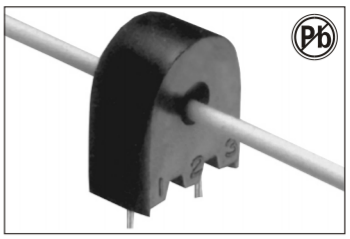
HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACST SETRIES



FEATURES:

- Meets UL94–V0 Requirements
- Precise Current Sensing

COMMON APPLICATIONS:

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

STANDARD SPECIFICATIONS @250C

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	80.0	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

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

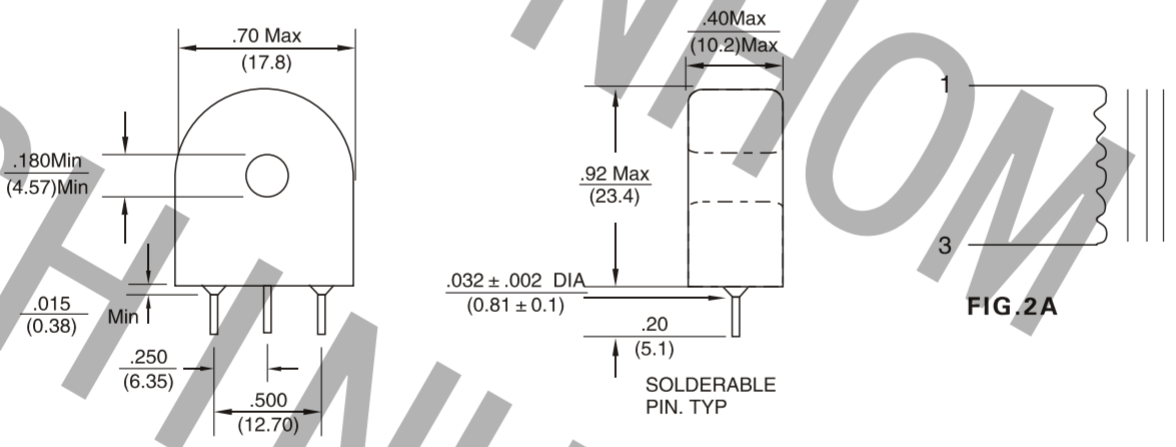


FIG.2A

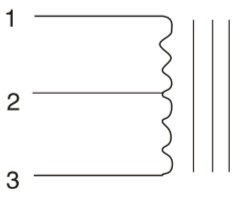


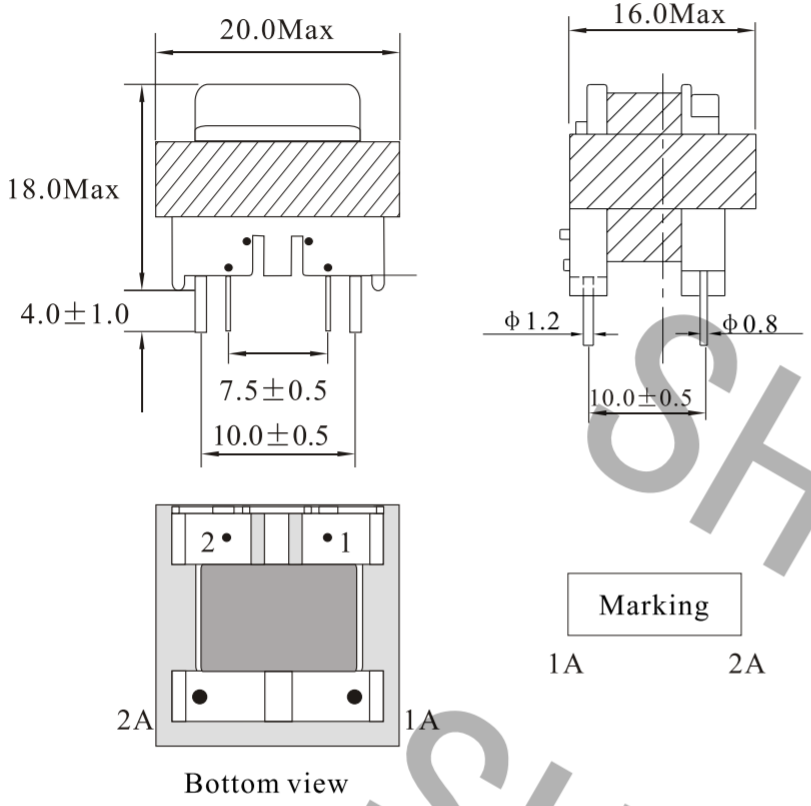
FIG.2B

- Working Frequency range:10KHz~1MHz
- Testing Frequency: 10 KHz 0.1VRMS
- Hipot:2000VAC,Primary to Secondary
- Maximum Sensing Current: 20A p–p
- All seconday measurements are in pins 1–3
- Soldering menthods: Wave,Reflow
- Operating Temperature:0℃ to 85℃
- Storage Temperature:–25℃ to 85℃

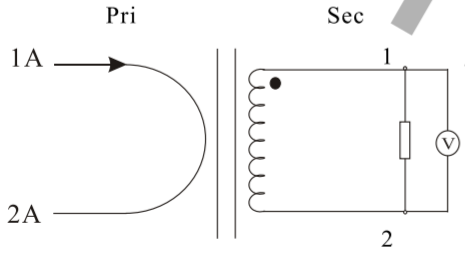
Note:All specifications subject to change without notice

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086–29–87851838 Fax:0086–29–87851840

1.PHYSICAL CHARACTERISTICS(mm)



2.ELECTRONICAL SCHEMATIC



3.ELECTRONICAL SPECIFICATIONS

Model Number	Current ratio	Accyracy	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℃

Storage Temperature: -50~125℃

NOTES:

Temp 20℃ 48%RH

RoHS Compliant

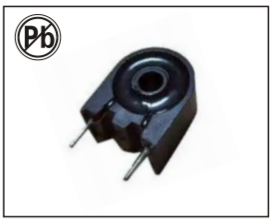
NAME:	Current Sensor		
CUSTOMER P/N:		DATE:	2013-01-08
SHINHOM P/N:	ACST014 Series	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

SHINHOM

SHAANXISHINHOM ENTERPRISE CO LTD

CURRENT SENSE TRANSFORMERS

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
- Optimum performance over designated current and frequency range
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

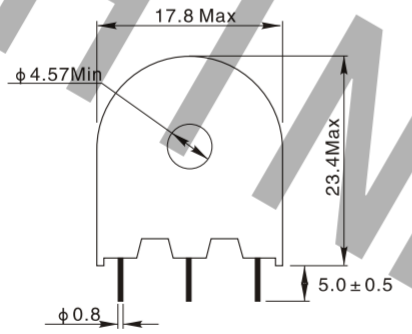
APPLICATIONS:

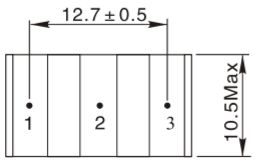
- Isolated current feed–back signal in Switch Mode Power Supplies
- Motor current load/overload
- Lighting
- Switch Controls Ultra–sound current
- High resolution sonar current
- Isolated bi–directional current sensor with full wave bridge rectifier

ELECTRICAL CHARACTERISTICS@25℃

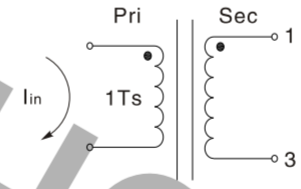
Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec Max ①	Volt uS Max ②	winding
ACST02–500	1:50	5	0.6	300mA	175	A
ACST02–101	1:100	22	1.1	150mA	350	A
ACST02–201	1:200	89	4.5	75mA	700	A
ACST02–301	1:300	200	10.0	50mA	900	A
ACST02–501	1:500	560	25.0	30mA	1500	A
ACST02–751	1:750	1260	43.0	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

PHYSICAL CHARACTERISTICS & WINDING

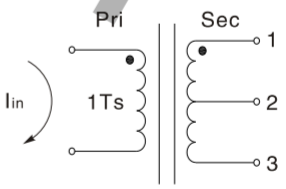




Schematic A



Schematic B



Notes

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 t x Is x1/2F
Rt (Ohms) : Recommended Terminating Resistance
Is (A) : Secondary Current
F (Hz) : Frequency

3.Secondary inductance tested at 10KHz and 10mV for 1:50 through 1:500 Prim./Sec. Ratios and 1KHz/10mV for Prim./Sec. ratio of 1:750

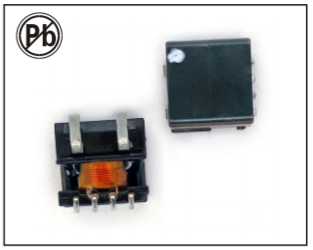
4.Ambient temperature range:–40℃ to +120℃.

5.Electrical specifications at 25℃.

6.Pin# 2 is on Center–Tapped (CT) versions only

SMT CURRENT SENSE TRANSFORMERS

ACSTEP11 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Small SMD package
- RoHS compatible
- Qualified to AEC–Q200
- Insulation distances in compliance with IEC61558–2–16

APPLCATIONS:

- Switch–mode power supplies
- Feedback control
- Overload sensing
- Load drop/shut–down detection
- Switching current detection in on–board DC/DC converter and chargers

ELECTRICAL CHARACTERISTICS:

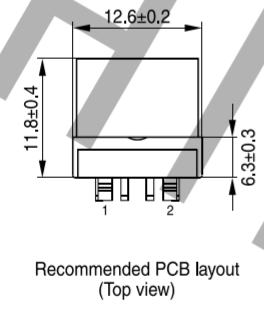
Part Number	Turns ratio	Inductance (mH) 20KHz,0.01V	Voltage–time product +120℃ (V.us) (1)	Cp (pF) 10KHz,1V	R(1–2) (mΩ) Max	R(4–5) (Ω) Max	Rt (2) (Ω) Typ.
ACSTEP11–50	1:50	1.2 Min	117	4	0.5	1.5	1.6
ACSTEP11–70	1:70	2.8 Min	164	4	0.5	2.1	2.3
ACSTEP11–100	1:100	6.5 Min	235	4	0.5	3.1	3.3
ACSTEP11–125	1:125	7.5 Min	294	4	0.5	4.1	4.1
ACSTEP11–180	1:180	18.0 Min	423	4	0.5	7.4	6.0
Small air gap ensures tighter tolerance of inductance for better sensing accuracy							
ACSTEP11–100A	1:100	2.5 ± 12%	235	4	0.5	3.1	3.3

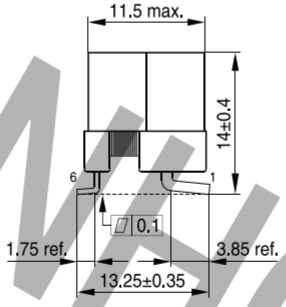
Notes:

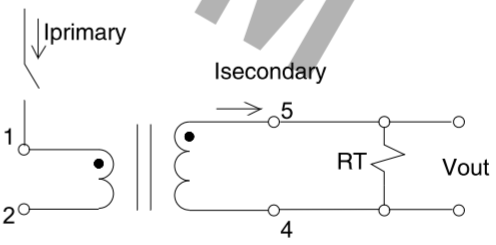
(1)The maximum volt–second rating limits the peak flux density to 220 mT when used in an unipolar drive application. For bipolar drive applications, a maximum volt–sec of two times is acceptable.

(2)Burden Resistor value is calculated by taking Vout as 1 V reference and with maximum input current flowing through the input (30 A).

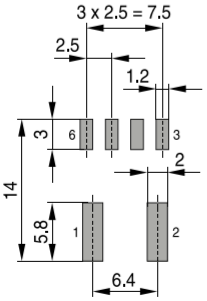
PHYSICAL CHARACTERISTICS & WINDING

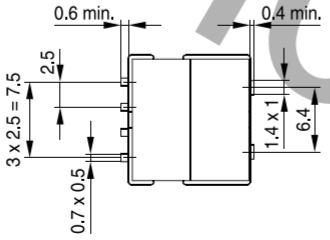






Recommended PCB layout
(Top view)





- Typical frequency range: 50~400KHz
- Inductance test frequency: 20KHz,0.01V
- High voltage test: 2500VAC,50Hz,1s (Pri to Sec, Core)
- The primary current of 30A causes approx +40℃ temperature rise
- Couple capacitance measured at 10kHz, 1V, +25℃
- Operating temperature range –40℃ to +150℃

SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086–29–87851838 Fax:0086–29–87851840

CURRENT SENSE TRANSFORMERS

ACST19 SERIES

FEATURES:

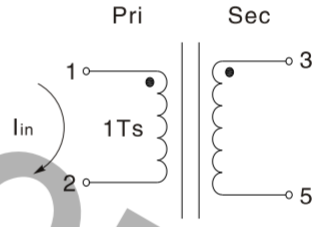
- Meets requirements of IEC 950 and VDE norms
  UL94V–0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction

ELECTRICAL CHARACTERISTICS@25℃

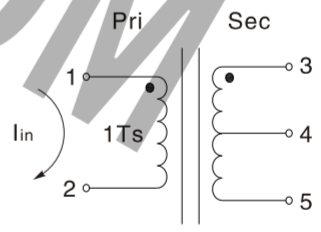
Part Number	Turns ratio	Sec inductance (3–5) (mH)Min.	Sec DCR (3–5) (Ω)Max	Isec ① Max	Volt uS ② Max	winding
ACST19–500	1:50	5	0.65	300mA	175	A
ACST19–101	1:100	20	1.3	150mA	350	A
ACST19–201	1:200	80	4.5	75mA	700	A
ACST19–500CT	1:50CT	5	0.65	300mA	175	B
ACST19–101CT	1:100CT	20	1.3	150mA	350	B
ACST19–201CT	1:200CT	80	4.5	75mA	700	B

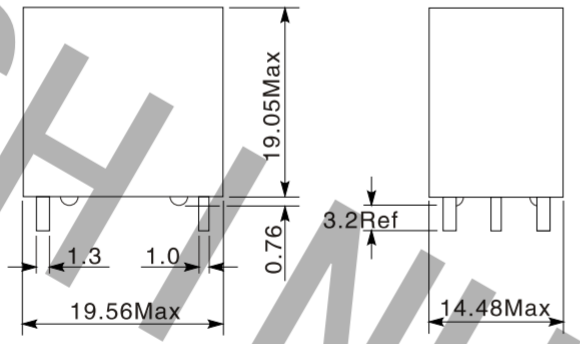
PHYSICAL CHARACTERISTICS & WINDING

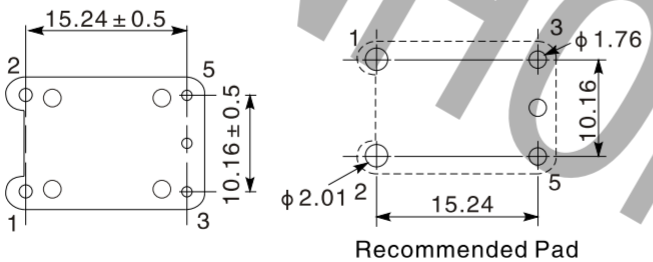
Schematic A



Schematic B







Recommended Pad

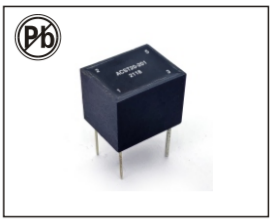
Notes

1.Isec value corresponds to a maximum primary current of 15 Amp–turns rms
2.VuS = R t x Is x1/2F
Rt (Ohms) : Recommended Terminating Resistance
Is (A) : Secondary Current
F (Hz) : Frequency
3.Secondary inductance tested at 10KHz and 10mV
4.Ambient temperature range:–40℃ to +120℃.
5.Electrical specifications at 25℃.
6.Pin# 4 is on Center–Tapped (CT) versions only

Note:All specifications subject to change without notice.

CURRENT SENSE TRANSFORMERS

ACST20 SERIES



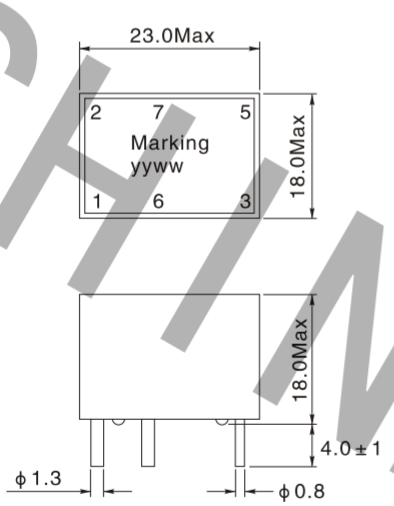
FEATURES:

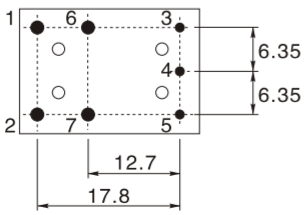
- Meets requirements of IEC 950 and VDE norms
  UL94V–0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction

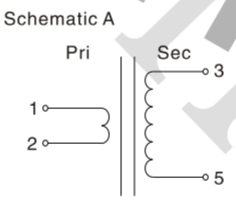
ELECTRICAL CHARACTERISTICS@25℃

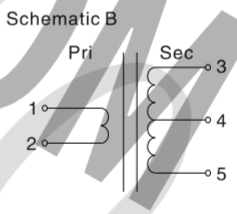
Part Number	Turns ratio	Sec inductance (mH)Min.	Sec DCR (Ω)Max	Isec Max ①	Volt uS Max ②	winding
ACST20–500	1:50	5	0.65	300mA	175	A
ACST20–101	1:100	20	1.3	150mA	350	A
ACST20–201	1:200	80	4.5	75mA	700	A
ACST20–500CT	1:50CT	5	0.65	300mA	175	B
ACST20–101CT	1:100CT	20	1.3	150mA	350	B
ACST20–201CT	1:200CT	80	4.5	75mA	700	B
ACST20A–500	1:1:50	5	0.65	300mA	175	C
ACST20A–101	1:1:100	20	1.3	150mA	350	C
ACST20A–201	1:1:200	80	4.5	75mA	700	C
ACST20A–500CT	1:1:50CT	5	0.65	300mA	175	D
ACST20A–101CT	1:1:100CT	20	1.3	150mA	350	D
ACST20A–201CT	1:1:200CT	80	4.5	75mA	700	D

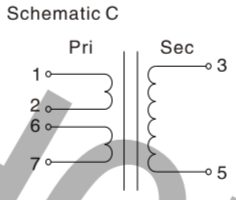
PHYSICAL CHARACTERISTICS & WINDING

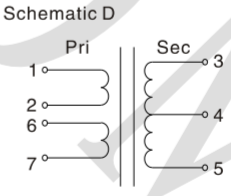












Notes

1.Isec value corresponds to a maximum primary current of 15 Amp–turns rms
2.VuS = R t x Is x1/2F
  Rt (Ohms) : Recommended Terminating Resistance
  Is (A) : Secondary Current
  F (Hz) : Frequency
3.Secondary inductance tested at 10KHz and 10mV
4.Ambient temperature range: –40℃ to +120℃.
5.Electrical specifications at 25℃.
6.Pin# 4 is on Center–Tapped (CT) versions only
7.Pin#6,#7 is on ACST20A versions only

CURRENT SENSE TRANSFORMERS

ACST19 SERIES

FEATURES:

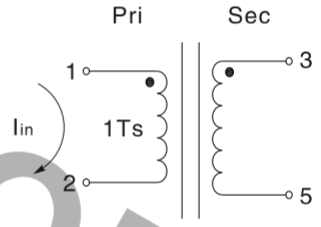
- Meets requirements of IEC 950 and VDE norms
  UL94V–0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Epoxy encapsulated construction

ELECTRICAL CHARACTERISTICS@25℃

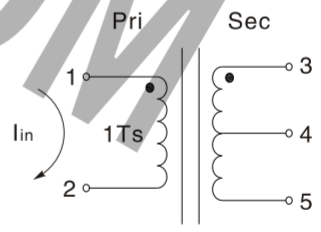
Part Number	Turns ratio	Sec inductance (3–5) (mH)Min.	Sec DCR (3–5) (Ω)Max	Isec ① Max	Volt uS ② Max	winding
ACST19–500	1:50	5	0.65	300mA	175	A
ACST19–101	1:100	20	1.3	150mA	350	A
ACST19–201	1:200	80	4.5	75mA	700	A
ACST19–500CT	1:50CT	5	0.65	300mA	175	B
ACST19–101CT	1:100CT	20	1.3	150mA	350	B
ACST19–201CT	1:200CT	80	4.5	75mA	700	B

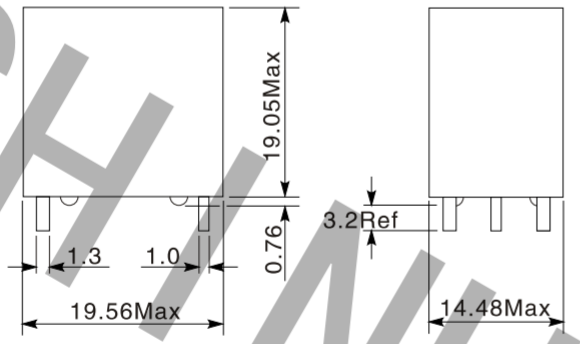
PHYSICAL CHARACTERISTICS & WINDING

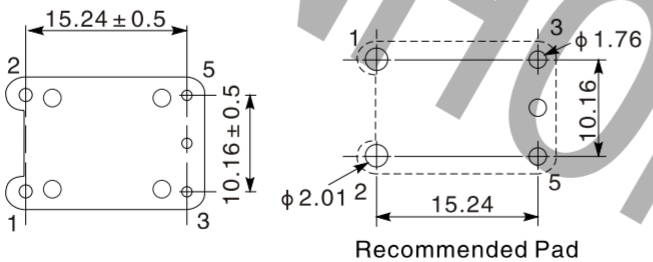
Schematic A



Schematic B





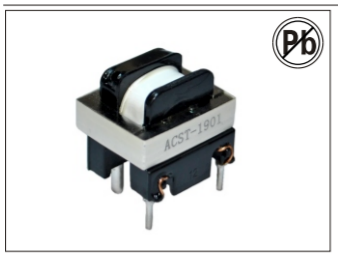


Recommended Pad

Notes

1.Isec value corresponds to a maximum primary current of 15 Amp–turns rms
2.VuS = R t x Is x1/2F
Rt (Ohms) : Recommended Terminating Resistance
Is (A) : Secondary Current
F (Hz) : Frequency
3.Secondary inductance tested at 10KHz and 10mV
4.Ambient temperature range:–40℃ to +120℃.
5.Electrical specifications at 25℃.
6.Pin# 4 is on Center–Tapped (CT) versions only

Note:All specifications subject to change without notice.



CURRENT SENSE TRANSFORMER
ACST–XXXX

FEATURES:

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

OPTIONS:

- Bulk packaging is standard
- Custom design available

COMMON APPLICATIONS:

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

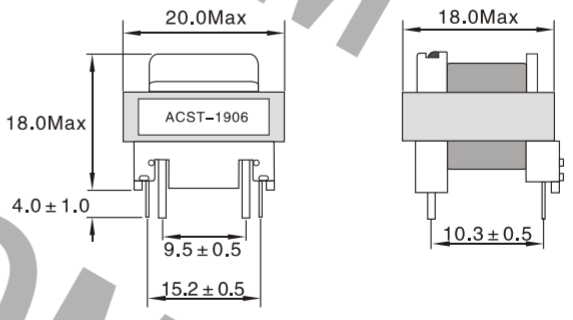
ELECTRICAL CHARACTERISTICS

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 Frenquency (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

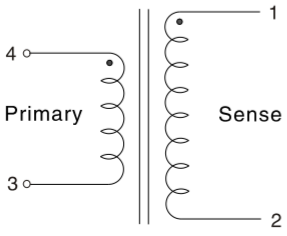
TECHNICAL INFORMATION

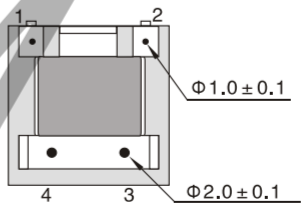
- Terminal Leads (1A,2A)Strip Enamel Coating
- Typical Output Test Condition: Input 10A/50Hz,60Ohm Load
- Sense inductance Test Condition:100Hz/1V
- Creepage Distance Between Primary And Sense is More Than 5mm,But The Creepage Distance Can Be Changed To 8mm For Special Requirement
- Operating temperature: Primary Current 0.4 to 30A –40℃to 70℃, Primary Current Range 0.4 to 20A –40℃ to 85℃
- Storage temperature:–40℃ to 85℃

MECHANICAL DIMENSIONS



POLARITY INDICATION





Bottom view

Note: All dimensions in mm
Unless otherwise specified all tolerances are ± 0.3mm.

THROUGH–HOLE CURRENT SENSOR TRANSORMER

ACST010–013 SERIES

FEATURES:

- Low profile,directly to PCB.
- PBT 94V0 Case
  burn–resistant epoxy resin,stable.

COMMON APPLICATIONS:

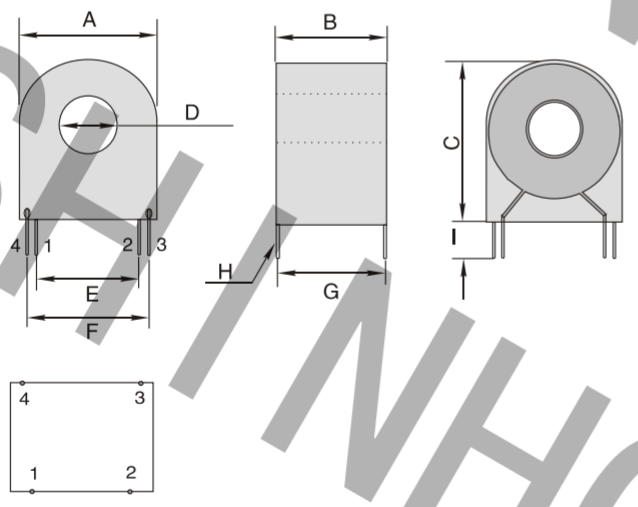
- AC energy Meter Power transducer RTU
- Protection current transformer
- AC kilowatt hour meter
- Electronical monitoring system

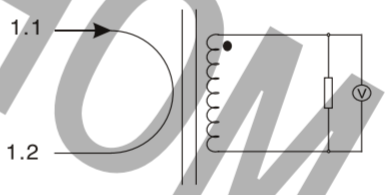
ELECTRICAL CHARACTERISTICS:

Performance&Specification for High Precision Current Test							Performance&Specification for Protection Precision Current Test						
Part Number	Rated primary current(A)	Max primary current(A)	Rated secondary current(mA)	Current ratio	Output ratio (Ω)	Accuracy class	Part Number	Rated primary current(A)	Max primary current(A)	Rated secondary current(mA)	Resistance load (Ohm)	Output ratio (Ω)	Accuracy class
ACST010A/5	5	40	2.5	2000:1	100	0.2,0.5	ACST010B	5	60	5	100	0.5	0.5,1.0
ACST010A/10	10	40	4	2500:1	100	0.2,0.5	ACST010B	10	60	10	100	1.0	0.5,1.0
ACST010A/20	20	40	10	2000:1	100	0.1,0.2,0.5	ACST010B	15	60	15	100	1.5	0.5,1.0
ACST011A/10	10	60	4	2500:1	100	0.1,0.2,0.5	ACST011B	20	60	20	100	2.0	0.5,1.0
ACST011A/20	20	60	10	2000:1	100	0.1,0.2,0.5	ACST011B	25	75	25	100	2.5	0.5,1.0
ACST011A/40	40	60	20	2000:1	100	0.1,0.2,0.5	ACST011B	30	75	30	100	3.0	0.5,1.0
ACST012A/60	60	120	24	2500:1	100	0.1,0.2,0.5	ACST012B	40	75	40	100	4.0	0.5,1.0
ACST012A/80	80	120	32	2500:1	100	0.1,0.2,0.5	ACST012B	50	125	50	100	5.0	0.5,1.0
ACST012A/120	120	120	48	2500:1	100	0.1,0.2,0.5	ACST012B	60	125	60	100	6.0	0.5,1.0
ACST013A/100	100	200	40	2500:1	100	0.1,0.2,0.5	ACST013B	75	125	75	100	7.5	0.5,1.0
ACST013A/100	100	200	50	2000:1	100	0.1,0.2,0.5	ACST013B	100	250	100	100	10.0	0.5,1.0
ACST013A/200	200	200	80	2500:1	100	0.1,0.2,0.5	ACST013B	150	250	150	100	15.0	0.5,1.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

DIMENSIONS IN:mm





- Working Frequency range 20Hz~400Hz
- Insulation resistance: 500V DC >100MΩ
- Hi–Pot : 4000V 1mA 60S
- Temperature range: –25℃ to +85℃
- Storage Temperature: –40℃℃ to +105℃℃
- Resistance to soldering heat:260℃ for 10 seconds
- Marking: Part number and date code

Note:All specifications subject to change without notice.

	A	B	C	D	E	F	G	H	I
ACST010	23.5	12.5	25.0	7.0	15.0	18.5	10.5	1.0	6.0
ACST011	26.0	17.0	29.0	9.0	15.0	18.5	15.0	1.0	6.0
ACST012	37.0	14.0	39.0	13.0	25.0	32.5	11.0	1.0	6.0
ACST013	49.0	20.0	54.0	18.5	29.5	37.0	17.5	1.0	6.0

Note:All specifications subject to change without notice.

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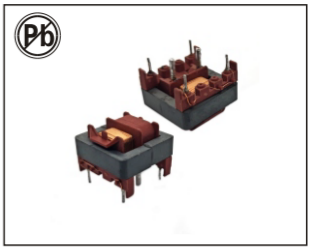
PCB MOUNT CURRENT SENSE TRANSFORMERS

ACSTE20 SERIES



FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- Operating frequency 10KHz to 1MHz
- 1500Vrms or 3000Vrms isolation voltage between windings
- Sensed Current – primary rated for 50 Amps

APPLICATIONS:

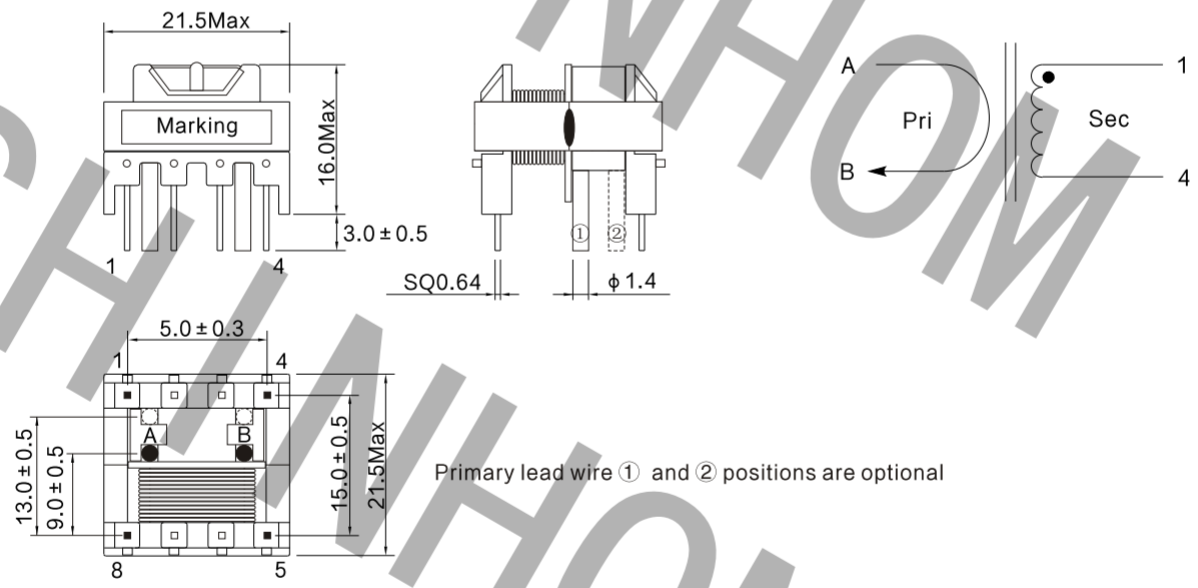
- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection

ELECTRICAL CHARACTERISTICS: @25℃

Part Number	Turns ratio	Sec. Inductance (mH) ± 30% 1.0KHz,1V	DCR Max		Rated input current (A) Max
			Pri(mΩ)	Sec(Ω)	
ACSTE20-500	1:50	5.0	1.0	1.0	50
ACSTE20-101	1:100	20.0	1.0	2.0	50
ACSTE20-201	1:200	80.0	1.0	4.3	50
ACSTE20-301	1:300	180.0	1.0	7.5	50
ACSTE20-501	1:500	500.0	1.0	15.0	50
ACSTE20-102	1:1000	2000.0	1.0	35.0	50

PHYSICAL CHARACTERISTICS & WINDING

Dimension: mm



NOTES

1.Operating temperature : −40℃ to 125℃
2.Storage temperature Component: −40℃ to +85℃
3.Inductance measured between secondary pins at 1.0kHz, 1Vrms, 0 Adc
4.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
5.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

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CURRENT SENSING TRANSFORMER

CT05 SETRIES

FEATURES:

- UL/C–UL recognized components
- 3000Vrms gate to drive winding test
- Useful operating frequency from 50kHz to 500kHz
- Most popular winding configurations

Electrical Specifications @ 25 ℃ Operating Temperature –40 ℃ to 130 ℃

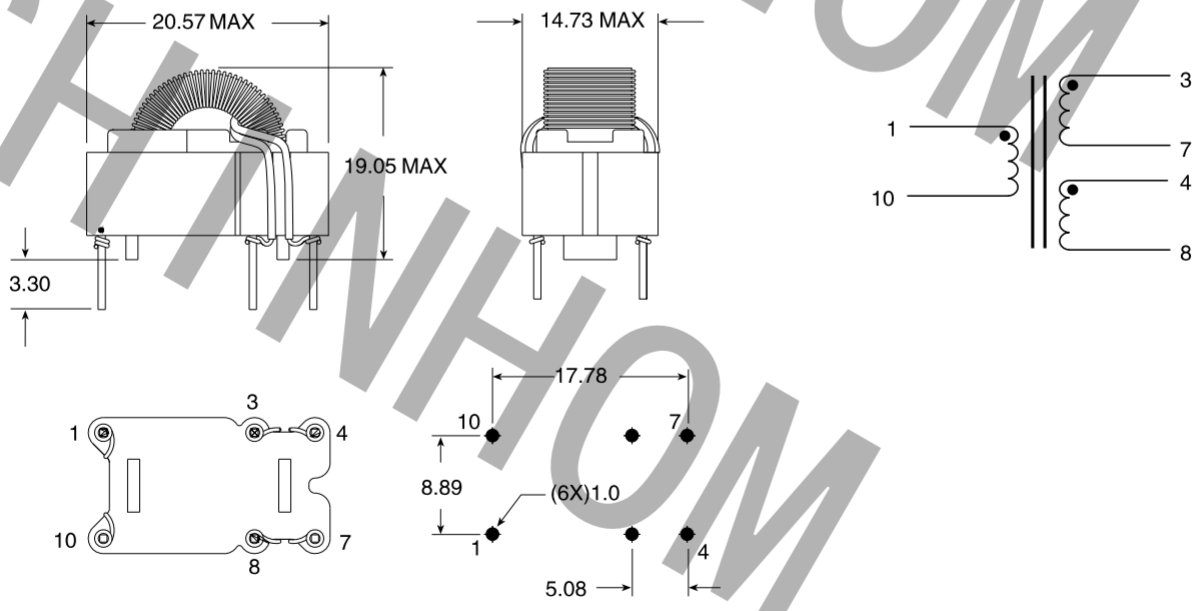
Part Number	Turns Ratio	Primary Inductance (1–10) (mH MIN)	DCR Pri (1–10)(Ω Max)	DCR Sec1 (3–7)(mΩ ±15%)	DCR Sec2 (4–8)(mΩ ±15%)	Hi–Pot (Pri–Sec) (Vrms)
CT0581	200:1:1	76	2.8	1.7	1.7	3000
CT0582	100:1:1	19	1.4	1.7	1.7	3000
CT0583	50:1:1	5	0.7	1.7	1.7	3000

Additional Specifications

Part Number	Reference Data				Calculation Data	
	RT	Ipk (Amps)	Droop (%)	Max Flux Density	Kb	Req (mΩ)
CT0581	200	34	1.00	2000	17.12	.9
CT0582	100	35	1.98	2000	68.49	.8
CT0583	15	36	1.19	2000	273.97	.75

NOTES:
1. These current sense transformers have two one turn primaries that can be used in parallel. The listed current ratings are for parallel connection.
2. The reference values are for an application using the termination resistor (Rt) and operating with unipolar waveform at 100kHz, 40% duty cycle. The estimated temperature rise is 55 ℃ .
3. The peak flux density should remain below 2100 Gauss to ensure that the core does not saturate. Use the following formula to calculate the peak flux density: Bpk = Kb * Ipk * Rt * don/(Ff * Freq. in kHz) where: Rt is the terminating resistor in the application and Ff is 1 for unipolar waveform and 2 for bipolar waveform
4. To calculate the droop: Droop Exponent (D) = Rt * don/(Lpri in mH * Freq. in kHz) %Droop = $(1-e^{-D}) * 100$
5. The temperature rise of the component is calculated based on the total core loss and copper loss:
   A. To calculate total copper loss (W): $P(cu) = Ipk^2 * Req * Ff * don$ where: Ff is 1 for unipolar waveform and 2 for bipolar waveform
   B. To calculate total core loss (W): $P(core) = 0.000073 * (Freq.\ in\ kHz)^{1.67} * (Bop\ in\ kG)^{2.532}$ where: Bop in kG = Kb * Ipk * Rt * don/(2000 * Freq. in kHz)
   C. To calculate temperature rise: Temperature Rise (C) = $60.18 * (Core\ Loss(W) + Copper\ Loss(W))^{.833}$

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



SUGGESTED PCB HOLE PATTERN

CURRENT SENSE TRANSFORMER

CT11XX SERIES

FEATURES:

* Current sense transformers provide output feedback to the pulse control circuitry allowing low–cost regulation of switch–mode power supplies
* 25A Rated primary current(40A Max)
* 500kHz maximum frequency

APPLICATIONS:

* switch–mode power supplies
* lighting
* switch controls

CONSTRUCTION:

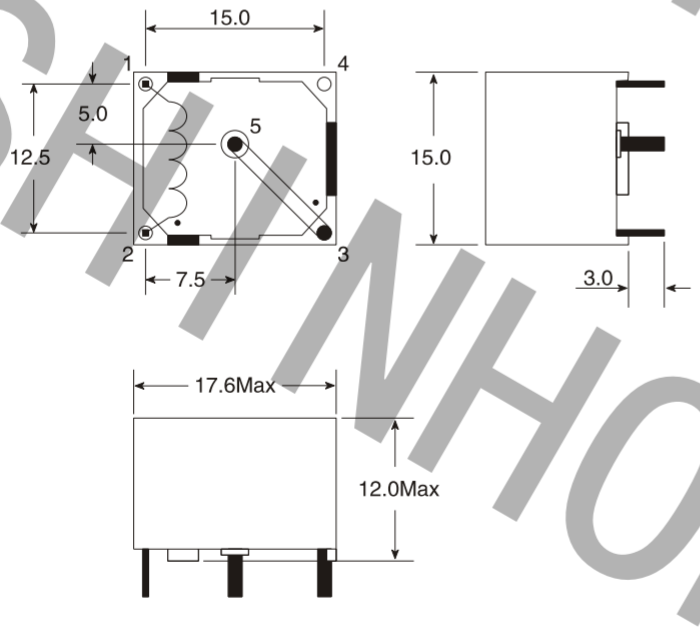
* Fully encapsulated construction

Electrical specification@25℃ Operating temperature: –40℃ to +125℃

Part No.	Prim/Sec Ratio	Sec L (mH MIN)	Sec DCR (MAX)	V x τ (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

NOTES:
L: Inductance:(2–1)tested at 10KHz&10mV
V x τ : V=Rt x Is τ =1/2F
Rt(Ω): Recommended terminating resistance
Is(A): Sec. current F(Hz): Frequency

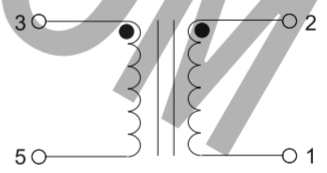
Mechanical



Pin3&5: ϕ 1.2mm
Pin1&2: ϕ 0.5mm
Unless otherwise specified,all tolerance are ± 0.5

Note:All specifications subject to change without notice.

Schematic



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

ZERO–PHASE CURRENT TRANSFORMERS

ZCT SETRIES

FEATURES:

The ZCT Series are compact molded–type, zero–phase current transformers ideal for improving the sensitivity, compactness and lightweight of electric shock prevention.

- High sensitivity
- Compact and lightweight
- Laminated iron core
- RoHS compliant.

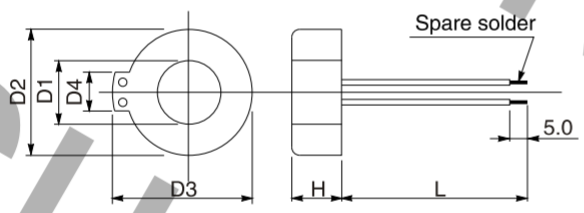
APPLICATIONS:

Typical applications include electric shock prevention from earth leakage breakers, short–circuit relays and ground fault circuit interrupters.

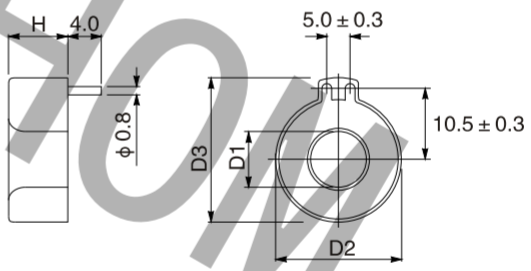
STANDARD SPECIFICATIONS @25℃

Part No.	Minimum Output Voltage (mV)	Temperature Characteristics (–20℃ to 80℃)	Maximum Overinput Characteristics (After DC5A Input)	Measurement Conditions
ZCT72	8	± 10%	10%	Frequency: 60Hz Load resistance: 300Ω Detection current: 22.5mA
ZCT89				
ZCT110				
ZCT165				
ZCT74P				

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



ZCT72 ZCT110
ZCT89 ZCT165



ZCT74P

Part No.	D1(Min)	D2(Max)	D3(Max)	D4	H(Max)	L(± 0.3)
ZCT72	7.2	19.3	22.4	5.0	8.3	45.0
ZCT89	8.9	21.8	24.7	5.0	8.3	80.0
ZCT110	11.0	28.0	30.5	6.0	10.5	67.0
ZCT165	16.5	32.0	34.5	7.0	10.8	67.0
ZCT74P	7.4	19.3	21.8	8.0	8.5	–––

Notes:

1. Don't drop or apply mechanical stress as it may change the performance characteristics.
2. Don't use the current transformers opened between secondary output terminals. Heat build–up in the magnetic core may occur, resulting in damages to the parts by melting of the coil.
3. If the ZCT Series will be used as a current transformer, please contact SHINHOM for more information.

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