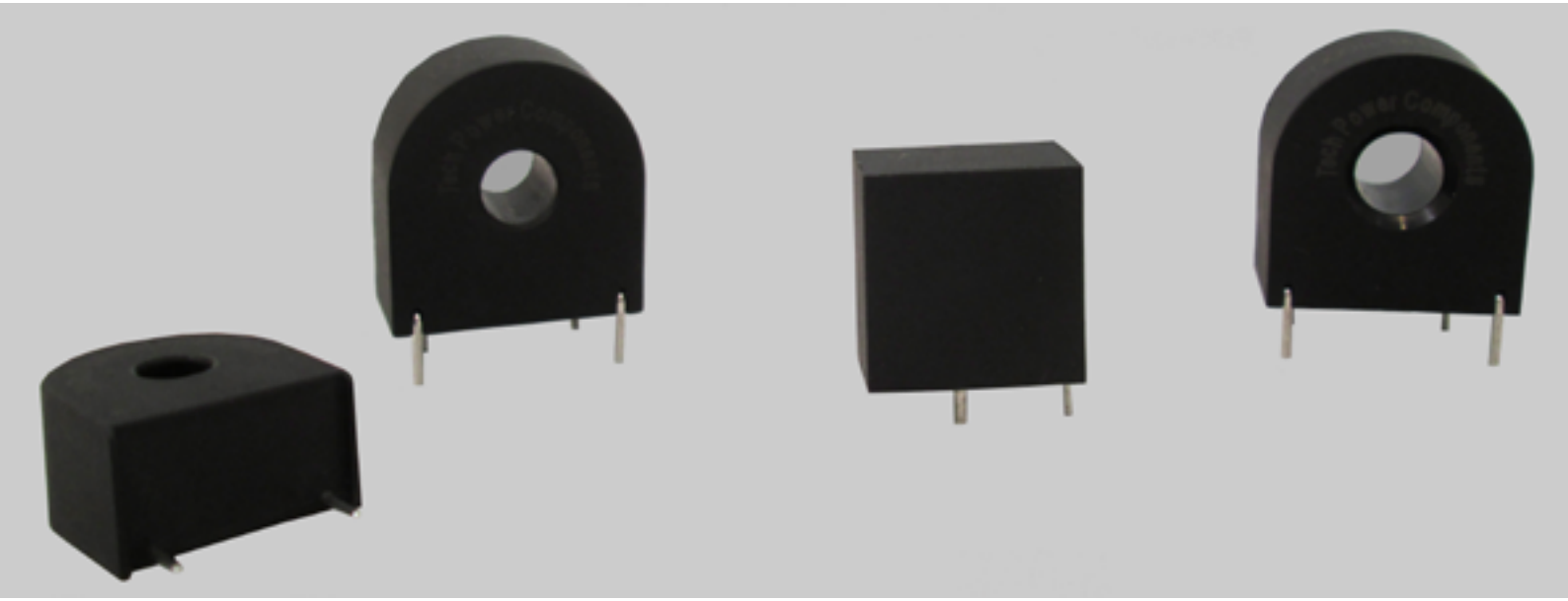
Tech Power®
Components



# Current Sense Transformers
## *Nanocrystalline core*
## *High Accuracy*

Tech Power
electronics
POSITIVE ENERGY

Tech Power electronics develops a new standard range of current sense transformers fully encapsulated made with nanocrystalline core.

They are designed for power electronic applications which require a highly-accurate current measurement.

In comparison with others soft magnetic materials, nanocrystalline alloys is the best material to be used in toroidal core for current transformers, due to its high magnetic permeability and low core losses.

## Advantages

- High permeability: smaller error in the measurement of current and lower phase angle error so higher accuracy
- High saturation induction: smaller size and lighter weight
- Excellent thermal stability: larger operating temperature range

## Standards

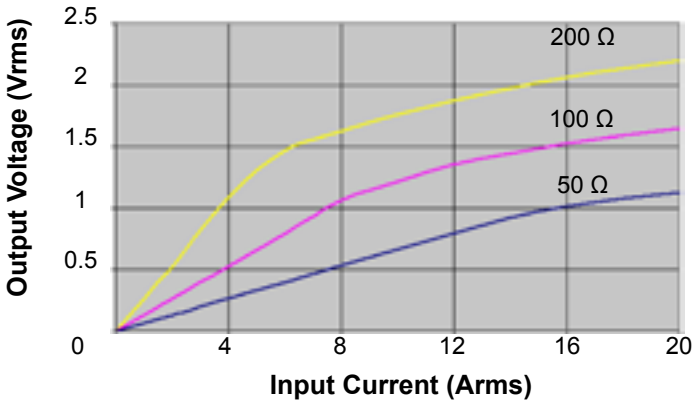
- RoHS
- Reach
- Plastic materials meet UL94 V-0 requirements

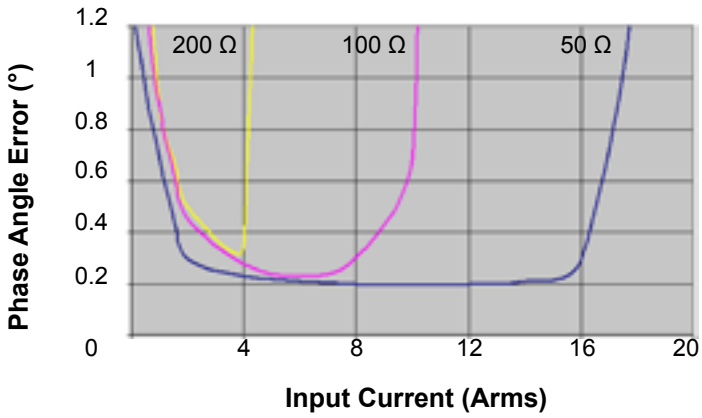
# 10A Current Sense Transformers SCTN10-750

## Electrical Characteristics (Ambient Temperature = 25°C)

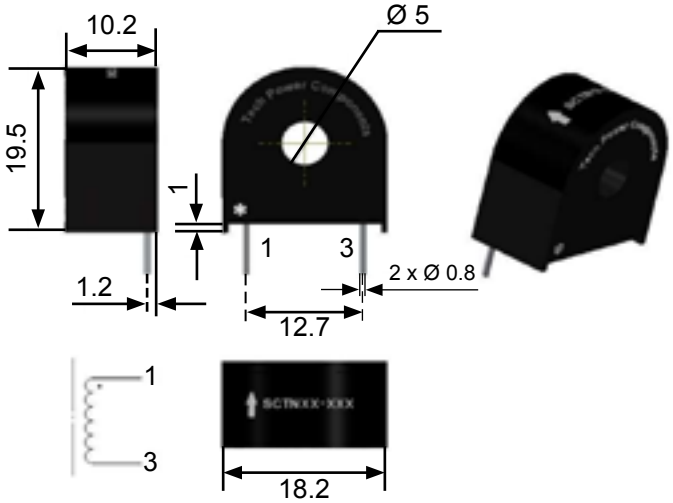
| SCTN10 - 750 | |
|---|---|
| Current Range | 0 ~ 10 A |
| Turn ratio | 1:750 |
| Internal Resistance | 25Ω |
| Frequency Range | 50 - 400Hz |
| Phase Angle Error | ≤60’ |
| Linearity | ≤0.5% |
| Accuracy class | 0.5 |
| Rated Burden Resistance | ≤50Ω |
| Operating Temperature Range | -40°C to +125°C |
| Storage Temperature Range | -40°C to +125°C |

## Output Characteristics




## Mechanical Characteristics




Weight: 6g
Unless otherwise stated, all dimensions in mm ± 0.2

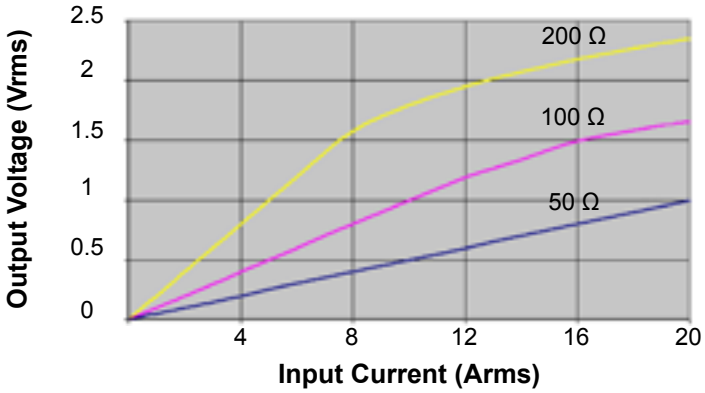
- Arrow designates direction of primary current in phase with pin 1 (identified by * on the box)
- Isolation Pri to Sec: 3,000 Vac min

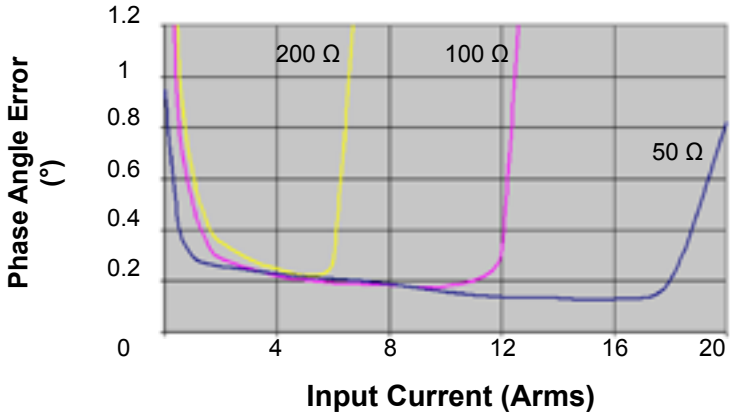
# 12A Current Sense Transformers SCTN12-1000

## Electrical Characteristics (Ambient Temperature = 25°C)

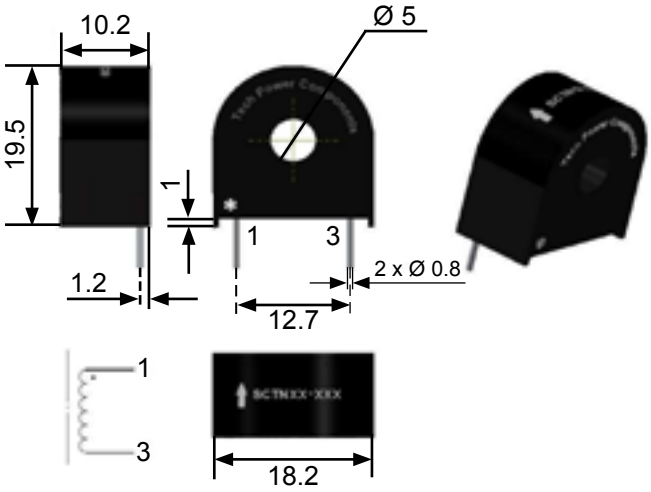
| SCTN12 - 1000 | |
|---|---|
| Current Range | 0 ~ 12 A |
| Turn ratio | 1:1000 |
| Internal Resistance | 50Ω |
| Frequency Range | 50 - 400Hz |
| Phase Angle Error | ≤60’ |
| Linearity | ≤0.5% |
| Accuracy class | 0.5 |
| Rated Burden Resistance | ≤50Ω |
| Operating Temperature Range | -40°C to +125°C |
| Storage Temperature Range | -40°C to +125°C |

## Output Characteristics




## Mechanical Characteristics




Weight: 6g
Unless otherwise stated, all dimensions in mm ± 0.2

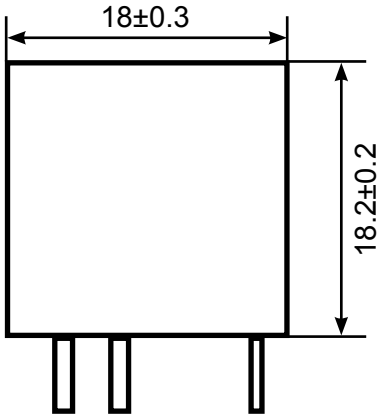
- Arrow designates direction of primary current in phase with pin 1 (identified by * on the box)
- Isolation Pri to Sec: 3 KVac min

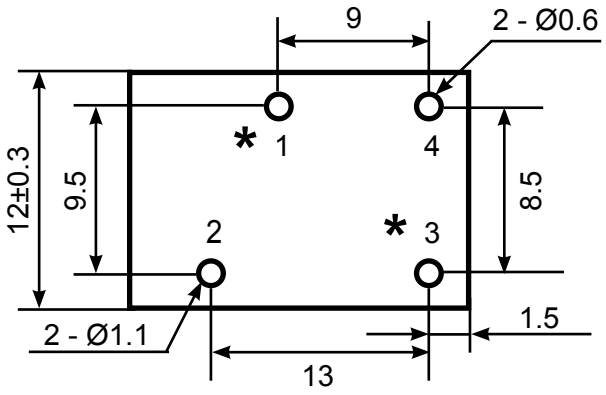
# 20A Current Sense Transformers SCTN20-2000

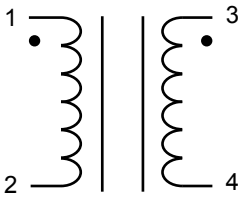
## Electrical Characteristics (Ambient Temperature = 25°C)

| SCTN20 - 2000 | |
|---|---|
| Current Range | 0 ~ 20 A |
| Turn ratio | 1:2000 |
| Internal Resistance | 150 Ω |
| Frequency Range | 50 - 400Hz |
| Phase Angle Error | ≤20' *(input: 1A, burden resistance: 100 Ω)* |
| Linearity | ≤0.2% *(5% Ip to 120% Ip)* |
| Accuracy class | 0.2 |
| Rated Burden Resistance | ≤100 Ω |
| Operating Temperature Range | -40°C to +125°C |
| Storage Temperature Range | -40°C to +125°C |

## Mechanical Characteristics




Weight: 8 g
Unless otherwise stated, all dimensions in mm ± 0.2

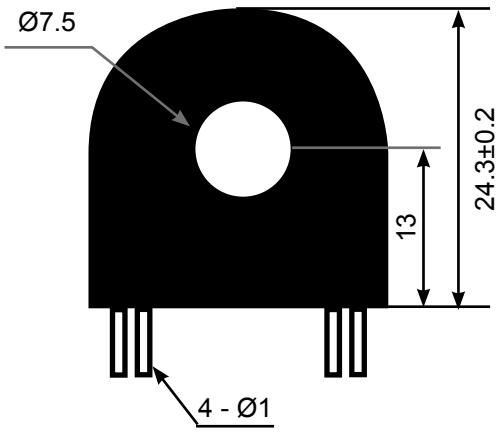
- pins 1 & 2: primary inputs
- pins 3 & 4: secondary outputs
- Isolation Pri to Sec: 3 KVac min
- * : same polarity

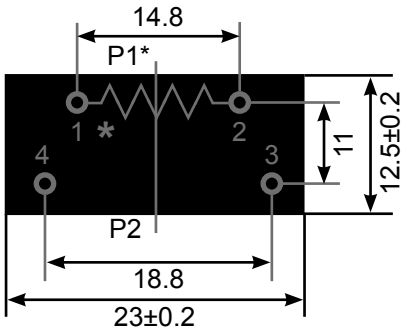
# 30A Current Sense Transformers SCTN30-1000

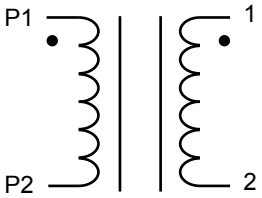
## Electrical Characteristics (Ambient Temperature = 25°C)

| SCTN30 - 1000 | |
|---|---|
| Current Range | 0 ~ 30 A |
| Turn ratio | 1:1000 |
| Internal Resistance | 40 Ω |
| Frequency Range | 50 - 400Hz |
| Phase Angle Error | ≤15' *(input: 5A, burden resistance: 50 Ω)* |
| Linearity | ≤0.3% *(5% Ip to 120% Ip)* |
| Accuracy class | 0.5 |
| Rated Burden Resistance | ≤50 Ω |
| Operating Temperature Range | -40°C to +125°C |
| Storage Temperature Range | -40°C to +125°C |

## Mechanical Characteristics




Weight: 14 g
Unless otherwise stated, all dimensions in mm ± 0.2

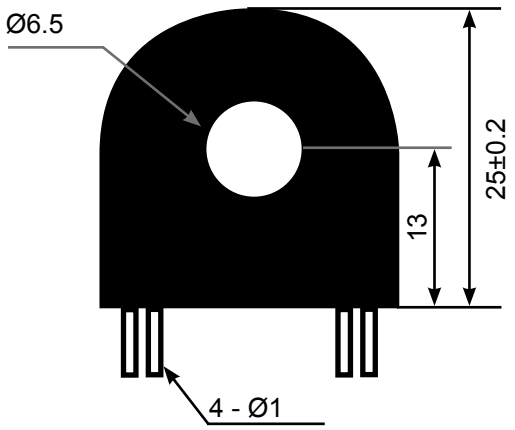
- pins 1 & 2: secondary outputs
- pins 3 & 4: blind pins
- Isolation Pri to Sec: 4,5 KVac min
- * : same polarity

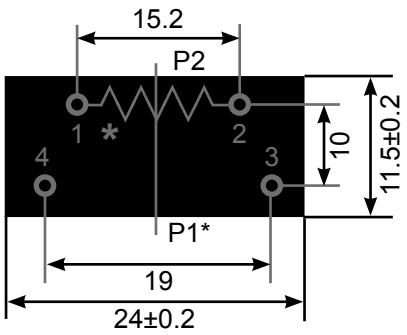
# 70A Current Sense Transformers SCTN70-2500

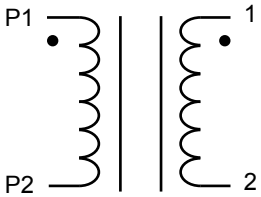
## Electrical Characteristics (Ambient Temperature = 25°C)

| SCTN70 - 2500 | |
|---|---|
| Current Range | 0 ~ 70 A |
| Turn ratio | 1:2500 |
| Internal Resistance | 250 Ω |
| Frequency Range | 50 - 400Hz |
| Phase Angle Error | ≤20' *(input: 1A, burden resistance: 100 Ω)* |
| Linearity | ≤0.1% *(5% Ip to 120% Ip)* |
| Accuracy class | 0.2 |
| Rated Burden Resistance | ≤100 Ω |
| Operating Temperature Range | -40°C to +125°C |
| Storage Temperature Range | -40°C to +125°C |

## Mechanical Characteristics




Weight: 15 g
Unless otherwise stated, all dimensions in mm ± 0.2

- pins 1 & 2: secondary outputs
- pins 3 & 4: blind pins
- Isolation Pri to Sec: 4,5 KVac min
- * : same polarity

# Tech Power® Components

## A trademark developed by

Tech Power electronics
POSITIVE ENERGY

### Our trade

We produce, design and develop professional electronic applicationsand provide high added value products and innovative services for this market.

### Our vision

In response to the need to take into account societal issues, we want to make a decisive contribution through the creation of new industrial solutions and be the European leader in B2B industrial electronics.

Open INSTITUTE
TOGETHER TOWARDS NEW POSSIBLE

Open Institute is a relationship and exchange platform between the worlds of business, education and the social environment.
It is a business incubator for new projects. Open Institute covers following expertises: Monitor technology intelligence - prospective - strategical marketing - research programs.



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Management System ISO 9001:2008

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