "D" nom. = 0.374[9.50]

1. Inductance L tested at 0.25 V. * L tested at 0.1V.
2. L and DCR tested at Ta= 25°C.

Primary is supplied by end user.

1-1

Ultrasonic seal (U)
 Potting (P)



RoHS COMPLIANT PRODUCT

CST013-01.PDF REV: F1 10/07