

Current Sense Transformer

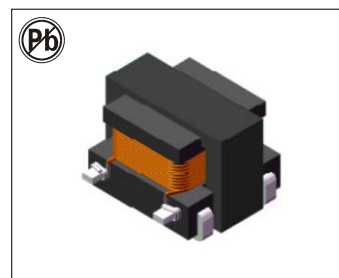
ACSTE4.4 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- 500Vrms, one minute isolation (hipot) between windings
- Sensed Current – primary rated for 7 Amps

APPLICATIONS:

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

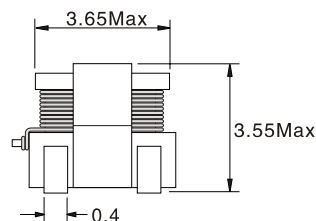
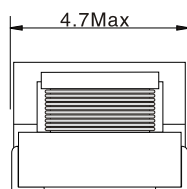


ELECTRICAL SPECIFICATIONS:

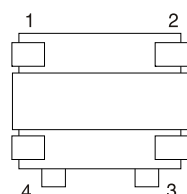
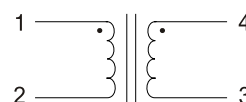
Part No.	Turns ratio	Ls (μ H, Min) 100KHz, 0.1V	Rp (Ω , Max)	Rs (Ω , Max)	Sensed Current (A)
ACSTE4.4-200	1:20	33	0.003	0.35	7
ACSTE4.4-300	1:30	74	0.003	0.8	7
ACSTE4.4-400	1:40	132	0.003	1.6	7
ACSTE4.4-500	1:50	205	0.003	2.5	7
ACSTE4.4-600	1:60	295	0.003	3.6	7
ACSTE4.4-700	1:70	400	0.003	4.6	7
ACSTE4.4-101	1:100	820	0.003	9.5	7
ACSTE4.4-121	1:125	1280	0.003	13.0	7
ACSTE4.4-151	1:150	1800	0.003	21.0	7

MECHANICAL:

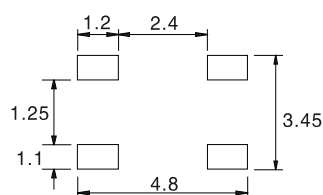
Unit:mm



Schematic



Bottom view



Recommended PCB layout

NOTES

- 1.Primary current of 7 A causes less than 35°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- 2.Operating temperature : -40°C to 125°C
- 3.Storage temperature Component: -40°C to +125°C
- 4.Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- 5.Measuring Frequency: @50KHz to 1MHz
- 6.Electrical specifications at 25°C
- 7.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
- 8.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

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

Current Sense Transformer

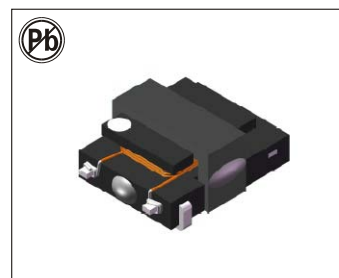
ACSTE4.6 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Very small package
- 500Vrms, one minute isolation (hipot) between windings
- Sensed Current – primary rated for 20 Amps

APPLICATIONS:

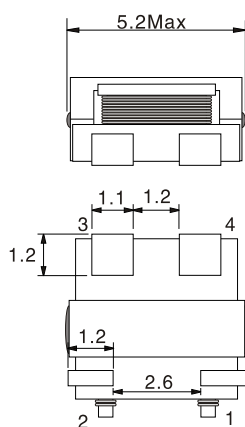
- Switching power supplies
- Feedback control
- Overload sensing
- Load drop/Shut down detection



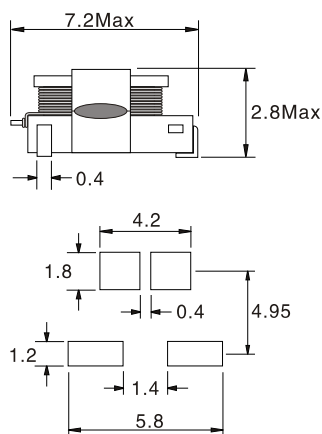
ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	Ls (μ H, Min) 100KHz, 0.1V	Rp (Ω , Max)	Rs (Ω , Max)	Sensed Current (A)
ACSTE4.6-200	1:20	53	0.0015	0.42	9
ACSTE4.6-500	1:50	333	0.0015	2.76	9
ACSTE4.6-700	1:70	652	0.0015	5.04	9
ACSTE4.6-101	1:100	1330	0.0015	10.68	9
ACSTE4.6-151	1:150	2993	0.0015	22.30	9

MECHANICAL: Unit:mm

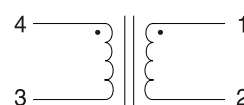


Bottom view



Recommended PCB layout

Schematic



NOTES

1. Primary current of 9 A causes less than 35°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
2. Operating temperature : -40°C to 125°C
3. Storage temperature Component: -40°C to +125°C
4. Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
5. Measuring Frequency: @50KHz to 1MHz
6. Electrical specifications at 25°C
7. Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
8. DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

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Current Sense Transformer

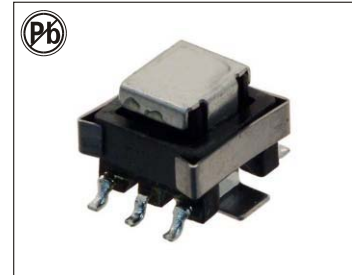
ACSTE5.0 SERIES

FEATURES:

- Very low DC resistance
- Different turns ratios
- Small package
- Other pinning on request

APPLICATIONS:

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

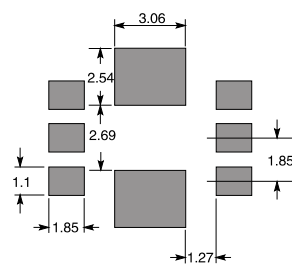
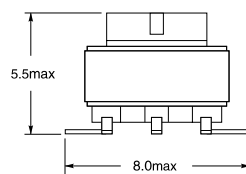
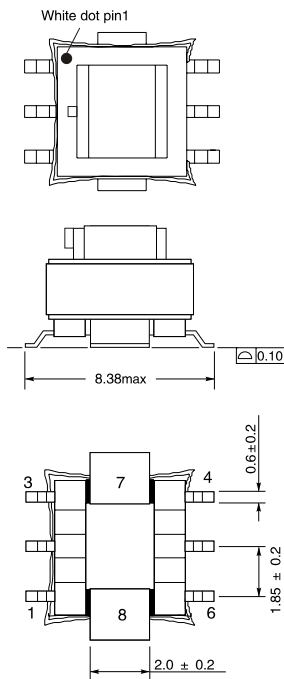


ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	Ls (μ H, Min) 100KHz, 0.1V	Rp (Ω , Max)	Rs (Ω , Max)	Sensed Current (A)
ACSTE5.0-200	1:20	80	0.0007	0.4	10
ACSTE5.0-300	1:30	180	0.0007	0.87	10
ACSTE5.0-400	1:40	320	0.0007	1.14	10
ACSTE5.0-500	1:50	500	0.0007	1.85	10
ACSTE5.0-600	1:60	730	0.0007	2.3	10
ACSTE5.0-700	1:70	980	0.0007	4.75	10
ACSTE5.0-101	1:100	2000	0.0007	5.5	10
ACSTE5.0-121	1:125	3000	0.0007	11.5	10

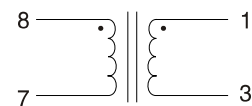
MECHANICAL:

Unit:mm



Recommended Land Pattern

Schematic



NOTES

1. Operating temperature : -40°C to 125°C
2. Storage temperature Component: -40°C to $+125^{\circ}\text{C}$
3. Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
4. Electrical specifications at 25°C
5. Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
6. DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

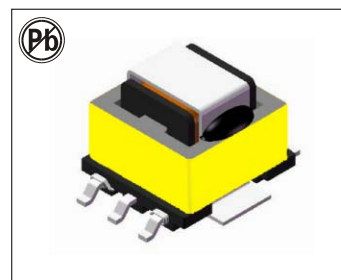
SHINHOM ELECTRONICS ENTERPRISE CO.,LTD. No.100YanTa Northern Road Zip:710054 Tel:0086-29-87851838 Fax:0086-29-87851840

Current Sense Transformer

ACSTE8.3 SERIES

APPLICATIONS:

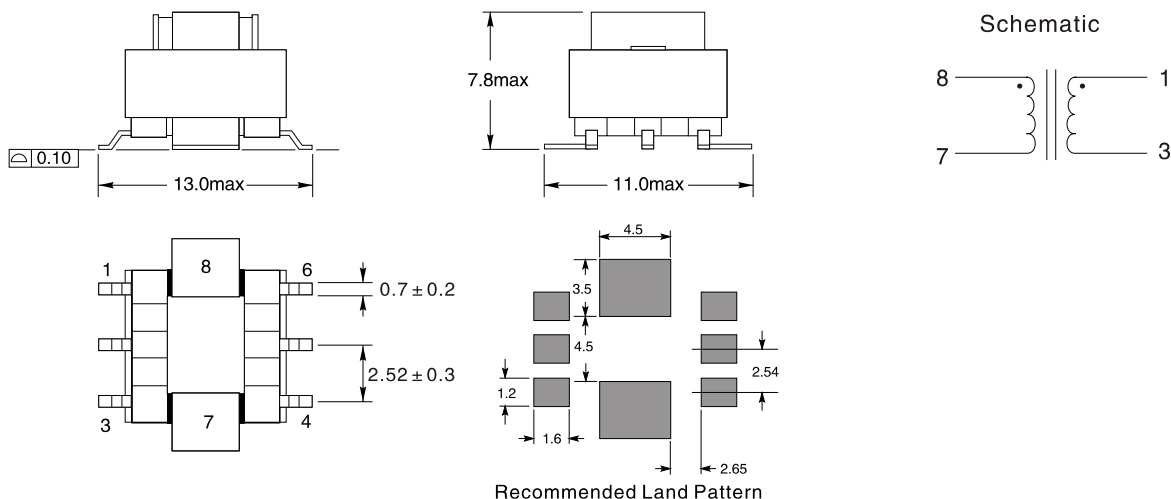
- Power supply for VTRs
- Small surface mount current sensors
- Sensed current up to 15A; Frequency range up to 1MHz
- Very low primary DC resistance
- 1.5KV AC/3mA / 1S isolation (hipot) between windings



ELECTRICAL SPECIFICATIONS:

Part No.	Turns ratio	Ls (mH, Min) 100KHz, 0.1V	Rp (Ω, Max)	Rs (Ω, Max)	Sensed Current (A)
ACSTE8.3-200	1:20	0.22	0.0039	0.21	15
ACSTE8.3-300	1:30	0.5	0.0039	0.32	15
ACSTE8.3-400	1:40	0.88	0.0039	0.50	15
ACSTE8.3-500	1:50	1.4	0.0039	0.65	15
ACSTE8.3-600	1:60	2.0	0.0039	0.81	15
ACSTE8.3-700	1:70	2.7	0.0039	1.0	15
ACSTE8.3-800	1:80	3.5	0.0039	1.3	15
ACSTE8.3-101	1:100	5.6	0.0039	2.0	15
ACSTE8.3-121	1:125	8.7	0.0039	5.2	15
ACSTE8.3-151	1:150	12.6	0.0039	6.5	15
ACSTE8.3-201	1:200	22.0	0.0039	8.0	15

MECHANICAL: Unit:mm



NOTES

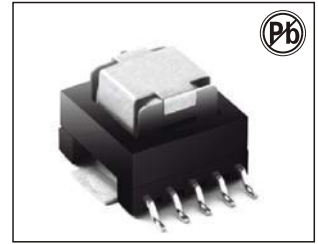
- 1.High Current – primary rated for 15 Amps
- 2.Operating temperature : -40°C to 125°C
- 3.Storage temperature Component: -40°C to +125°C
- 4.Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- 5.Operating Frequency Range up to 100KHz
- 6.Electrical specifications at 25°C
- 7.Inductance measured at 0Adc on HP 4284A LCR Meter or equivalent
- 8.DCR measured on Chroma 16502 micro-ohmmeter or equivalent

Specifications subject to change without notice

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SMT CURRENT SENSE TRANSFORMERS

ACSTE12 SERIES



FEATURES:

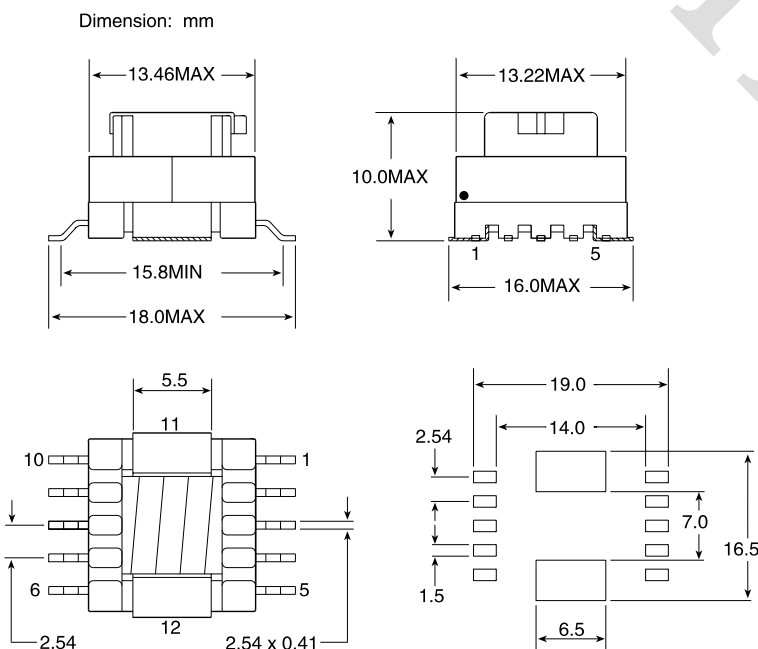
- Height: 10mm Max
- Footprint: 19.9mm X 15.0mm Max
- Frequency range: 50KHz to 500KHz
- Current rating: up to 35A
- Operating temperature: -40°C to +130°C

ELECTRICAL CHARACTERISTICS:

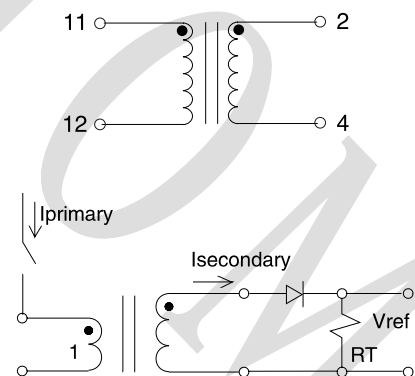
Part Number	Turns ratio	Sec. Inductance (mH) 10KHz,0.1V	DCR (mΩ)Max		Hi-Pot (Vrms)
			Pri	Sec	
ACSTE12-50	1:50	1.4 min.	0.42	700	500
ACSTE12-100	1:100	5.6 min.	0.42	1400	500
ACSTE12-200	1:200	22.4 min.	0.42	2900	500

- 1.The temperature of component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
- 2.The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.

PHYSICAL CHARACTERISTICS & WINDING



Unless otherwise specified, all tolerances are $\pm 0.25\text{mm}$



APPLICATION CIRCUIT

Weight..... 4.7g
Tray..... 100/tray
Tape&Reel..... 300/reel