

# THROUGH-HOLE CURRENT SENSING TRANSFORMERS FAACST014-016 SERIES



## FEATURES

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

## OPTIONS

Bulk is standard  
Custom design acceptable

## COMMON APPLICATIONS

Air-Conditioner Current Control  
Protection current transformer  
Testing Protection system  
Electronical monitoring system

## ELECTRICAL CHARACTERISTICS

Performance & Specification for 50/60Hz series

| Part Number | Rated primary current(A) | Max primary current(A) | Rated secondary current(mA) | Resistance load (Ohm) | Output ratio (Ω) | Accuracy class |
|-------------|--------------------------|------------------------|-----------------------------|-----------------------|------------------|----------------|
| FAACST014   | 5                        | 12                     | 2.5                         | 1000                  | 2.5              | 1              |
| FAACST014   | 5                        | 15                     | 5                           | 100                   | 0.5              | 1              |
| FAACST015   | 5                        | 15                     | 2                           | 2000                  | 4.0              | 1              |
| FAACST015   | 3                        | 10                     | 1                           | 2500                  | 2.5              | 1              |

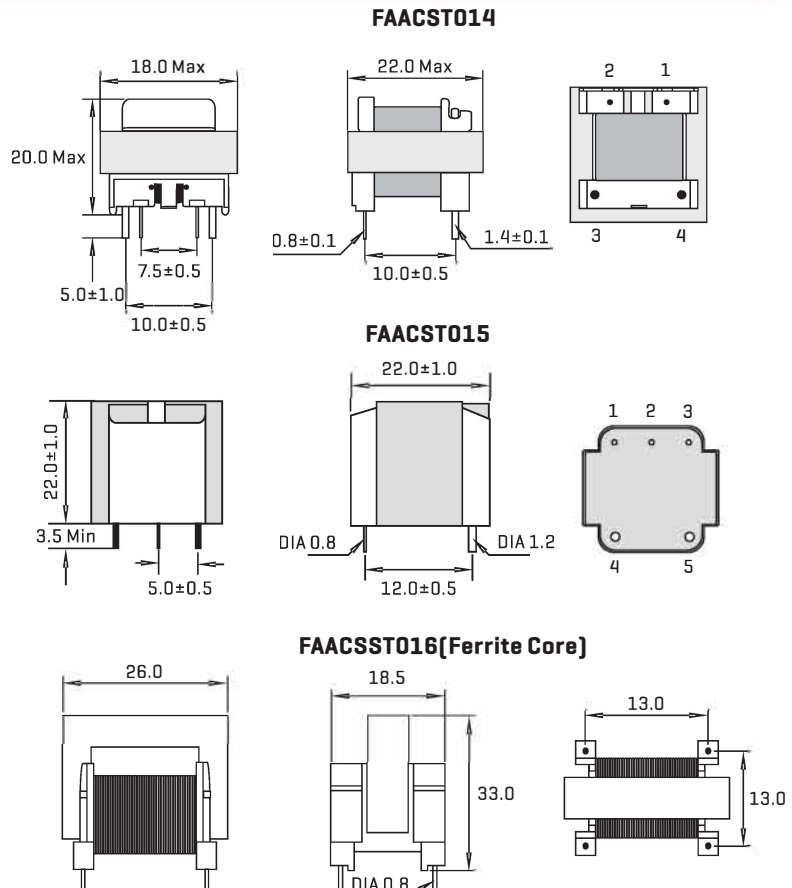
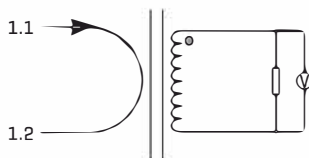
Performance & Specification for High frequency(10KHz-200KHz)

| Part Number | Rated primary current(A) | Max primary current(A) | Rated secondary current(mA) | Resistance load (Ohm) | Output ratio (Ω) | Accuracy class |
|-------------|--------------------------|------------------------|-----------------------------|-----------------------|------------------|----------------|
| FAACST016   | 5                        | 20                     | 2                           | 1000                  | 2                | 2              |
| FAACST016   | 10                       | 20                     | 5                           | 500                   | 2.5              | 2              |

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS

- 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

Note: All specifications subject to change without notice.



ALL DIMENSIONS IN MM

# THROUGH-HOLE CURRENT SENSOR TRANSFORMERS FAACST010-013 SERIES



## FEATURES

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

## OPTIONS

Bulk packaging is standard  
Custom design available

## COMMON APPLICATIONS

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

## ELECTRICAL CHARACTERISTICS

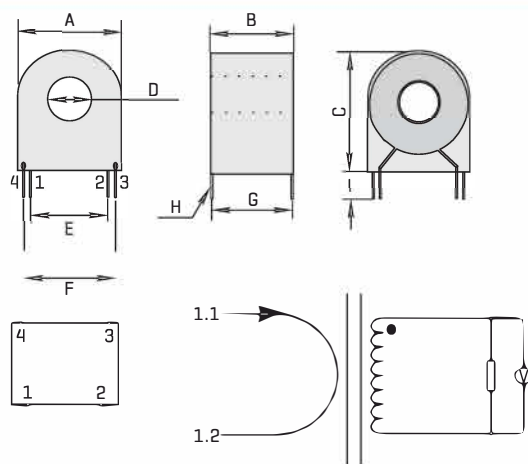
Performance & Specification for High Precision Current Test

| Part Number    | Rated primary current(A) | Max primary current(A) | Rated secondary current(mA) | Current ratio | Output ratio (Ω) | Accuracy class |
|----------------|--------------------------|------------------------|-----------------------------|---------------|------------------|----------------|
| FAACST010A/5   | 5                        | 40                     | 2.5                         | 2000:1        | 100              | 0.2,0.5        |
| FAACST010A/10  | 10                       | 40                     | 4                           | 2500:1        | 100              | 0.2,0.5        |
| FAACST010A/20  | 20                       | 40                     | 10                          | 2000:1        | 100              | 0.1,0.2,0.5    |
| FAACST011A/10  | 10                       | 60                     | 4                           | 2500:1        | 100              | 0.1,0.2,0.5    |
| FAACST011A/20  | 20                       | 60                     | 10                          | 2000:1        | 100              | 0.1,0.2,0.5    |
| FAACST011A/40  | 40                       | 60                     | 20                          | 2000:1        | 100              | 0.1,0.2,0.5    |
| FAACST012A/60  | 60                       | 120                    | 24                          | 2500:1        | 100              | 0.1,0.2,0.5    |
| FAACST012A/80  | 80                       | 120                    | 32                          | 2500:1        | 100              | 0.1,0.2,0.5    |
| FAACST012A/120 | 120                      | 120                    | 48                          | 2500:1        | 100              | 0.1,0.2,0.5    |
| FAACST013A/100 | 100                      | 200                    | 40                          | 2500:1        | 100              | 0.1,0.2,0.5    |
| FAACST013A/100 | 100                      | 200                    | 50                          | 2000:1        | 100              | 0.1,0.2,0.5    |
| FAACST013A/200 | 200                      | 200                    | 80                          | 2500:1        | 100              | 0.1,0.2,0.5    |

Performance & Specification for Protection Precision Current Test

| Part Number | Rated primary current(A) | Max primary current(A) | Rated secondary current(mA) | Resistance load (Ohm) | Output ratio (Ω) | Accuracy class |
|-------------|--------------------------|------------------------|-----------------------------|-----------------------|------------------|----------------|
| FAACST010B  | 5                        | 60                     | 5                           | 100                   | 0.5              | 0.5,1.0        |
| FAACST010B  | 10                       | 60                     | 10                          | 100                   | 1.0              | 0.5,1.0        |
| FAACST010B  | 15                       | 60                     | 15                          | 100                   | 1.5              | 0.5,1.0        |
| FAACST011B  | 20                       | 60                     | 20                          | 100                   | 2.0              | 0.5,1.0        |
| FAACST011B  | 25                       | 75                     | 25                          | 100                   | 2.5              | 0.5,1.0        |
| FAACST011B  | 30                       | 75                     | 30                          | 100                   | 3.0              | 0.5,1.0        |
| FAACST012B  | 40                       | 75                     | 40                          | 100                   | 4.0              | 0.5,1.0        |
| FAACST012B  | 50                       | 125                    | 50                          | 100                   | 5.0              | 0.5,1.0        |
| FAACST012B  | 60                       | 125                    | 60                          | 100                   | 6.0              | 0.5,1.0        |
| FAACST013B  | 75                       | 125                    | 75                          | 100                   | 7.5              | 0.5,1.0        |
| FAACST013B  | 100                      | 250                    | 100                         | 100                   | 10.0             | 0.5,1.0        |
| FAACST013B  | 150                      | 250                    | 150                         | 100                   | 15.0             | 0.5,1.0        |

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



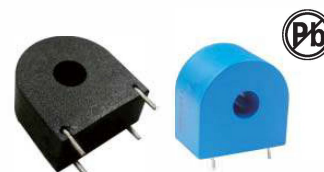
ALL DIMENSIONS IN MM

- Working Frequency range 20Hz-400Hz
- 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

Note: All specifications subject to change without notice.

|           | A    | B    | C    | D    | E    | F    | G    | H   | I   |
|-----------|------|------|------|------|------|------|------|-----|-----|
| FAACST010 | 23.5 | 12.5 | 25.0 | 7.0  | 15.0 | 18.5 | 10.5 | 1.0 | 6.0 |
| FAACST011 | 26.0 | 17.0 | 29.0 | 9.0  | 15.0 | 18.5 | 15.0 | 1.0 | 6.0 |
| FAACST012 | 37.0 | 14.0 | 39.0 | 13.0 | 25.0 | 32.5 | 11.0 | 1.0 | 6.0 |
| FAACST013 | 49.0 | 20.0 | 54.0 | 18.5 | 29.5 | 37.0 | 17.5 | 1.0 | 6.0 |

# AC CURRENT TRANSFORMER FACT006P-CT102 SERIES



## FEATURES :

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

## APPLICATION :

Power Meter Class 0.2, 0.5, and 1.0 for accurate measurement, Indirect and Direct Type  
Power Calibrator and Transducer  
Street Lighting Control System  
Monitoring and Protection Relay  
Ground Fault CT or Grounded Neutral Sensor  
Current & Power Measurement  
High-end Digital Protection Relay  
High-end Industrial Power Sensor

## CHARACTERISTICS:

Rated Current: 0.1A-200A  
Accuracy: 0.1 Class  
Phase Shift Change: < 12' during 2%-120% I<sub>b</sub>  
Linearity: 0.1L, 0.2L  
Operation frequency: 20Hz-10KHz  
Operation Temperature: -40°C to +80°C  
Hi-pot Test between Primary and Secondary: 4KV/1min  
Insulation Resistance: 500Mohm[500VDC]

## ELECTRICAL CHARACTERISTICS:

| Mode No.    | Current [A] | Turns Ratio | DC Resistance [ohms] | Inductance [50Hz/0.5V] [H] | FIG  |
|-------------|-------------|-------------|----------------------|----------------------------|------|
| FACT006P-C  | 6           | 1:2000      | 95±15%               | 160±30%                    | FIG1 |
| FACT006P-C1 | 6           | 1:2500      | 125±15%              | 250±30%                    | FIG1 |
| FACT006P-C2 | 6           | 1:1500      | 53±15%               | 100±30%                    | FIG1 |
| FACT010P-C1 | 10          | 1:2500      | 125±15%              | 250±30%                    | FIG1 |
| FACT010P-C2 | 10          | 1:1500      | 53±15%               | 100±40%                    | FIG1 |
| FACT010P-C6 | 10          | 1:2000      | 95±15%               | 160±30%                    | FIG1 |
| FACT020P-C1 | 20          | 1:2500      | 125±15%              | 250±30%                    | FIG1 |
| FACT020P-C6 | 20          | 1:1000      | 28±15%               | 45±40%                     | FIG1 |
| FACT100P-C1 | 40          | 1:2500      | 125±15%              | 250±30%                    | FIG1 |
| FACT100P-C2 | 40          | 1:2000      | 95±15%               | 160±30%                    | FIG1 |
| FACT101P2   | 60          | 1:2000      | 95±15%               | 160±30%                    | FIG1 |
| FACT006P-B1 | 6           | 1:2000      | 114±20%              | 238±30%                    | FIG2 |
| FACT101P    | 60          | 1:2000      | 95±15%               | 160±30%                    | FIG3 |
| FACT102-A1  | 80          | 1:1000      | 235±15%              | 95±30%                     | FIG4 |

## SHAPE AND DIMENSIONS

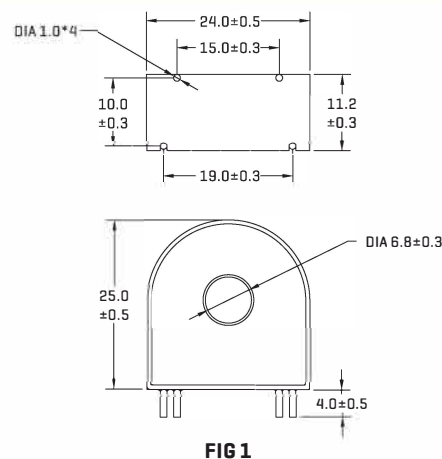


FIG 1

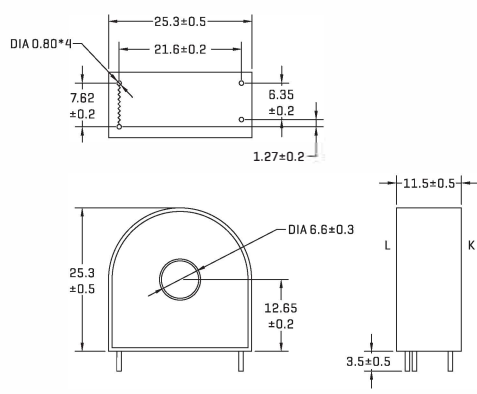


FIG 2

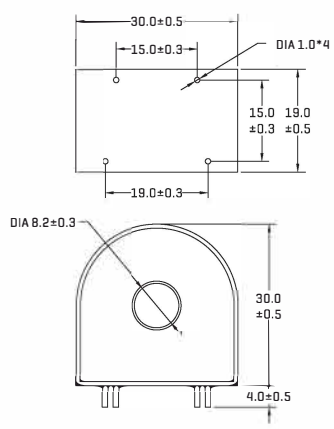


FIG 3

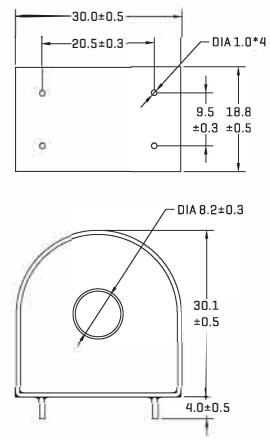


FIG 4

DIMENSIONS:MM

# AC CURRENT TRANSFORMER FACT104P-CT105W SERIES



## FEATURES:

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

## APPLICATION:

Power Meter Class 0.2, 0.5, and 1.0 for accurate measurement, Indirect and Direct Type  
Power Calibrator and Transducer  
Street Lighting Control System  
Monitoring and Protection Relay  
Ground Fault CT or Grounded Neutral Sensor  
Current & Power Measurement  
High-end Digital Protection Relay  
High-end Industrial Power Sensor

## CHARACTERISTICS:

Rated Current: 0.1A~200A  
Accuracy: 0.1 Class  
Phase Shift Change: <math>\lt; 12^\circ</math> during 2%~120% Ib  
Linearity: 0.1L, 0.2L  
Operation frequency: 20Hz~10KHz  
Operation Temperature: -40°C to +80°C  
Hi-pot Test between Primary and Secondary: 4KV/1min  
Insulation Resistance: 500Mohm[500VDC]

## ELECTRICAL CHARACTERISTICS:

| Mode No.    | Current [A] | Turns Ratio | DC Resistance [ohms] | Inductance [50Hz/0.5V] [H] | FIG  |
|-------------|-------------|-------------|----------------------|----------------------------|------|
| FACT104P    | 100         | 1:2500      | 113±15%              | 340±30%                    | FIG1 |
| FACT105P    | 120         | 1:2500      | 113±15%              | 340±30%                    | FIG1 |
| FACT006W-C1 | 6           | 1:2000      | 95±15%               | 160±30%                    | FIG2 |
| FACT010W-C1 | 10          | 1:2500      | 125±15%              | 250±30%                    | FIG2 |
| FACT100W-C  | 40          | 1:2000      | 95±15%               | 160±30%                    | FIG2 |
| FACT100W-C1 | 40          | 1:2500      | 125±15%              | 250±30%                    | FIG2 |
| FACT020W-C2 | 20          | 1:2000      | 95±15%               | 160±30%                    | FIG3 |
| FACT101W-C1 | 60          | 1:2000      | 95±15%               | 160±30%                    | FIG3 |
| FACT104W    | 100         | 1:2000      | 113±15%              | 340±30%                    | FIG4 |
| FACT105W    | 120         | 1:2000      | 113±15%              | 340±30%                    | FIG4 |

## SHAPE AND DIMENSIONS

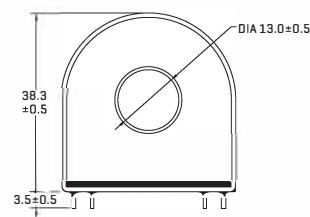
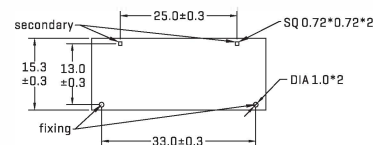


FIG 1

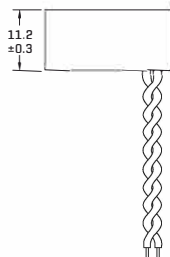
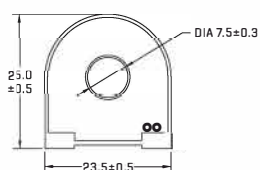


FIG 2

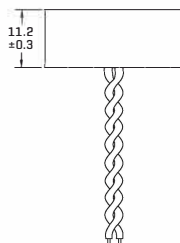
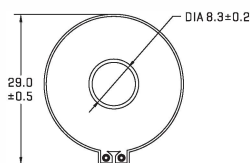


FIG 3

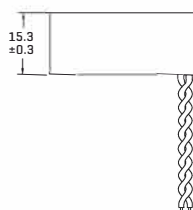
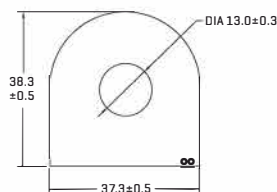


FIG 4

DIMENSIONS:MM

# AC CURRENT TRANSFORMER FACT106W2,CT108W1 SERIES



## FEATURES :

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

## APPLICATION :

Power Meter Class 0.2, 0.5, and 1.0 for accurate measurement, Indirect and Direct Type  
Power Calibrator and Transducer  
Street Lighting Control System  
Monitoring and Protection Relay  
Ground Fault CT or Grounded Neutral Sensor  
Current & Power Measurement  
High-end Digital Protection Relay  
High-end Industrial Power Sensor

## CHARACTERISTICS:

Rated Current: 60A-100A  
Accuracy: 0.1 Class  
Phase Shift Change: < 12' during 2%-120% Ib  
Linearity: 0.1L, 0.2L  
Operation frequency: 20Hz-10KHz  
Operation Temperature: -40°C to +80°C  
Hi-pot Test between Primary and Secondary: 4KV/1min  
Insulation Resistance: 1000Mohm Min [500VDC]

## ELECTRICAL CHARACTERISTICS:

| Mode No.  | Current [A] | Turns Ratio | DC Resistance [ohms Max] | FIG  |
|-----------|-------------|-------------|--------------------------|------|
| FACT106W2 | 60          | 1:2000      | 20                       | FIG1 |
| FACT108W1 | 100         | 1:2500      | 12.5                     | FIG2 |

## SHAPE AND DIMENSIONS

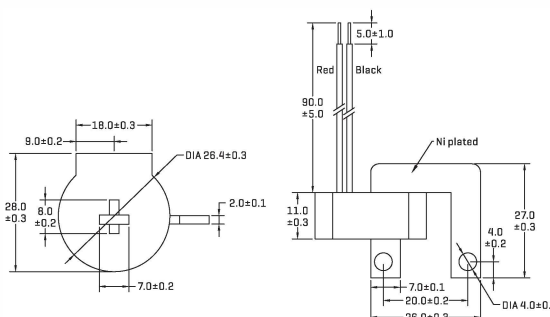


FIG 1

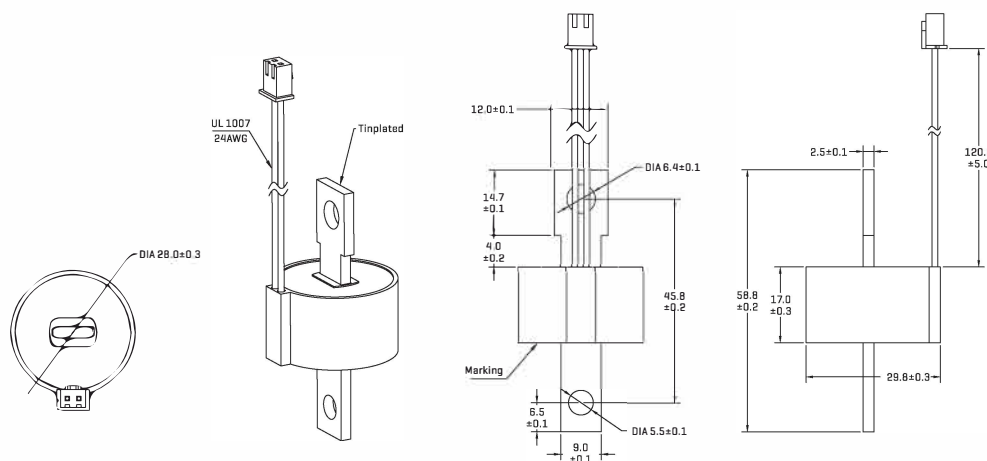


FIG 2

DIMENSIONS:MM

# HIGH FREQUENCY CURRENT SENSOR TRANSFORMER FAACST SERIES



## FEATURES

Meets UL94-V0 Requirements  
Precise Current Sensing

## OPTIONS

Bulk Packaging is Standard  
Custom Design Available  
Thru Hole Available

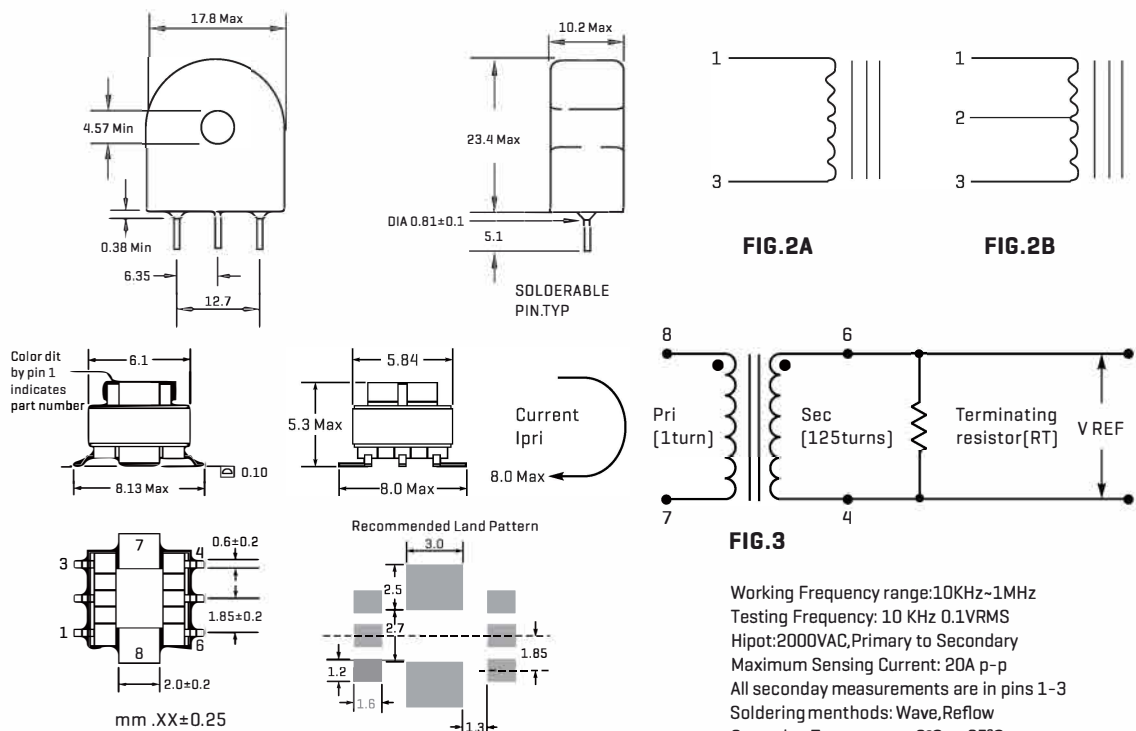
## COMMON APPLICATIONS

SMPS Control Circuits  
Current Sensing  
Switching power regulators  
Pulse current test

## STANDARD SPECIFICATIONS @250°C

| Part Number | SCHEMATIC | TURNS<br>[±1% Max] | OCL<br>[mH Min] | DCR<br>[ΩMax] | ET<br>[V-μSEC-Min] |
|-------------|-----------|--------------------|-----------------|---------------|--------------------|
| FAACST-001  | 2A        | 50                 | 5.0             | 0.7           | 150                |
| FAACST-002  | 2A        | 100                | 20.0            | 1.40          | 300                |
| FAACST-003  | 2A        | 200                | 80.0            | 4.50          | 600                |
| FAACST-004  | 2A        | 300                | 180.0           | 11.0          | 900                |
| FAACST-005  | 2B        | 50CT               | 5.0             | 0.7           | 150                |
| FAACST-006  | 2B        | 100CT              | 20.0            | 1.40          | 300                |
| FAACST-007  | 2B        | 200CT              | 80.0            | 4.50          | 600                |
| FAACST-008  | 2B        | 300CT              | 180.0           | 11.0          | 900                |
| FAACST-E51  | 3         | 100                | 2.0             | 5.50          | 120                |
| FAACST-E52  | 3         | 125                | 3.0             | 6.50          | 130                |

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS



ALL DIMENSIONS IN MM

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