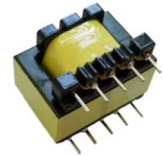


# CURRENT SENSE TRANSFORMER



## ACST-19 Series

### Features:

- Conform to Class B insulation System;
- Split Bobbin Design;
- Dielectric Strength 3000vrnis;
- Small Physical Package For Tight Configurations.

### Applications:

- Protection current transformer;
- Testing protection system;
- Electronical monitoring system.

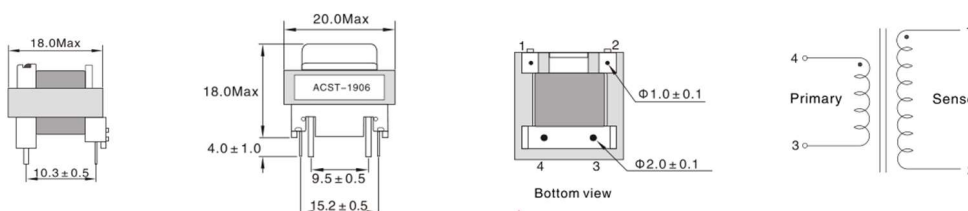
### Electrical Characteristics:

Part No	Turns Ratio	Current Range	Typical Output (mv/A)	Primary Resistance (μ Ohms) max	Sense Resistance (Ohms) ±10%	Sense Inductance (H)±30%	Primary Sense Frequency (Hz)
ACST-1901	1/50	1-30A	32	800	0.198	0.008	50-200
ACST-1902	1/100	1-30A	64	800	0.785	0.025	50-200
ACST-1903	1/150	1-30A	90	800	1.7	0.06	50-200
ACST-1904	1/200	1-30A	120	800	3.2	0.12	50-200
ACST-1905	1/300	1-30A	140	800	7.4	0.27	50-200
ACST-1906	1/500	1-30A	110	800	20	0.73	50-200
ACST-1907	1/1000	1-30A	60	800	79	2.4	50-200
ACST-1908	1/1500	1-30A	45	800	220	5.2	50-200

### Technical Information:

- Terminal Leads (1A,2A)Strip Enamel Coating;
- Typical Output Test Condition: Input 10A/50Hz,60ohm Load;
- Sense inductance Test Condition:100Hz/1V;
- Creepage Distance Between Primary And Sense is More Than Smm,But The Creepage Distance Can Be Changed To 8mm For Special Requirement;
- Operating temperature: Primary Current 0.4 to 30A -40°C to 70°C;  
Primary Current Range 0.4 to 20A -40°C to 85°C
- Storage temperature: -40°C to 85°C.

### Mechanical Dimensions & Polarity Indication:



# CURRENT SENSE TRANSFORMER

## ACST014 Series



### Electrical Characteristics:

Model Number	Current ratio	Accuracy	Linearity	Output @ 50/60Hz
ACST014-681	680:1	±2%	<1%	2.2Vrms
ACST014-102	1000:1	±2%	<1%	3.2Vrms
ACST014-152	1500:1	±2%	<1%	4.7Vrms
ACST014-252	2500:1	±2%	<1%	7.9Vrms
ACST014A-681	680:1	±5%	<5%	2.2Vrms
ACST014A-102	1000:1	±5%	<5%	3.2Vrms
ACST014A-152	1500:1	±5%	<5%	4.7Vrms
ACST014A-252	2500:1	±5%	<5%	7.9Vrms

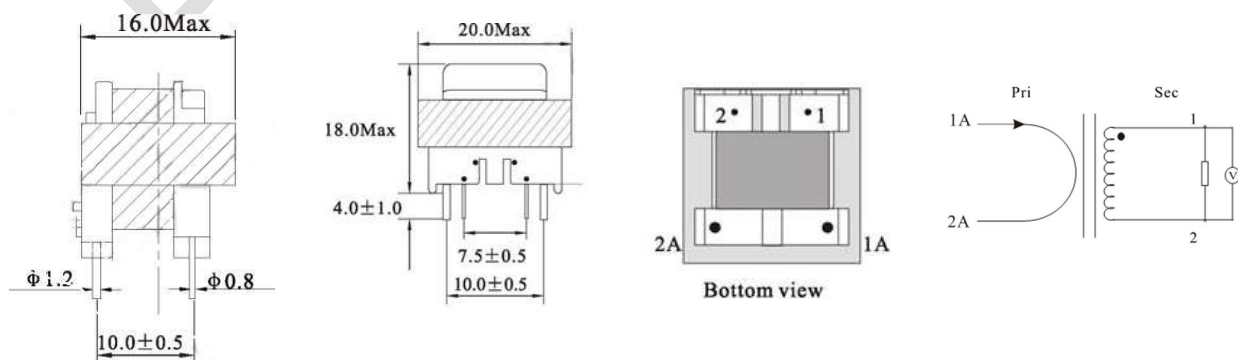
Hi-Pot: 2.5kVrms, 50/60Hz, 10S Winding to Winding

Hi-Pot: 1.25kVrms, 50/60Hz, 10S Winding to Core

Operating Temperature: -30~95°C

Storage Temperature: -50~125°C

### Mechanical Dimensions & Polarity Indication:



# CURRENT SENSE TRANSFORMER

## ACST02 Series



### Features:

- Fully encapsulated for optimal PC board mounting
- Frequency range from 20KHz to 200KHz
- Primary current rating to 30 Amps
- Primary to secondary isolated to 2500 or 4000VAC
- Meets VDE norms
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

### Applications:

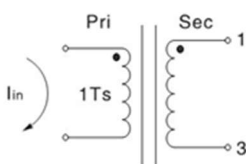
- Isolated current feed-back signal in Switch Mode Power Supplies
- Motor current load/overload
- Switch Controls Ultra-sound current
- Isolated bi-directional current sensor with full wave bridge rectifier
- Switch Controls Ultra-sound current
- Lighting
- High resolution sonar current

### Electrical Characteristics: @25°C

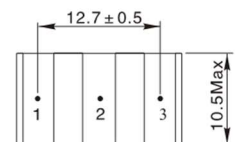
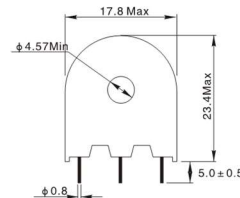
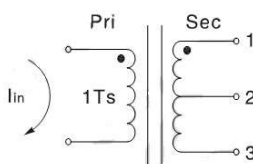
Part Number	Turns ratio	Sec Inductance (mH)Min.	Sec DCR (Ω)Max	Isec Max	Volt uS Max	winding
ACST02-500	1:50	5	0.6	300mA	175	A
ACST02-101	1:100	22	1.1	150mA	350	A
ACST02-201	1:200	89	4.5	75mA	700	A
ACST02-301	1:300	200	10.0	50mA	900	A
ACST02-501	1:500	560	25.0	30mA	1500	A
ACST02-751	1:750	1260	43.0	40mA	3750	A
ACST02-500CT	1:50CT	5	0.3/0.3	300mA	175	B
ACST02-101CT	1:100CT	22	0.55/0.55	150mA	350	B
ACST02-201CT	1:200CT	89	2.25/2.25	75mA	700	B
ACST02-301CT	1:300CT	200	10.0/5.0	50mA	900	B
ACST02-501CT	1:500CT	560	12.5/12.5	30mA	1500	B
ACST02-751CT	1:750CT	1260	21.5/21.5	40mA	3750	B

### Mechanical Dimensions & Polarity Indication:

Schematic A



Schematic B



1. For Prim./Sec. Ratios of 1:50 through 1:500, the Isec value corresponds to a maximum primary current of 15 Amp-turns rms while the Isec value for the ratio of 1:750 corresponds to a max. primary current of 30 Amp-turns rms.
2.  $VuS = R_{tsec} \times I_{sec}^2 \times 2F$
3.  $R_t$  (Ohms): Recommended Terminating Resistance  $I_s$  (A): Secondary Current  $F$  (Hz): Frequency.
4. Secondary inductance tested at 10KHz and 10mV for 1:50 through 1:500 Prim./Sec. Ratios and 1 KHz/1 OmV for Prim./Sec. ratio of 1:750.
4. Ambient temperature range -40°C to +120°C.
5. Electrical specifications at 25°C.
6. Pin # 2 is on Center-Tapped (CT) versions only.

# CURRENT SENSE TRANSFORMER

## ACST11 Series



### Features:

- Conform to Class B insulation System
- Dielectric Strength 3000vrms
- Small Physical Package For Tight Configurations
- Cost Effective
- UL approved Class B Insulation System
- Split Bobbin Design

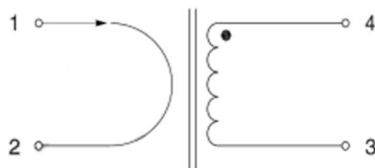
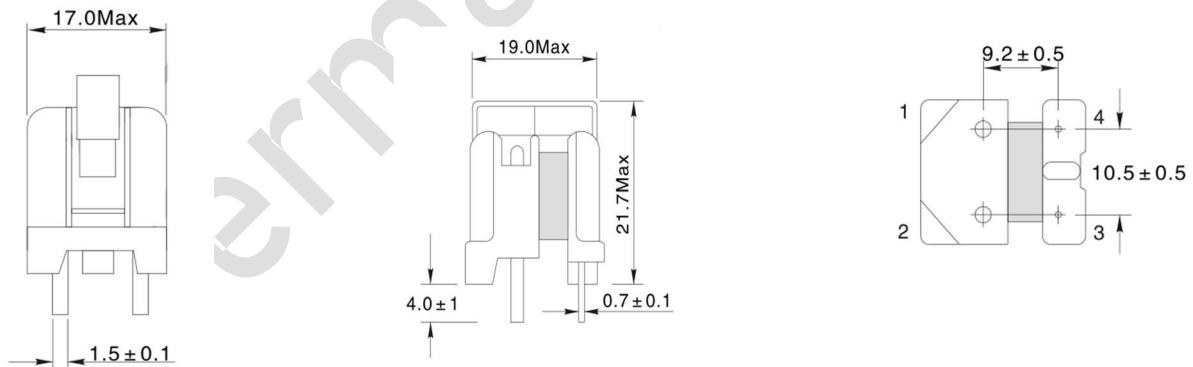
### Applications:

- Protection current transformer
- Testing protection system
- Electronical monitoring system

### Electrical Characteristics: @25°C

Part Number	Turns	Sec Inductance Ls (mH)Ref	DCR Rs (Ω)Max	Pri current (A)	Sec wire diameter (mm)
ACST11-101	100	40	1.1	30	0.25
ACST11-151	150	90	2.0	28	0.23
ACST11-201	200	160	3.5	27	0.20
ACST11-301	300	360	7.5	25	0.17

### Mechanical Dimensions & Polarity Indication:



- Operating temperature : -0°C to 85°C
- Storage temperature Component: -25°C to +85°C
- Secondary inductance test at 10kHz, 0.1 Vrms
- Measuring frequency at 10kHz to 1 MHz
- Electrical specifications at 25°C

# CURRENT SENSE TRANSFORMER

## ACST Series



### Features:

- Meets UL94-V0 Requirements
- Precise Current Sensing

### Applications:

- SMPS Control Circuits
- Current Sensing
- Switching power regulators
- Pulse current test

### Electrical Characteristics: @25°C

Part Number	SCHEMATIC	TURNS (±1%Max)	OCL (mH Min)	DCR (Ω Max)	ET (V-μ SEC-Min)
ACST-001	2A	50	5.0	0.7	150
ACST-002	2A	100	20.0	1.40	300
ACST-003	2A	200	60.0	4.50	600
ACST-004	2A	300	180.0	11.0	900
ACST-005	2B	50CT	5.0	0.7	150
ACST-006	2B	100CT	20.0	1.40	300
ACST-007	2B	200CT	80.0	4.50	600
ACST-008	2B	300CT	180.0	11.0	900

### Mechanical Dimensions & Polarity Indication:

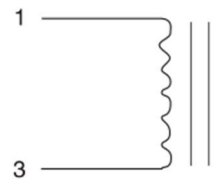
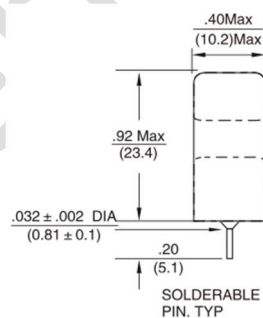
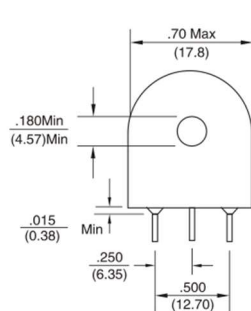


FIG. 2A

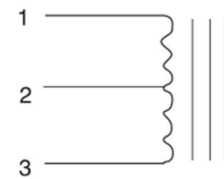


FIG. 2B

- All secondary measurements are in pins 1-3
- Soldering methods: Wave, Reflow
- Operating Temperature: 0°C to 85°C
- Storage Temperature: -25°C to 85°C

Note: All specifications subject to change without notice

- Working Frequency range: 10KHz~1MHz
- Testing Frequency: 10 KHz 0.1VRMS
- Hipot: 2000VAC, Primary to Secondary
- Maximum Sensing Current: 20A p-p

# CURRENT SENSE TRANSFORMER

## CT11 Series



### Features:

Current sense transformers provide output feedback to the pulse control circuitry allowing low-cost regulation of switch-mode power supplies

### Applications:

- switch-mode power supplies
- lighting
- switch controls

### Electrical Characteristics: @25°C

Part No.	Prim/Sec Ratio	Sec L (mH MIN)	Sec DCR (MAX)	V x T (MAX)
CT1151	1:50	4.7	0.5	175uVs
CT1152	1:100	18	2.0	350uVs
CT1153	1:200	76	4.5	700uVs
CT1154	1:500	470	16.0	1750uVs
CT1155	1:1000	1900	50.0	3500uVs

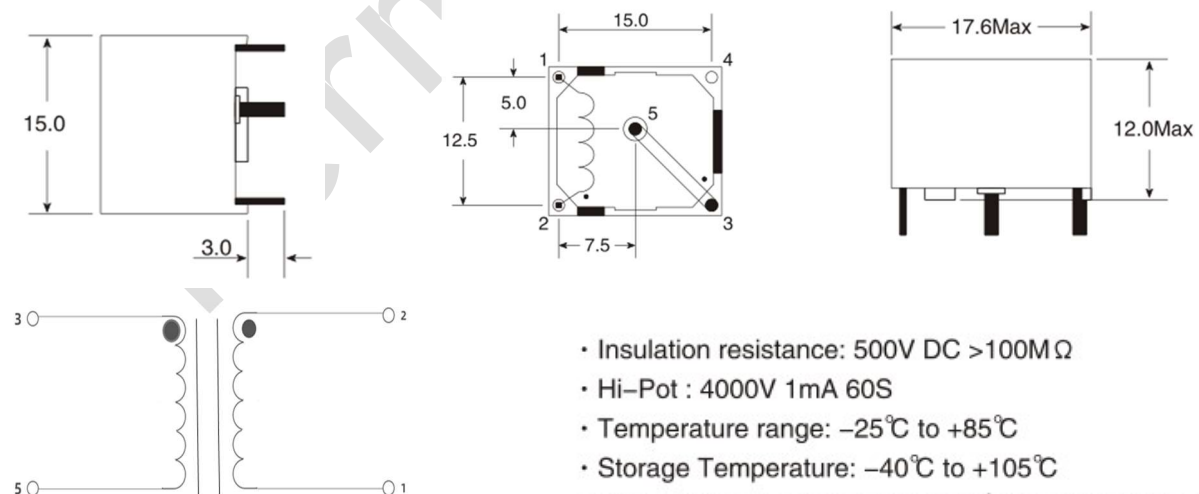
Operating temperature: -40°C to +125°C

#### NOTES:

L: Inductance:(2-1)tested at 10KHz&10Mv  
V x T : V=Rt x Is                      T =1/2F

Rt(Ω): Recommended terminating resistance  
Is(A): Sec. current                      F(Hz): Frequency

### Mechanical Dimensions & Polarity Indication:



- Insulation resistance: 500V DC >100MΩ
- Hi-Pot : 4000V 1mA 60S
- Temperature range: -25°C to +85°C
- Storage Temperature: -40°C to +105°C
- Resistance to soldering heat:260°C for 10 seconds
- Marking: Part number and date code

Pin3&5: φ 1.2mm

Pin1&2: φ 0.5mm

Unless otherwise specified,all tolerance are ± 0.5