

# TA0813 Series Vertical Type Microminiature Pulse Current Transformers

LI056V5/2016

## 1. Features:

- ① Vertical core-through, printed circuit board directly soldered and installed;
- ② Small size, high frequency, beautiful appearance;
- ③ Fully enclosed, good mechanical and environmental resistance, strong voltage isolation capability.

## 2. Ambient Conditions:

- ① Ambient temperature:  $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860 \sim 1060\text{mbar}$   
(about  $650 \sim 800\text{mmHg}$ ).

## 3. Operating Frequency Range: $2\text{kHz} \sim 200\text{kHz}$

## 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

## 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $6\text{KV}$   $50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .

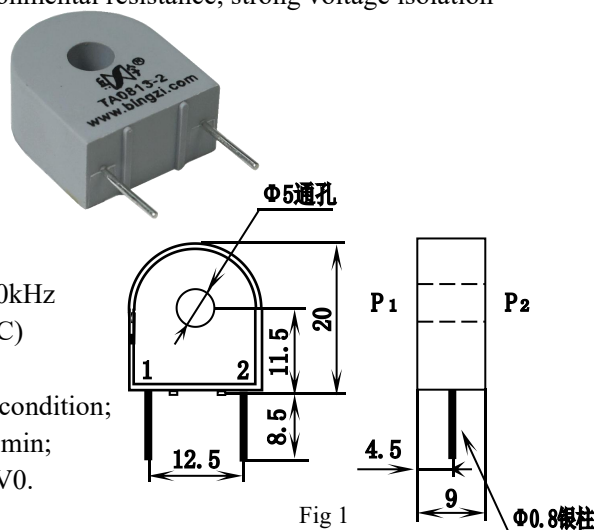


Fig 1

## 6. Outline Drawing, Installation Dimension and Coil Diagram: (tolerance $\pm 0.3\text{ mm}$ )

- ① Outline drawing and installation dimensions are shown in Figure 1:
- ② The coil diagram is shown in Figure 2.

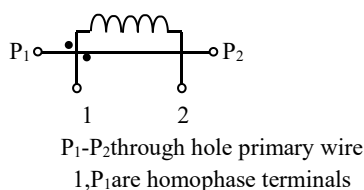


Fig 2

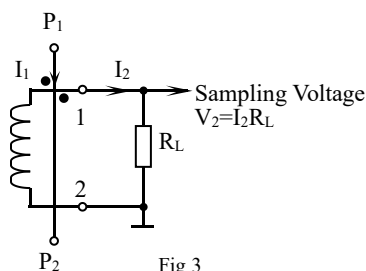


Fig 3

## 7. Typical Application and Technical Parameters: (tolerance $\pm 0.3\text{mm}$ )

See the table below for performance parameters when applied as shown in Figure 3

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance	Rated Sampling Voltage	Non-linearity
TA0813-1	20A	100mA	$25\Omega$	2.5V	$\leq 2\%$
TA0813-2	20A	40mA	$125\Omega$	5V	$\leq 2\%$
TA0813-3	20A	20mA	$500\Omega$	10V	$\leq 2\%$

## 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

## TA1526 Series Round-type Pulse Current Transformers

LI058V1/2008

### 1. Features:

- ① Being able to be directly soldered on PCB, perfect outline.
- ② High frequency.
- ③ Completely sealed, strong mechanical and environmental endurance, strong dielectric strength, safe and reliable.

### 2. Ambient Conditions:

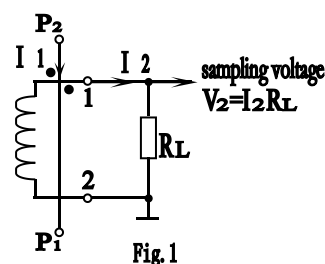
- ① Ambient temperature:  $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860 \sim 1060\text{mbar}$ (about  $650 \sim 800\text{mmHg}$ ).

### 3. Operating Frequency Range: $2\text{kHz} \sim 200\text{kHz}$

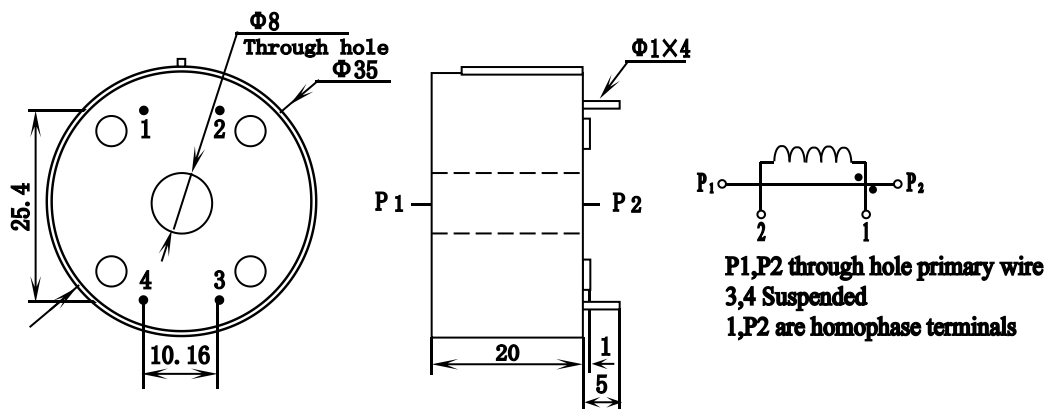
### 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

### 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $6\text{KV}$   $50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .



### 6. Outline Drawing, Installation Dimension and Coil Diagram:( tolerance $\pm 0.3\text{ mm}$ )



### 7. Typical Application and Technical Parameters:

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance	Rated Sampling Voltage	Non Linearity	Withstand Voltage
TA1526-1	50A	250mA	$30\Omega$	7.5V	$\leq 2\%$	$\geq 6\text{KV}$
TA1526-2	50A	100mA	$150\Omega$	15V	$\leq 2\%$	$\geq 6\text{KV}$
TA1526-3	50A	50mA	$600\Omega$	30V	$\leq 2\%$	$\geq 6\text{KV}$

### 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

# TA1931 Series Vertical Core-through AC Current Transformer

LI143V2/2016

## 1. Features:

- ① Vertical core-through , beautiful appearance;
- ② High frequency, fully enclosed, good mechanical and environmental resistance ;
- ③ Strong voltage isolation capability, safe and reliable ;
- ④ The plug-in piece is drawn out, and the connection is convenient and firm.

## 2. Ambient Conditions:

- ① Ambient temperature:  $-55^{\circ}\text{C}\sim+85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860\sim 1060\text{mbar}$   
(about  $650\sim 800\text{mmHg}$ ).

## 3. Operating Frequency Range: $2\text{kHz}\sim 200\text{kHz}$

## 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

## 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $6\text{KV } 50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with UL94-V0.

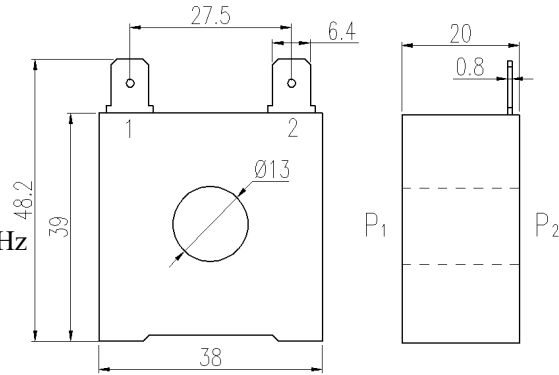


Fig 1

## 6. Outline Drawing, Installation Dimension and Coil Diagram:( tolerance $\pm 0.5\text{mm}$ )

- ① The outline drawing and installation dimensions are shown in Figure 1:
- ② The coil diagram is shown in Figure 2:

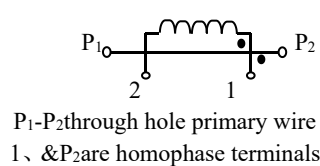


Fig 2

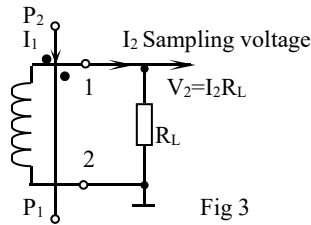


Fig 3

## 7. Typical Application and Performance Parameters:

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance	Rated Sampling Voltage	Non-linearity
TA1931-01	100A	1A	$3\Omega$	3V	$\leq 2\%$
TA1931-02	100A	0.5A	$1\ 2\Omega$	6V	$\leq 2\%$

## 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

# TA0510 Series Miniature Pulse Current Transformer with Busbar Built-in

LI177V1/2016

## 1. Features:

- ① The printed circuit board is directly welded and installed, and the appearance is beautiful;
- ② Compact, high precision; fully enclosed, good mechanical and environmental resistance, strong voltage isolation capability, safe and reliable.

## 2. Ambient Conditions:

- ① Ambient temperature:  $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860 \sim 1060\text{mbar}$  (about  $650 \sim 800\text{mmHg}$ ).

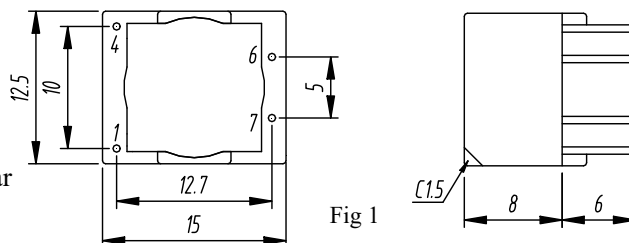


Fig 1

## 3. Operating Frequency Range: $2\text{kHz} \sim 200\text{kHz}$ ;

## 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

## 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $2.5\text{KV}$   $50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .

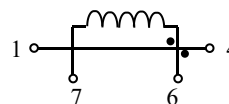
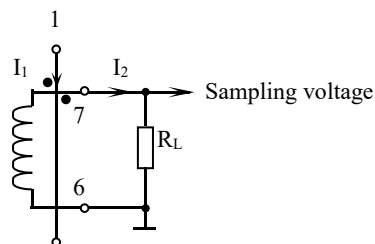


Fig 2

## 6. Outline Drawing and Installation Dimension

Coil Diagram: ( tolerance  $\pm 0.3\text{mm}$  )

- ① Outline drawing and installation dimensions are shown in Figure 1:
- ② The coil diagram is shown in Figure 2:



## 7. Performance Parameters:

Obtain the sampling voltage directly with the resistance method as shown in Figure 3 . The performance parameters are shown in the table below:

Model	Rated Input Current	Rated Output	Rated Sampling	Rated Sampling	Non-Linearity	Linear Range
TA0510-01	10A	0.2A	$2\Omega$	0.4V	$\leq 2\%$	$\geq 2$ times of the rated value
TA0510-02	10A	0.1A	$8\Omega$	0.8V	$\leq 2\%$	$\geq 2$ times of the rated value

## 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

## TA0714 Series Miniature High Frequency Pulse Current Transformer with Busbar Built-in

LI149V2/2016

### 1. Features:

- ① The busbar is built-in, and the printed circuit board is directly welded and installed;
- ② Compact, high frequency, beautiful appearance;
- ③ Fully enclosed, good mechanical and environmental resistance, strong voltage isolation capability, and beautiful appearance .

### 2. Ambient Conditions:

- ① Ambient temperature:  $-55^{\circ}\text{C}\sim+85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860\sim 1060\text{mbar}$   
(about  $650\sim 800\text{mmHg}$ ).

### 3. Operating Frequency Range: $2\text{kHz}\sim 200\text{kHz}$

### 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

### 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $2\text{KV } 50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .

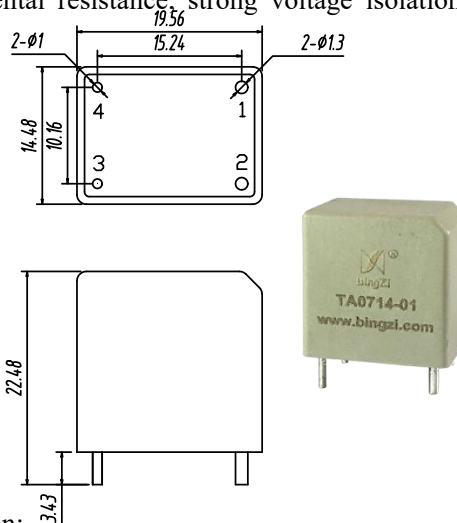
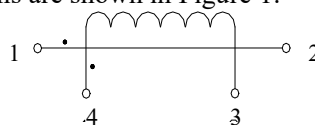


Fig 1

### 6. Outline Drawing, Installation Dimension and Coil Diagram: ( tolerance $\pm 0.3\text{mm}$ )

- ① Outline drawing and installation dimensions are shown in Figure 1:
- ② The coil diagram is shown in Figure 2:



1 – 2 through hole primary wire  
1&4are homophase terminals

Fig 2

### 7. Performance Parameters:

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance	Rated Sampling Voltage	Non Linearity
TA0714-01	20A	200mA	$7.5\Omega$	1.5V	$\leq 2\%$
TA0714-02	20A	100mA	$25\Omega$	2.5V	$\leq 2\%$

### 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

## TA0916 Series Microminiature Precision Pulse Current Transformer with Bus Built-in

LI055V 5/20 16

### 1. Features:

- ① The printed circuit board is directly welded and installed, and the appearance is beautiful;
- ② Small size, high precision; fully enclosed, good mechanical and environmental resistance, strong voltage isolation capability, safe and reliable.

### 2. Ambient conditions:

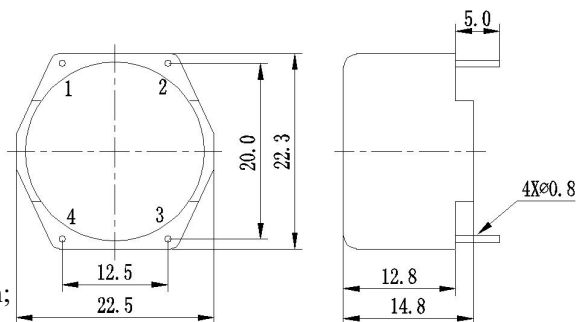
- ① Ambient temperature:  $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860 \sim 1060\text{mbar}$  (about  $650 \sim 800\text{mmHg}$ ).

### 3. Operating Frequency Range: $2\text{kHz} \sim 100\text{kHz}$

### 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

### 5. Safety Features:

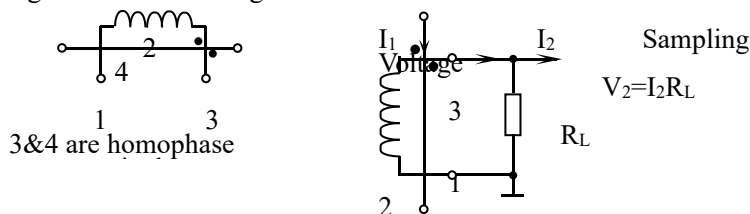
- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $2.5\text{KV}$   $50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .



Figure

### 6. Outline Drawing, Installation Dimension and Coil Diagram : ( tolerance $\pm 0.3\text{ mm}$ )

- ① Outline drawing and installation dimensions are shown in Figure 1:
- ② The coil diagram is shown in Figure 2:



### 7. Typical Application and Technical Parameters:( tolerance $\pm 0.3\text{mm}$ )

When the sampling voltage is directly obtained by the resistance method (as shown in Figure 3 ), the performance parameters are shown in the table below .

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance $R_L$	Rated Sampling Voltage	Non-linearity	Linear Range
TA0916-01	2A	4mA	1000 $\Omega$	4V	$\leq 2\%$	$\geq 1.5$ times of the rated value
TA0916-02	2A	2mA	4000 $\Omega$	8V	$\leq 1.5\%$	$\geq 2$ times of the rated value

### 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.

## TA 3006 Series Bus Built-in Current Transformer

LI146V2/2016

### 1. Features:

- ① The busbar is built-in , and the printed circuit board is directly welded and installed;
- ② High frequency , fully enclosed, good mechanical and environmental resistance;
- ③ Fully enclosed, good mechanical and environmental resistance;
- ④ Strong voltage isolation capability, safe and reliable, beautiful appearance.

### 2. Ambient Conditions:

- ① Ambient temperature:  $-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ ;
- ② Relative humidity:  $\leq 90\%$  at  $40^{\circ}\text{C}$ ;
- ③ Atmospheric pressure:  $860 \sim 1060\text{mbar}$   
(about  $650 \sim 800\text{mmHg}$ ).

### 3. Operating Frequency Range: $2\text{kHz} \sim 200\text{kHz}$

### 4. Insulation Thermal Class: Class B ( $130^{\circ}\text{C}$ )

### 5. Safety Features:

- ① Insulation resistance:  $>1000\text{M}\Omega$  in normal condition;
- ② Insulation withstand voltages:  $4\text{KV}$   $50\text{Hz}/1\text{min}$ ;
- ③ Fire retardancy: In conformity with  $\text{UL94-V0}$ .

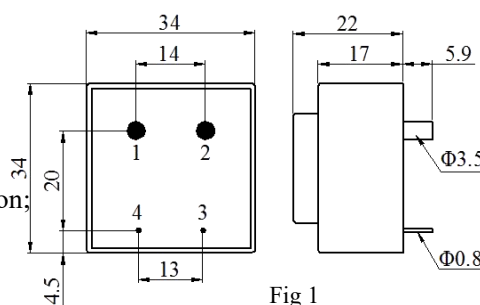


Fig 1

### 6. Outline Drawing, Installation Dimension and Coil Diagram:( tolerance $\pm 0.5\text{mm}$ )

- ① Outline drawing and installation dimensions are shown in Figure 1 :

- ② The coil diagram is shown in Figure 2 :

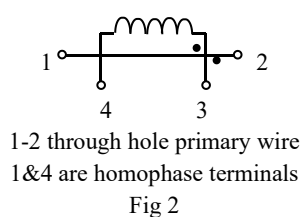


Fig 2

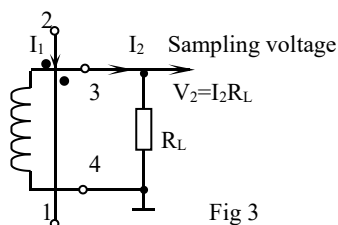


Fig 3

### 7. Typical Application and Performance Parameters:

Model	Rated Input Current	Rated Output Current	Rated Sampling Resistance	Rated Sampling Voltage	Non-linearity
TA3006-01	70A	0.35A	$20\Omega$	7.0V	$\leq 3\%$

### 8. Attention:

- ① Connect the primary winding of the current transformer in series with the measured current loop. Operate the secondary winding in a near short-circuit mode.
- ② Do not allow the secondary winding of the current transformer to be open-circuited. Do not install any fuse on the secondary winding.