



ENGLISH

## Datasheet

Stock No: 1730041

# RS Pro

## Current Sense Inductors & Transformers



This Current Sensor is designed as a low cost method of controlling, monitoring or measuring AC currents. The sensors serve as feedback elements between the output and pulse control circuitry providing accurate regulation of switch mode power supplies.

### Features

- Fully encapsulated for optimal PC board mounting
- Frequency range from 20kHz to 200kHz
- Primary current rating to 15 Amps
- Primary to secondary isolated to 2500 VAC
- Meets VDE norms
- Optimum performance over designated current and frequency range
- Competitive pricing due to high volume production
- Fully RoHS compliant

### Applications

- Isolated current feed-back signal in Switch Mode Power Supplies
- Motor current load/overload
- Lighting
- Switch Controls Ultra-sound current
- High resolution sonar current
- Isolated bi-directional current sensor with full wave bridge rectifier

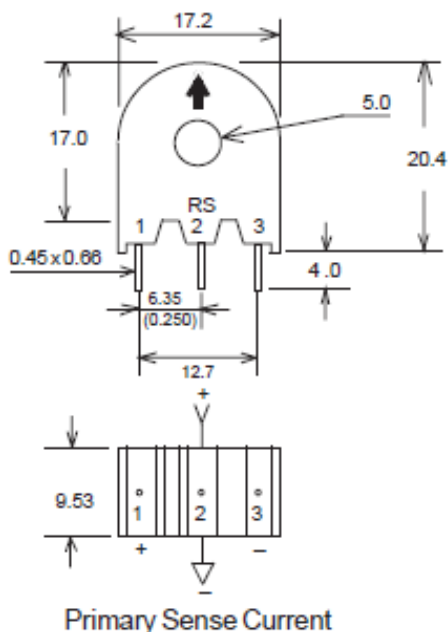
### Electrical Specifications at 25°C

Prim./Sec. Ratio	$L_{sec}$ (1) (mH Min)	$DCR_{sec}$ (Ohms Max.)	Sec. Term. (2) Resistance (Ohms Nom.)	$I_{sec}$ (3) Max.	Volt $\mu$ S (4) Max.
1:50	5	0.6	50	300mA	175

AS100

- Notes:**
- 1) Lsec: Secondary inductance tested at 10kHz and 10mV
  - 2) This nominal termination resistance value will yield approximately 1.0V of output for each amp of current in a single turn sense line. The output Voltage/Ampere of these devices can be increased or decreased linearly over a restricted temperature range by adjusting the terminating resistance.
  - 3)  $V_{\mu S} = R_t \times I_s \times 1/2F$   
 $R_t$  (Ohms): Recommended Terminating Resistance  
 $I_s$  (A): Secondary Current  
 $F$  (Hz): Frequency
  - 4) Operating Temperature Range: -40°C to +120°C
  - 5) Pin 2 is on Center-Tapped (CT) versions only

**Mechanical Dimensions**



**Schematic**

