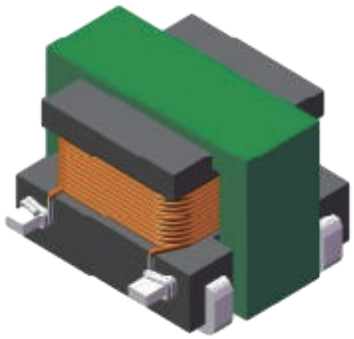
CONTENTS

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE4.2 SERIES



ELECTRICAL SPECIFICATION

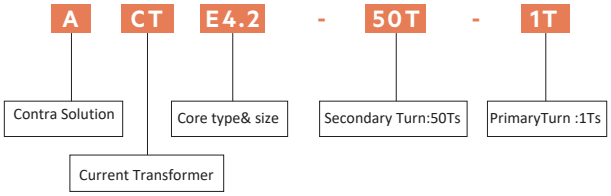
- Primary current of 7 A causes less than 35°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- Operating temperature: -40°C to +120°C
- Storage temperature Component: -40°C to +165°C
- Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- Inductance measured at OAdc on HP 4284A LCR Meter or equivalent
- DCR measured on Chroma 16502 microohmmeter or equivalent
- Electrical specifications at 25°C

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible
- 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

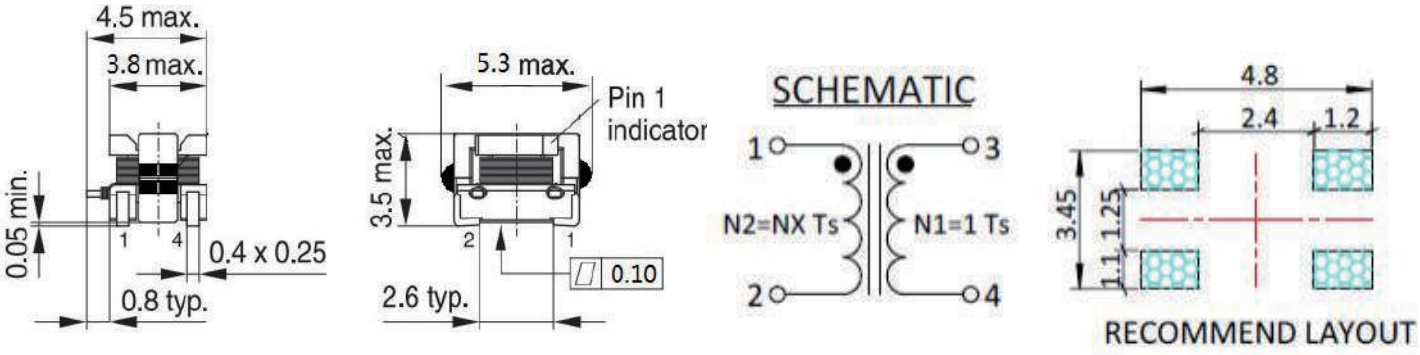


ELECTRICAL CHARACTERISTICS FORM

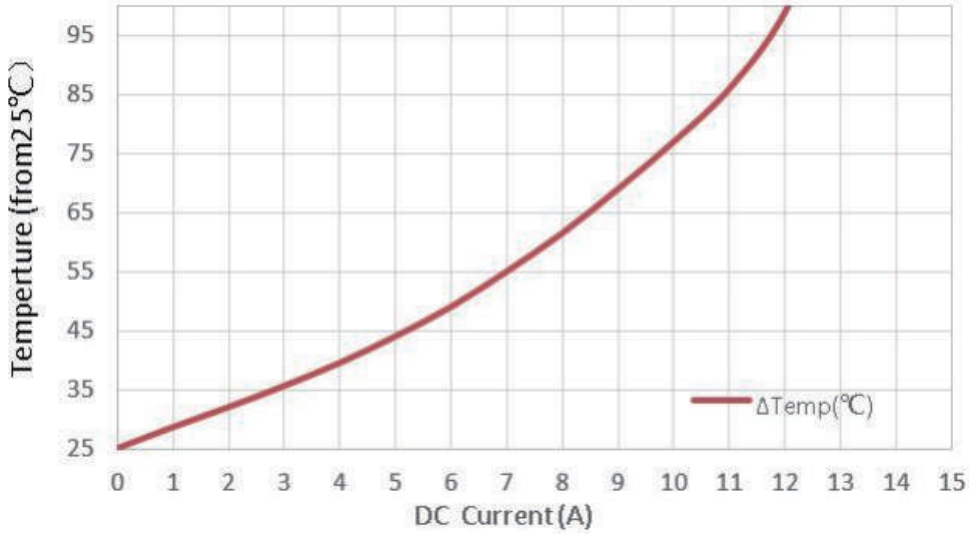
Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (uH)MIN	DCR(Ω) Sec Max	DCR(Ω) Pri Ref	Sensed Current(A) (Max)
ACTE4.2-20T-1T	20:1	33	0.35	0.003	7
ACTE4.2-30T-1T	30:1	74	0.80	0.003	7
ACTE4.2-40T-1T	40:1	132	1.60	0.003	7
ACTE4.2-50T-1T	50:1	205	2.50	0.003	7
ACTE4.2-60T-1T	60:1	295	3.60	0.003	7
ACTE4.2-70T-1T	70:1	400	4.60	0.003	7
ACTE4.2-100T-1T	100:1	820	9.50	0.003	7
ACTE4.2-125T-1T	125:1	1280	13.0	0.003	7
ACTE4.2-150T-1T	150:1	1840	21.0	0.003	7

ELECTRICAL INFORMATION

Dimension in mm



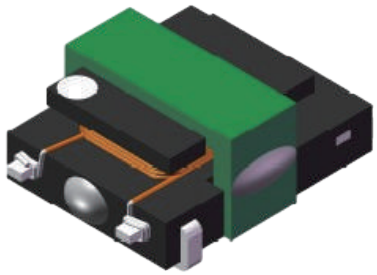
CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE4.2B SERIES



ELECTRICAL SPECIFICATION

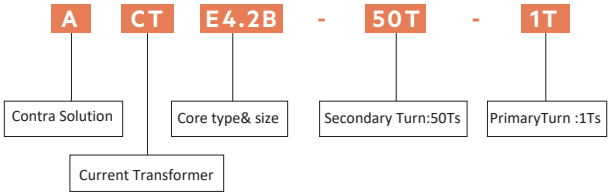
- Primary current of 9 A causes less than 40°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- Operating temperature: -40°C to +125°C
- Storage temperature Component: -40°C to +165°C
- Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc
- Inductance measured at OAdc on HP 4284A LCR Meter or equivalent
- DCR measured on Chroma 16502 microohmmeter or equivalent
- Electrical specifications at 25°C

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible
- 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

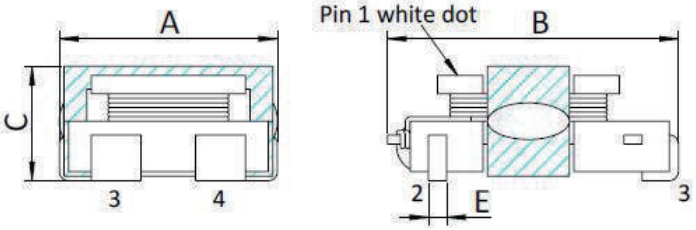


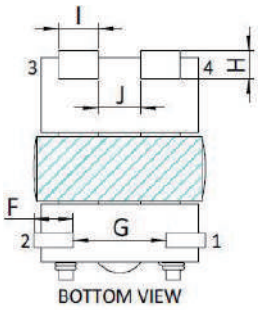
ELECTRICAL CHARACTERISTICS FORM

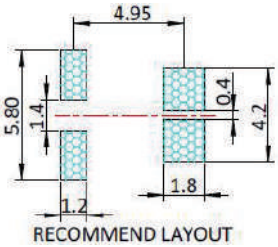
Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (mH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE4.2B-20T-1T	20:1	0.053	0.42	0.0015	9
ACTE4.2B-50T-1T	50:1	0.333	2.76	0.0015	9
ACTE4.2B-70T-1T	70:1	0.652	5.04	0.0015	9
ACTE4.2B-100T-1T	100:1	1.330	10.68	0.0015	9
ACTE4.2B-150T-1T	150:1	2.993	22.30	0.0015	9

ELECTRICAL INFORMATION

Dimension in mm



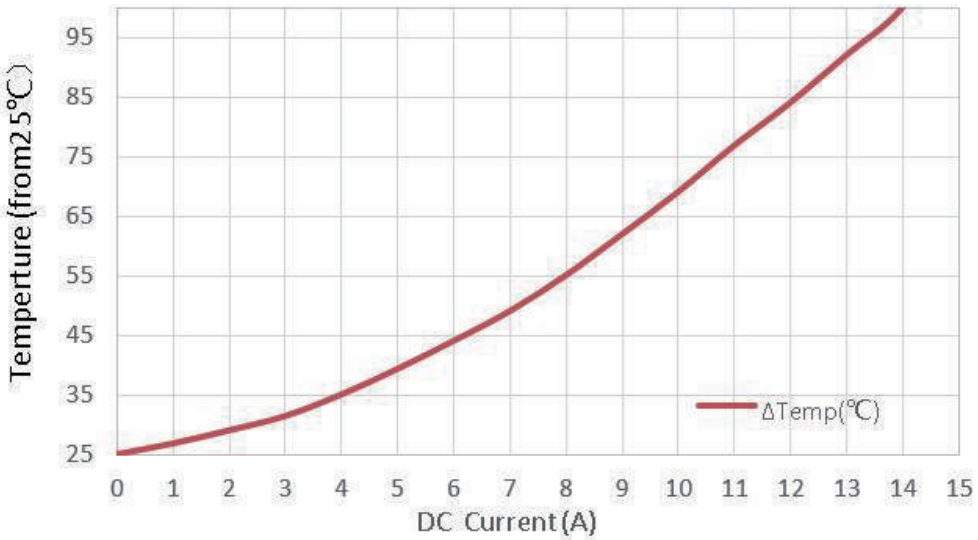




Item	A MAX.	B MAX.	C MAX.
ACTE4.2B	5.40	7.20	3.00

Item	E	F	G	H	I	J
ACTE4.2B	0.4	1.2	2.6	1.2	1.1	1.2

CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE5 SERIES

ELECTRICAL SPECIFICATION

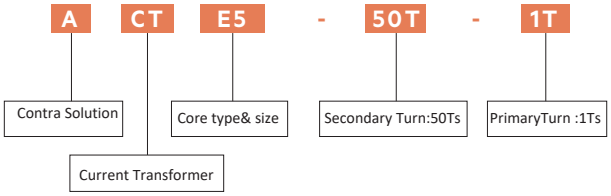
- Temperature Rise Current(Irms):The current when temperature of coil increases up to max.△T=40°C.(Ta=20°C)
- Operating temperature: -40°C to +125°C
- L: HP4284A PRECISION LCR METER
- DCR: CHENHWA 502 OHM METER
- Electrical specifications at 25°C

FEATURES

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

APPLICATIONS

- Switching power supplies
- feedback control
- overload sensing
- Load drop/shut down detection

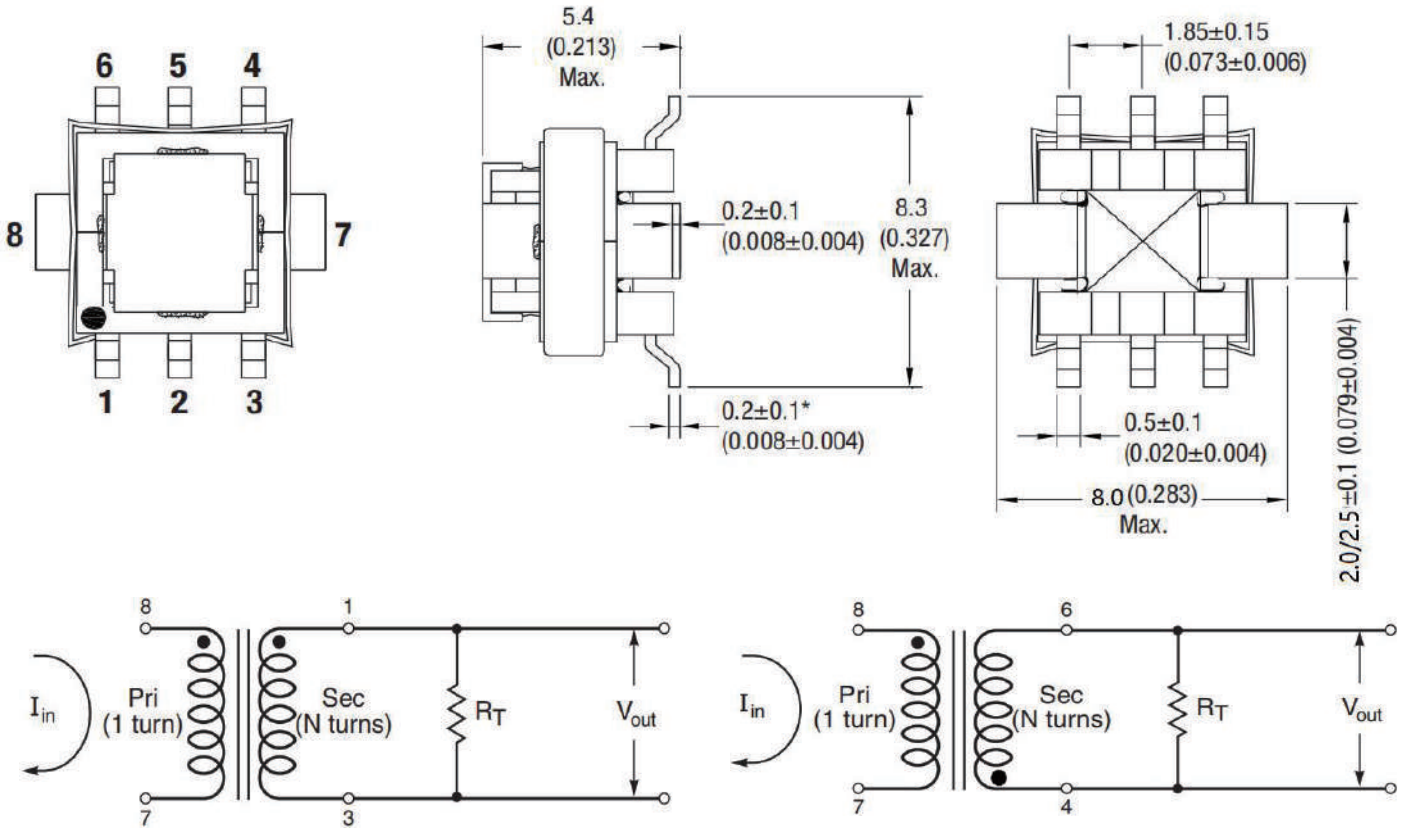


ELECTRICAL CHARACTERISTICS FORM

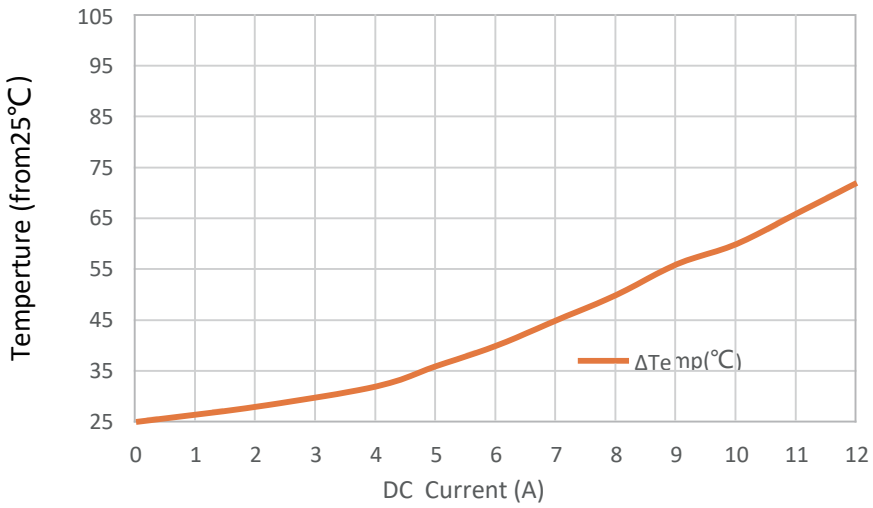
Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (uH)MIN	DCR(Ω) Sec Max	DCR(Ω) Pri Ref	Sensed Current(A) (Max)
ACTE5-20T-1T	20:1	80	0.40	0.0007	10/20
ACTE5-30T-1T	30:1	180	0.87	0.0007	10/20
ACTE5-40T-1T	40:1	320	1.14	0.0007	10/20
ACTE5-50T-1T	50:1	500	1.85	0.0007	10/20
ACTE5-60T-1T	60:1	730	2.30	0.0007	10/20
ACTE5-70T-1T	70:1	980	4.75	0.0007	10/20
ACTE5-100T-1T	100:1	2000	5.50	0.0007	10/20
ACTE5-125T-1T	125:1	3000	11.50	0.0007	10/20

ELECTRICAL INFORMATION

Dimension in mm



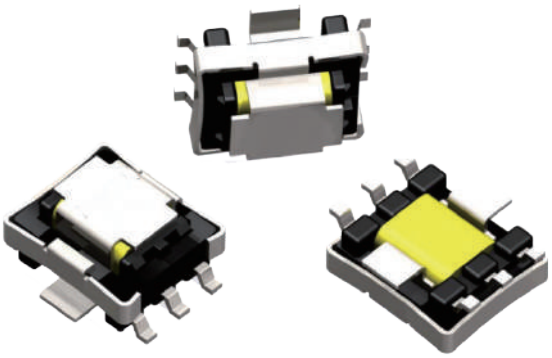
CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE6 SERIES



ELECTRICAL SPECIFICATION

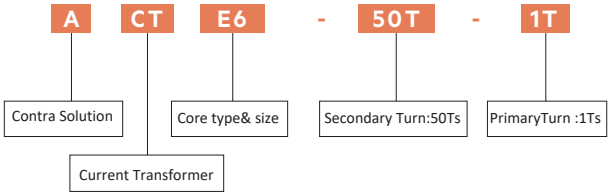
- Temperature Rise Current(Irms):The current when temperature of coil increases up to max.△T=40°C.(Ta=20°C)
- Operating temperature: -40°C to +125°C
- L: HP4284A PRECISION LCR METER
- DCR: CHENHWA 502 OHM METER
- Electrical specifications at 25°C

FEATURES

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

APPLICATIONS

- Switching power supplies
- feedback control
- overload sensing
- Load drop/shut down detection

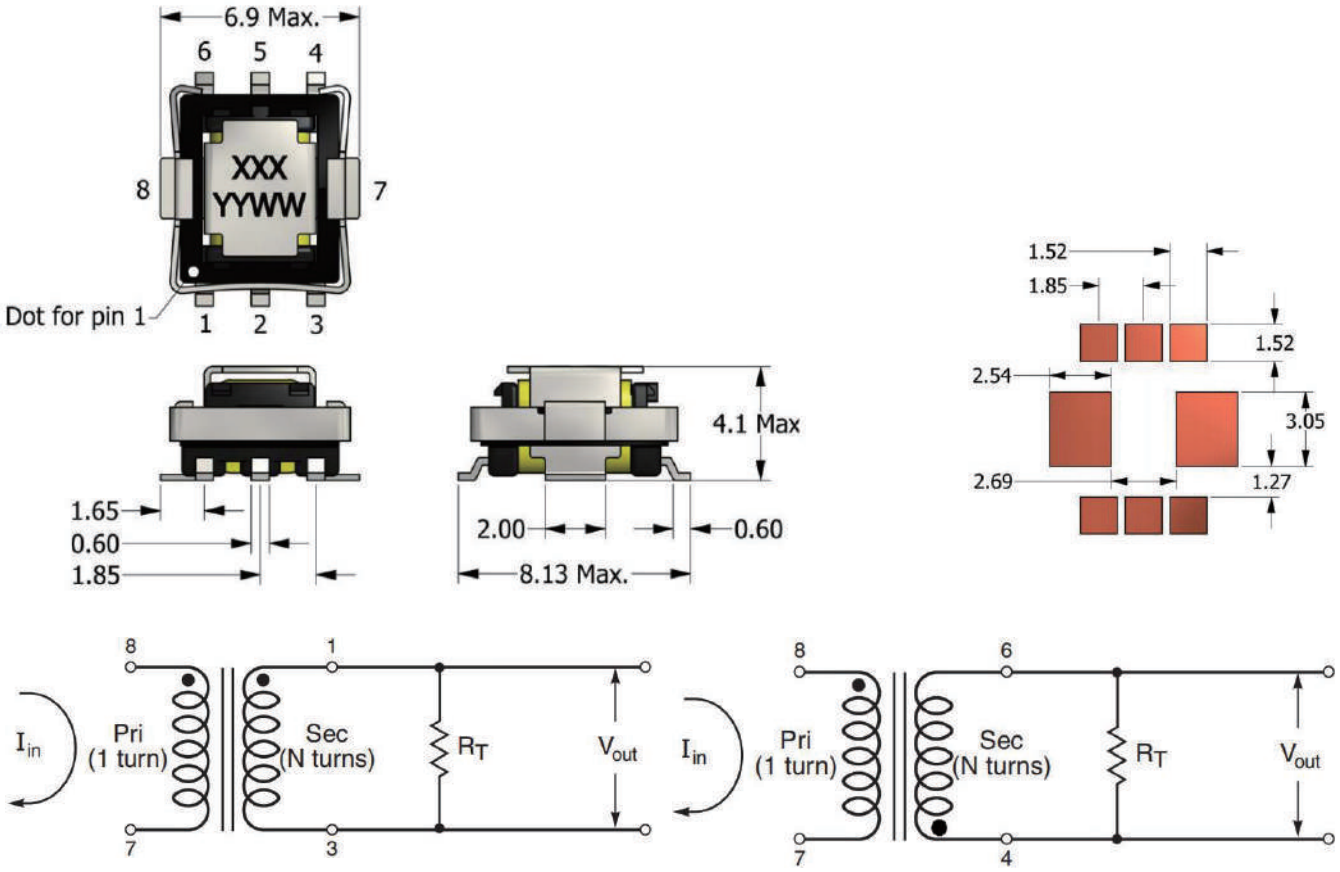


ELECTRICAL CHARACTERISTICS FORM

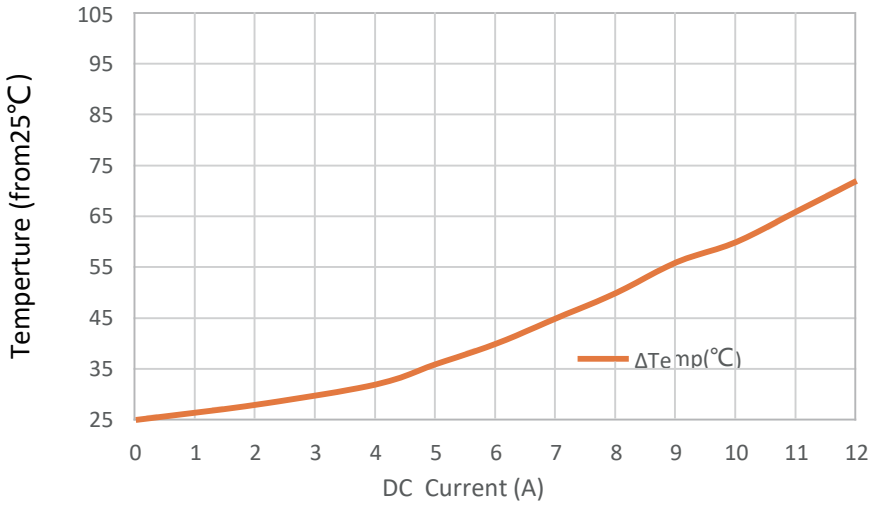
Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (uH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE6-50T-1T	50:1	352	0.90	0.0007	20
ACTE6-70T-1T	70:1	690	1.70	0.0007	20
ACTE6-100T-1T	100:1	1400	3.00	0.0007	20
ACTE6-125T-1T	125:1	2200	5.00	0.0007	20

ELECTRICAL INFORMATION

Dimension in mm



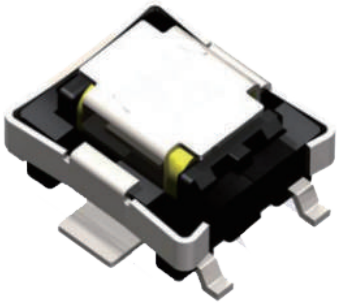
CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE6B SERIES



ELECTRICAL SPECIFICATION

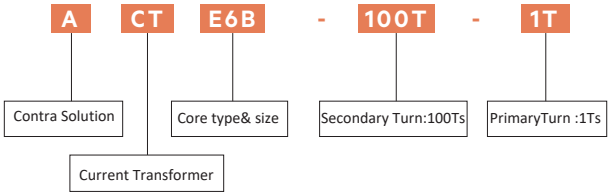
- Temperature Rise Current(Irms):The current when temperature of coil increases up to max.△T=40°C.(Ta=20°C)
- Operating temperature: -40°C to +125°C
- L: HP4284A PRECISION LCR METER
- DCR: CHENHWA 502 OHM METER
- Electrical specifications at 25°C

FEATURES

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

APPLICATIONS

- Switching power supplies
- feedback control
- overload sensing
- Load drop/shut down detection

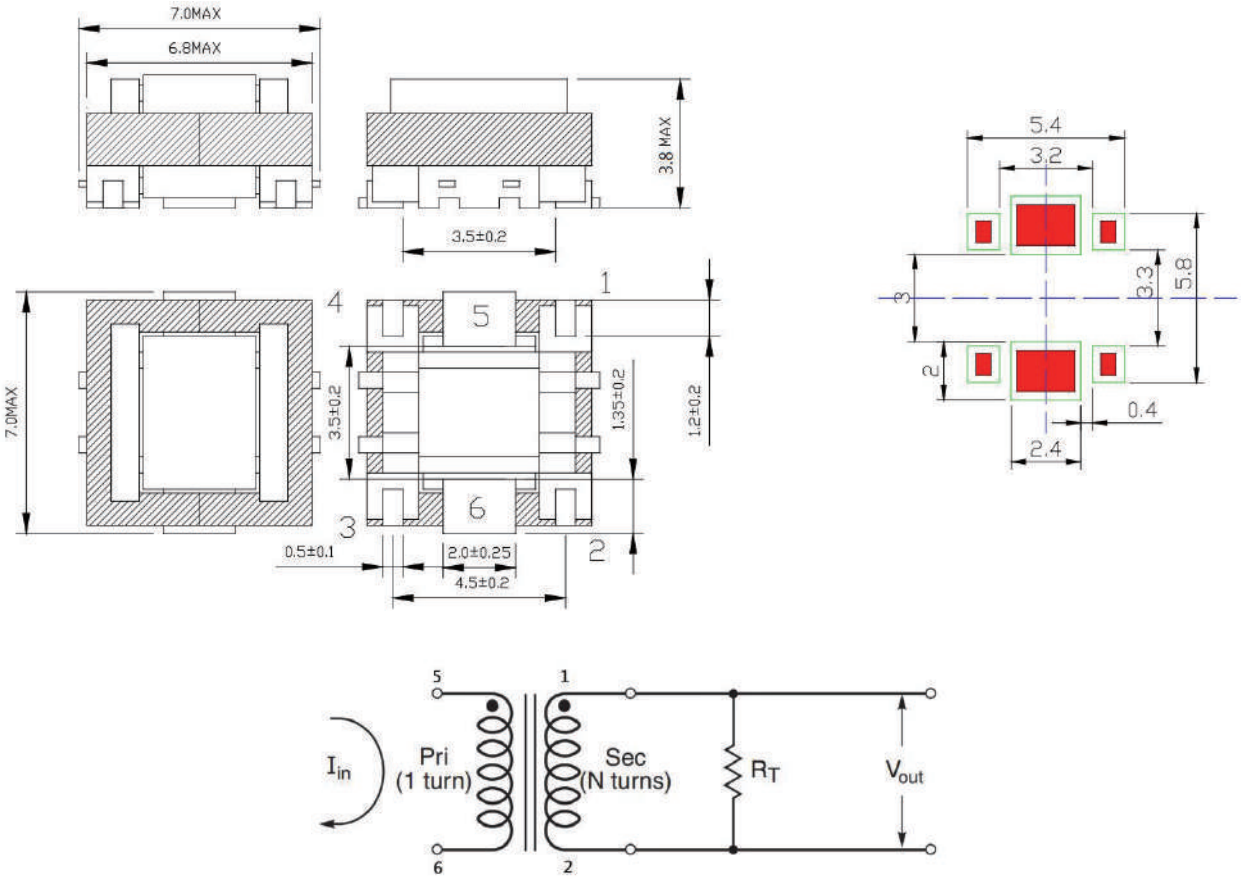


ELECTRICAL CHARACTERISTICS FORM

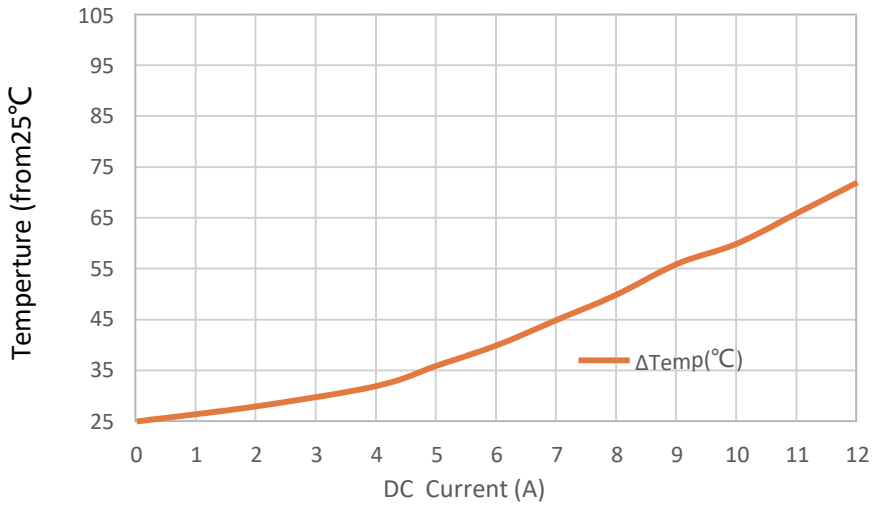
Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (uH)MIN	DCR(Ω) Sec Max	DCR(Ω) Pri Ref	Sensed Current(A) (Max)
ACTE6B-100T-1T	100:1	800	0.90	0.0007	10

ELECTRICAL INFORMATION

Dimension in mm



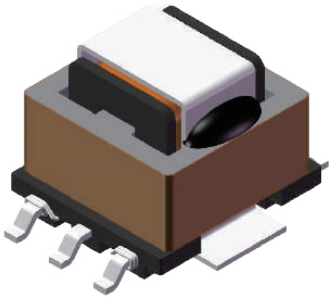
CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE8A SERIES



ELECTRICAL SPECIFICATION

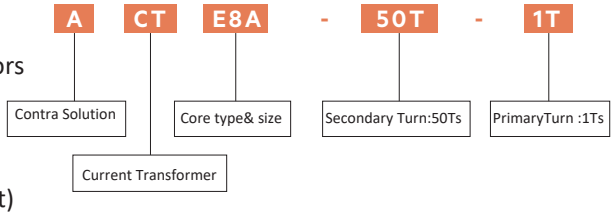
- Temperature Rise Current(Irms):The current when temperature of coil increases up to max.△T=40°C.(Ta=20°C)
- Operating temperature: -40°C to +125°C
- L: HP4284A PRECISION LCR METER
- DCR: CHENHWA 502 OHM METER
- Electrical specifications at 25°C

FEATURES

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

APPLICATIONS

- Power supply for VTRs
- Small surface mount current sensors
- Sensed current up to 30 A; Frequency range up to 1MHz
- Very low primary DC resistance
- 1.0KV DC/3mA / 1S isolation (hipot) between windings
- LCD televisions、Notebook PCs.、Portable communication equipment.、DC/DC converters,m etc

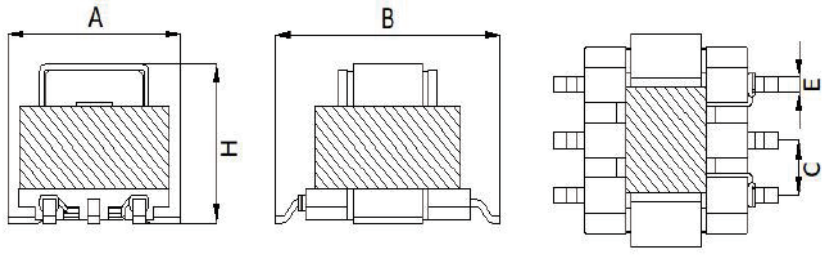


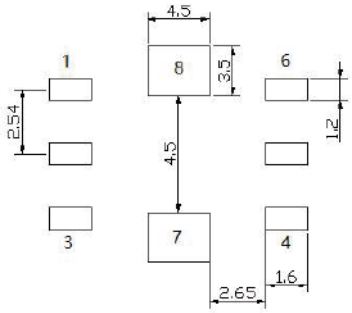
ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (mH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE8A-50T-1T	50:1	0.63	0.60	0.0039	30
ACTE8A-100T-1T	100:1	2.50	3.00	0.0039	30
ACTE8A-150T-1T	150:1	5.63	5.70	0.0039	30
ACTE8A-200T-1T	200:1	10.0	10.0	0.0039	30
ACTE8A-300T-1T	300:1	22.5	25.0	0.0039	30

ELECTRICAL INFORMATION

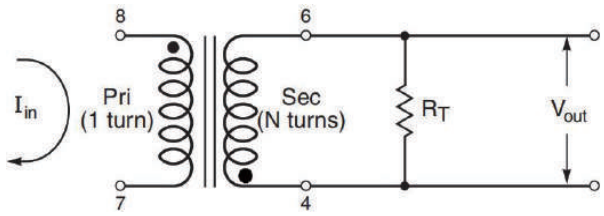
Dimension in mm

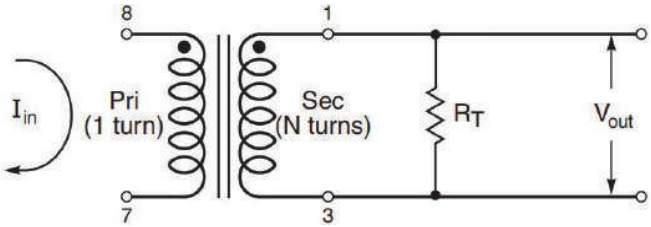




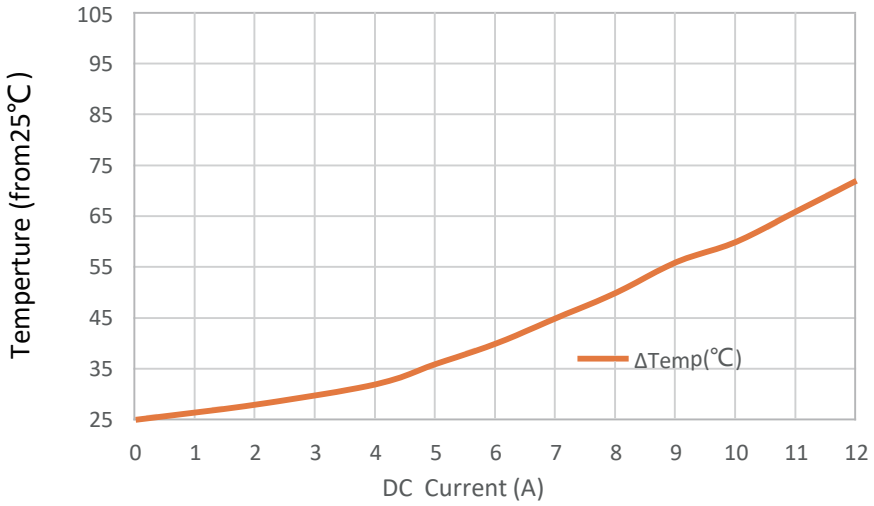
Item	A MAX.	B MAX.	H MAX.
ACTE8A	9.70	12.80	7.00

Item	C	E				
ACTE8A	2.50	1.00				





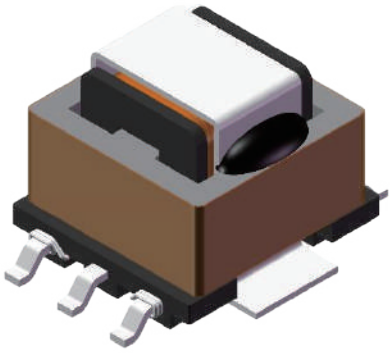
CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE8B SERIES



ELECTRICAL SPECIFICATION

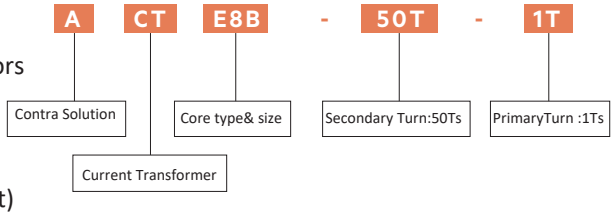
- Temperature Rise Current(Irms):The current when temperature of coil increases up to max.△T=40°C.(Ta=20°C)
- Operating temperature: -40°C to +125°C
- L: HP4284A PRECISION LCR METER
- DCR: CHENHWA 502 OHM METER
- Electrical specifications at 25°C

FEATURES

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

APPLICATIONS

- Power supply for VTRs
- Small surface mount current sensors
- Sensed current up to 30 A; Frequency range up to 1MHz
- Very low primary DC resistance
- 1.0KV DC/3mA / 1S isolation (hipot) between windings
- LCD televisions、Notebook PCs.、Portable communication equipment.、DC/DC converters,m etc

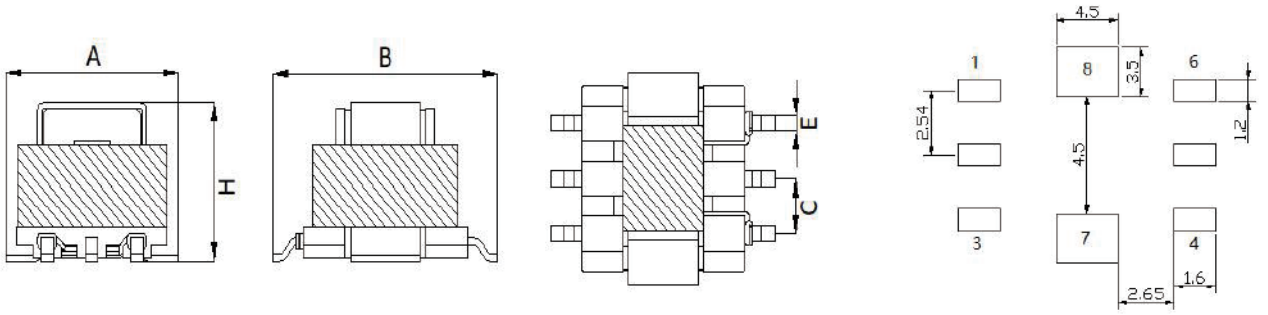


ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (mH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE8B-50T-1T	50:1	1.40	0.65	0.0039	30
ACTE8B-100T-1T	100:1	5.60	2.00	0.0039	30
ACTE8B-125T-1T	125:1	8.70	5.20	0.0039	30
ACTE8B-150T-1T	150:1	12.6	6.50	0.0039	30
ACTE8B-200T-1T	200:1	22.0	8.00	0.0039	30

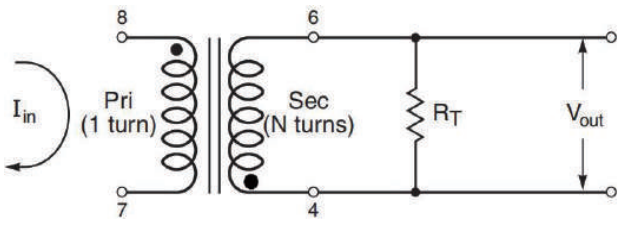
ELECTRICAL INFORMATION

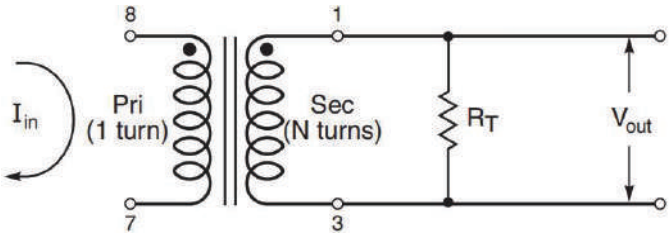
Dimension in mm



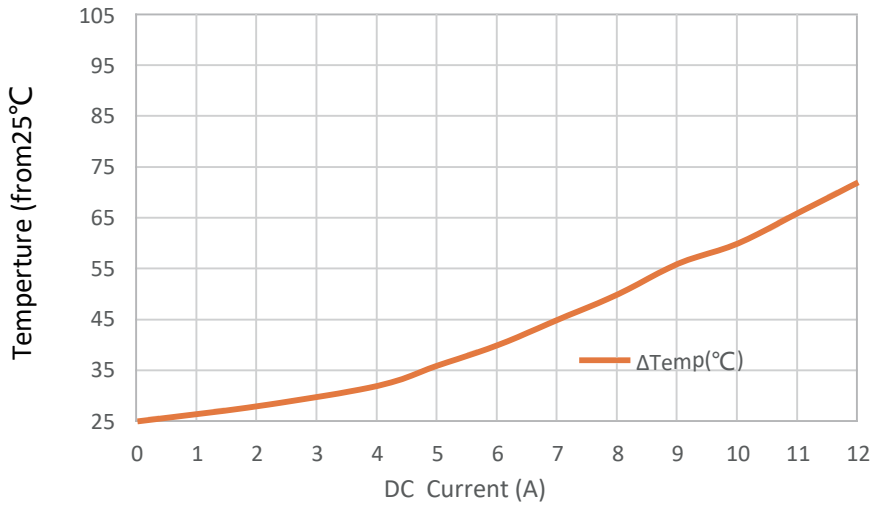
Item	A MAX.	B MAX.	H MAX.
ACTE8B	11.00	13.00	7.80

Item	C	E				
ACTE8B	2.50	0.70				





CURRENT VS TEMPERATURE RISE



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE8D SERIES

ELECTRICAL SPECIFICATION

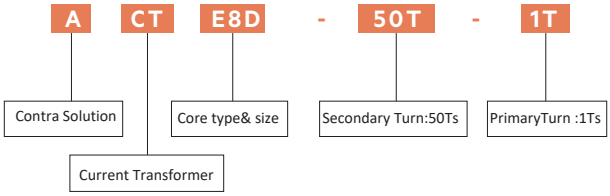
- -Frequency range: 1KHz~500KHz
- Inductance: 10KHZ 0.1V.
- D.C.Resistance: at 25°C
- Storage conditions: -20°C~+40°C,<75%RH
- Operating temperature range:-40°C~+125°C
- Weight: approx.3.0g

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible

APPLICATIONS

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

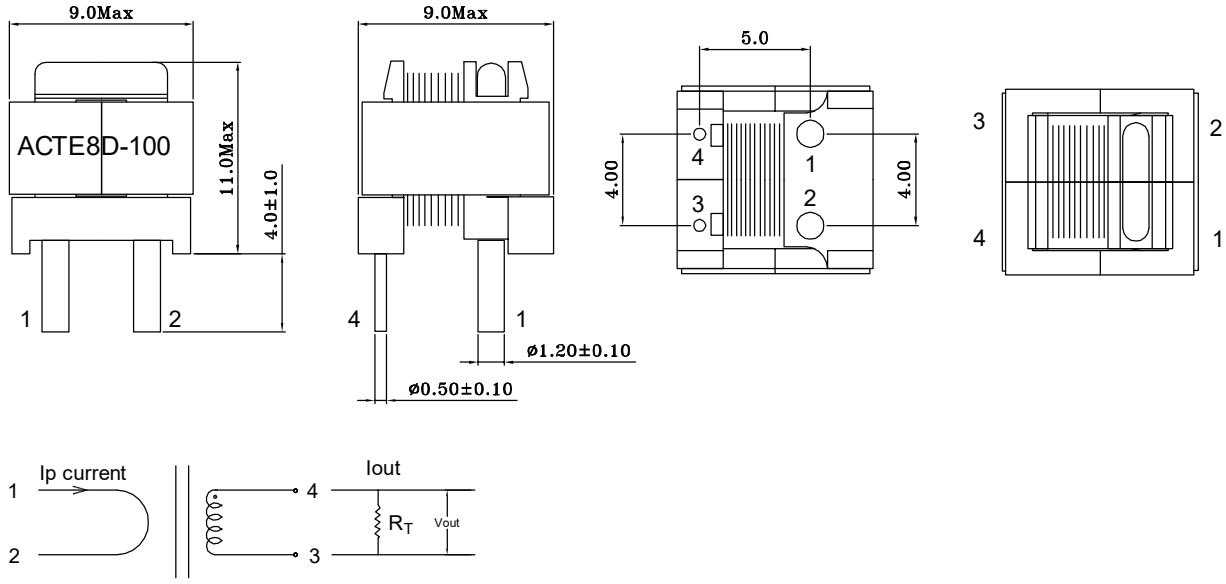


ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @10KHZ0.1V (mH)MIN	DCR(Ω) Sec Max	DCR(Ω) Pri Ref	Sensed Current(A) (Max)
ACTE8D-50T-1T	50:1	1.0	1.0	0.0025	10
ACTE8D-60T-1T	60:1	1.4	1.5	0.0025	10
ACTE8D-70T-1T	70:1	1.9	2.0	0.0025	10
ACTE8D-100T-1T	100:1	3.8	4.0	0.0025	10
ACTE8D-125T-1T	125:1	6.0	6.0	0.0025	10
ACTE8D-150T-1T	150:1	8.7	9.0	0.0025	10
ACTE8D-200T-1T	200:1	15.0	15.0	0.0025	10

ELECTRICAL INFORMATION

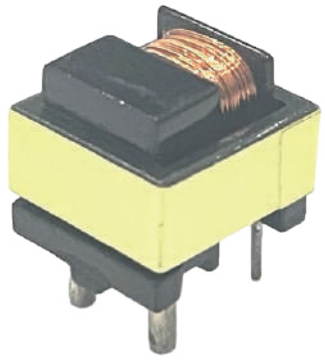
Dimension in mm



Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE10 SERIES



ELECTRICAL SPECIFICATION

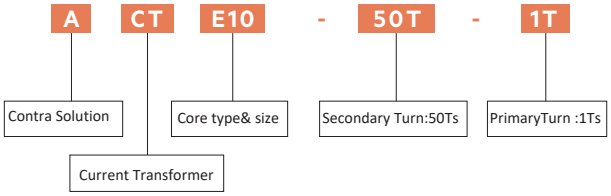
- -Frequency range: 1KHz~500KHz
- Inductance: 10KHZ 0.1V.
- D.C.Resistance: at 25°C
- Storage conditions: -20°C~+40°C,<75%RH
- Operating temperature range:-40°C~+125°C
- Weight: approx.3.0g

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible

APPLICATIONS

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

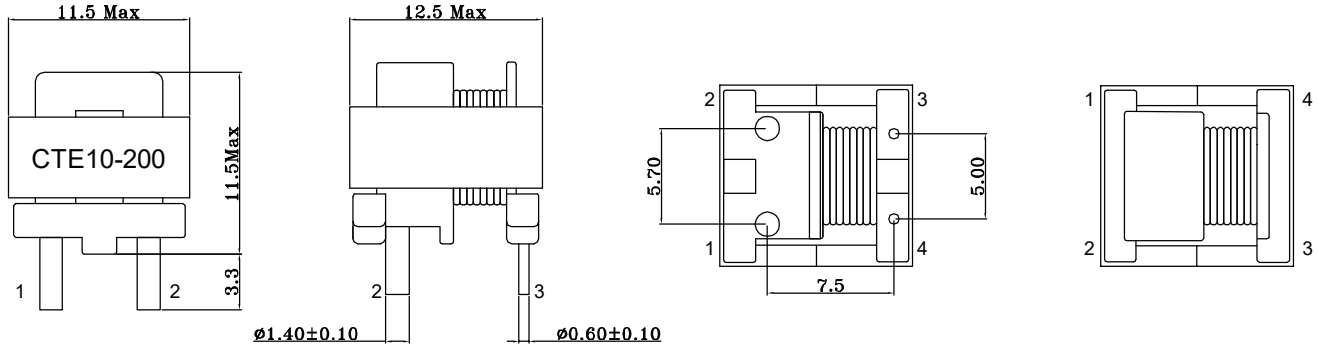


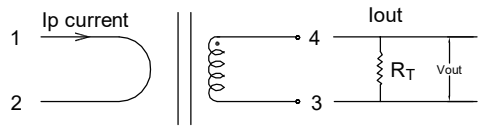
ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @10KHZ0.1V (mH)MIN	DCR(Ω) Sec Max	DCR(Ω) Pri Ref	Sensed Current(A) (Max)
ACTE10-50T-1T	50:1	1.75	0.65	0.0004	15
ACTE10-60T-1T	60:1	2.5	1.0	0.0004	15
ACTE10-70T-1T	70:1	3.5	1.35	0.0004	15
ACTE10-100T-1T	100:1	7.0	2.5	0.0004	15
ACTE10-125T-1T	125:1	11.0	3.5	0.0004	15
ACTE10-150T-1T	150:1	15.7	5.5	0.0004	15
ACTE10-200T-1T	200:1	28.0	10.0	0.0004	15

ELECTRICAL INFORMATION

Dimension in mm





Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTEP10 SERIES

ELECTRICAL SPECIFICATION

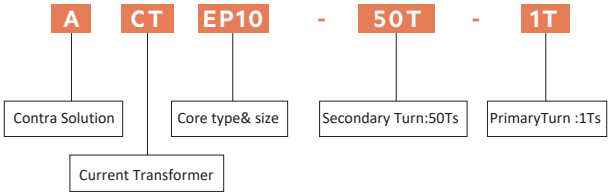
- -Frequency range: 1KHz~500KHz
- Inductance: 10KHZ 0.1V.
- D.C.Resistance: at 25°C
- Storage conditions: -20°C~+40°C,<75%RH
- Operating temperature range:-40°C~+125°C
- Weight: approx.5.0g

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible

APPLICATIONS

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

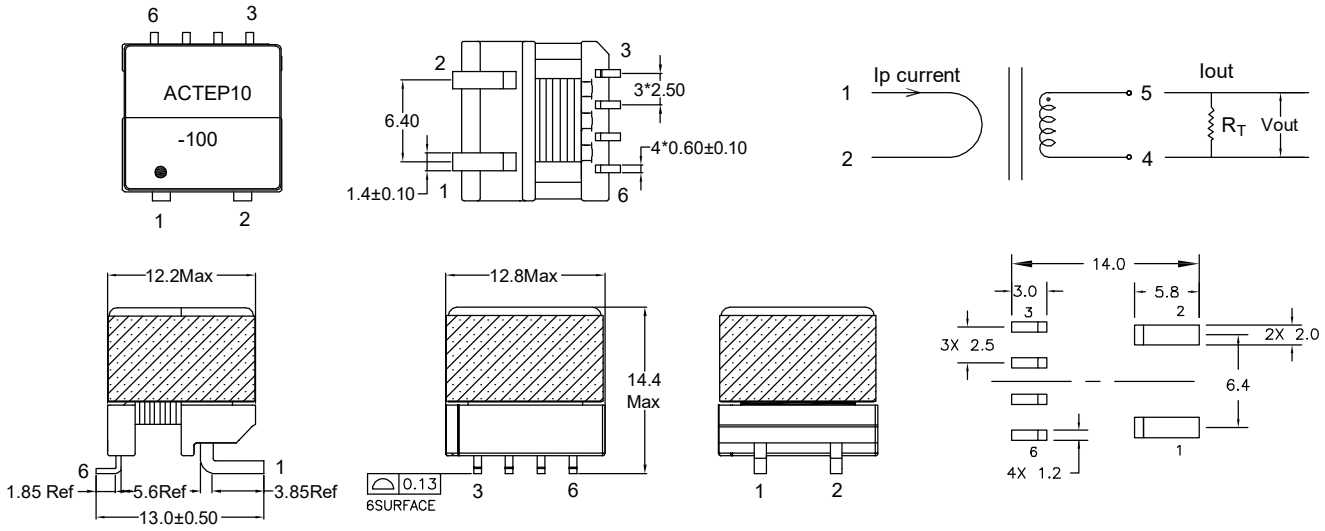


ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @10KHZ0.1V (mH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTEP10-50T-1T	50:1	1.7	0.65	0.0005	30
ACTEP10-70T-1T	70:1	3.0	1.38	0.0005	30
ACTEP10-100T-1T	100:1	7.0	2.79	0.0005	30
ACTEP10-125T-1T	125:1	11.0	4.0	0.0005	30
ACTEP10-150T-1T	150:1	15.8	6.0	0.0005	30
ACTEP10-180T-1T	180:1	25.0	7.4	0.0005	30
ACTEP10-200T-1T	200:1	32.0	9.0	0.0005	30

ELECTRICAL INFORMATION

Dimension in mm

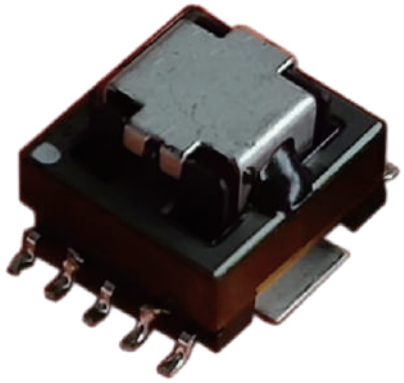


Customer to determine land layout

Product datasheet

HIGH FREQUENCY CURRENT SENSING TRANSFORMER

ACTE12 SERIES



ELECTRICAL SPECIFICATION

- Primary current of 35 A causes less than 35°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise
- Operating temperature: -40°C to +120°C
- Storage temperature Component: -40°C to +165°C
- Inductance measured between secondary pins at 100kHz, 0.1 Vrms, 0 Adc

Inductance measured at OAdc on HP 4284A LCR Meter or equivalent

DCR measured on Chroma 16502 microohmmeter or equivalent

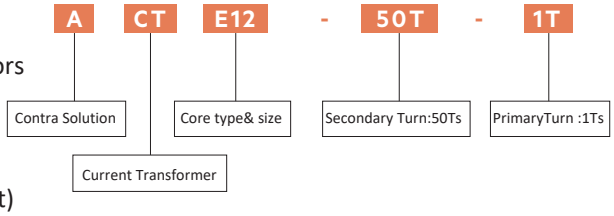
Electrical specifications at 25°C

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible
- 1000Vrms,one minute isolation (hipot) between windings temperature rise from 25°C ambient. Higher current causes a greater temperature rise

APPLICATIONS

- Power supply for VTRs
- Small surface mount current sensors
- Sensed current up to 35 A; Frequency range up to 1MHz
- Very low primary DC resistance
- 1.0KV DC/3mA / 1S isolation (hipot) between windings
- LCD televisions、Notebook PCs.、Portable communication equipment.、DC/DC converters,m etc

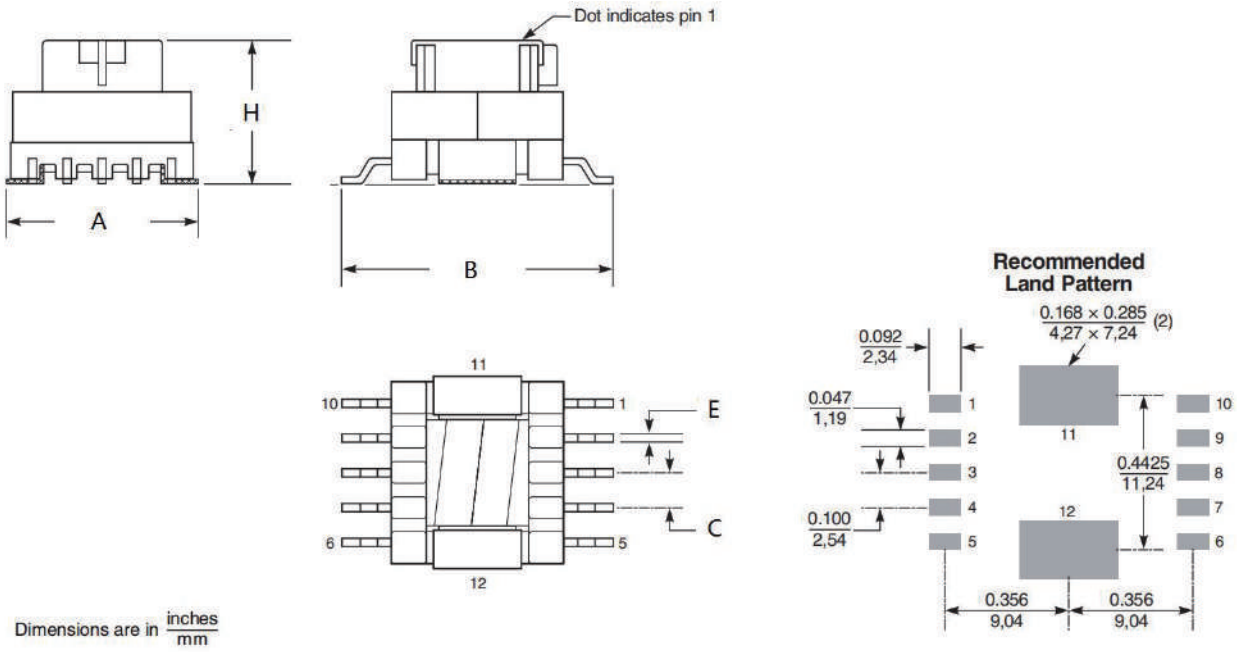


ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (mH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE12-50T-1T	50:1	1.40	0.70	0.0042	35
ACTE12-100T-1T	100:1	5.60	1.40	0.0042	35
ACTE12-150T-1T	150:1	12.6	2.40	0.0042	35
ACTE12-200T-1T	200:1	22.4	2.90	0.0042	35

ELECTRICAL INFORMATION

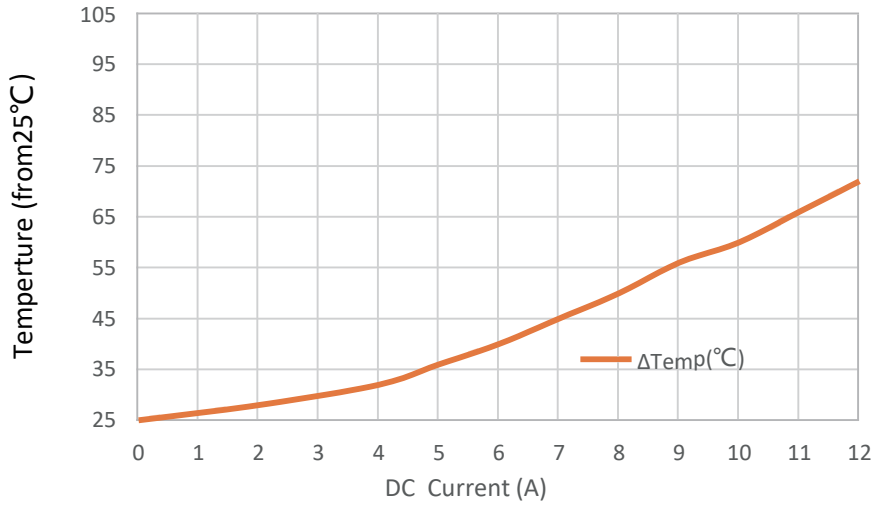
Dimension in mm



Item	A MAX.	B MAX.	C MAX.
ACTE12	15.0	20.0	2.50

Item	E	H MAX
ACTE12	0.7	10.50

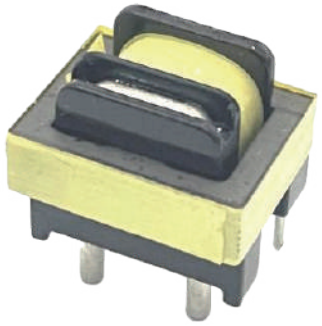
CURRENT VS TEMPERATURE RISE



Product datasheet

LOW FREQUENCY CURRENT SENSING TRANSFORMER

ACTE19 SERIES



ELECTRICAL SPECIFICATION

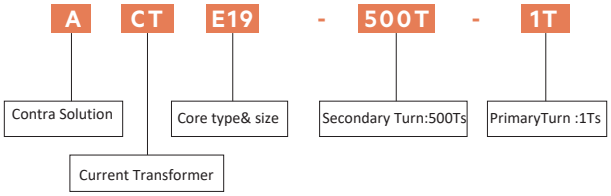
- Primary Current:0~30Amps
- Vout=Rt*Ip/Ns. Iout=Ip/Ns
- Frequency range: 50Hz~10KHz
- D.C.Resistance: at 25°C
- Storage conditions: -20°C~+40°C,<75%RH
- Operating temperature range:-40°C~+125°C
- Weight: approx.13.5g

FEATURES

- Very low DC resistance
- Different turns ratios
- Very small package
- RoHS compatible

APPLICATIONS

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



ELECTRICAL CHARACTERISTICS FORM

Part Number	Turns ratio sec:pri	Secondary Inductance @100KHZ0.1V (uH)MIN	DCR(Ω)		Sensed Current(A) (Max)
			Sec Max	Pri Ref	
ACTE19-500T-1T	500:1	-	22	0.003	30
ACTE19-1000T-1T	1000:1	-	90	0.003	30
ACTE19-1500T-1T	1500:1	-	200	0.003	30
ACTE19-2000T-1T	2000:1	-	350	0.003	30
ACTE19-2500T-1T	2500:1	-	600	0.003	30
ACTE19-3000T-1T	3000:1	-	750	0.003	30

ELECTRICAL INFORMATION

Dimension in mm