

# **SX-02**

## **Current Sense Transformers**

## **Features**

- Low profile THT current sense transformer
- Frequency range from 30kHz to 300kHz
- Primary current rating up to 20 Amps
- Two primary wire for series or parallel configuration
- Operating temperature: -40°C to 125°C
- Primary to secondary isolation:  $1500 \, V_{RMS}$



Ordering Code	Turns ratio	Current rating (A)	Secondary Rdc (mΩ) MAX	Secondary Inductance (mH) MIN	Burden Resistor (Ω)
SX-02-001	1:1:50	20	520	4.0	50
SX-02-002	1:1:100	20	1050	16.0	100
SX-02-003	1:1:200	20	2080	64.0	200

#### **Notes**

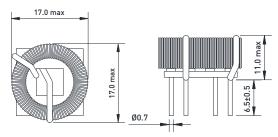
- Electrical specifications at 25°C
- Current rating (DC) based on 40°C temperature rise. Primary windings in 2-
- Operating temperature includes component self-heating
- Inductance measured at 10kHz, 10mVac.
  Recommended burden resistor for 20Amps. Primary windings in parallel

To calculate burden resistor use following formula:

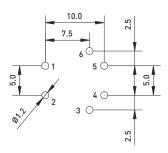
$$Rb\left( \Omega \right) = \frac{Vout \cdot N}{Ipeak\_primary}$$

#### **Dimensions**

All dimensions in mm

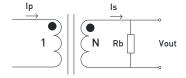


## **Recommended PCB layout**



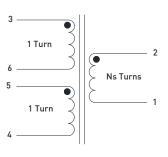
View in mounting direction

### **Application circuit**



Ip = Primary current Is = Secondary current Rb = Burden resistor Vout = Output voltage

#### **Schematic**



Revised: 13/08/2013

Specifications subject to change without notice