



**Nanjing Zeming Electronic Co., Ltd**

*micro transformer professional manufacturer*

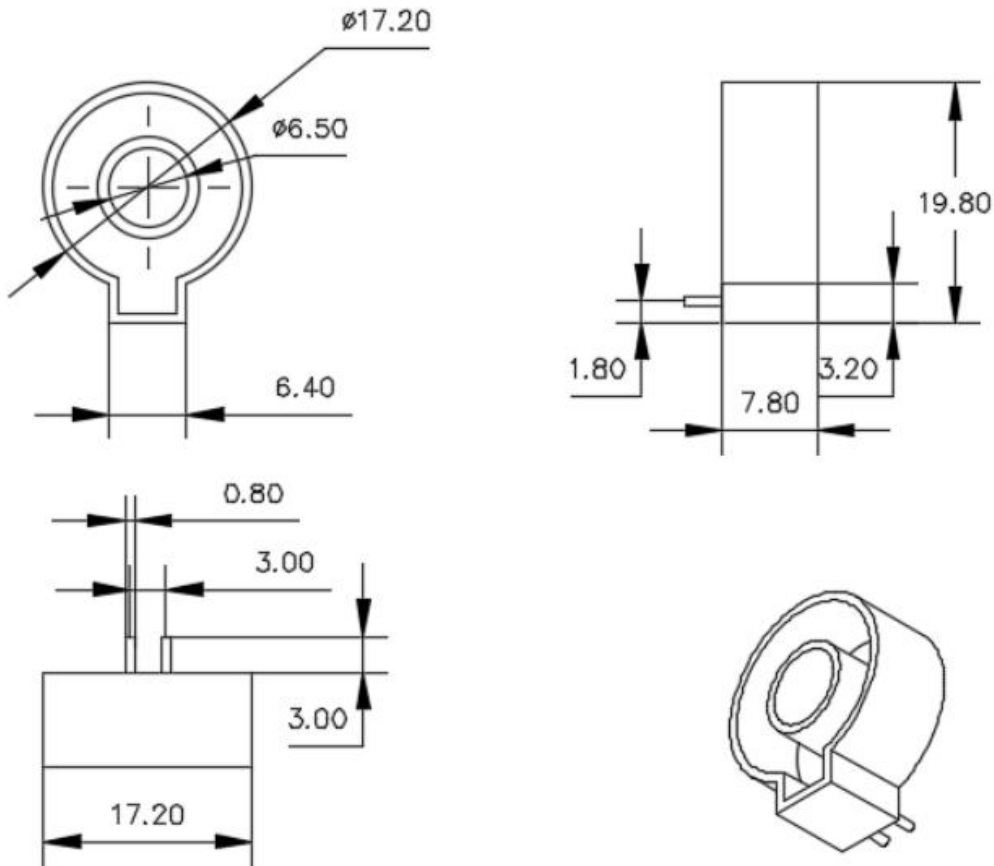
# Specification Sheet

**Part No. : ZMCT205D-2**

# ZMCT205D-2 current transformer

Small size, high accuracy, good consistency, for simple current monitoring and control

## 1. Structural parameters



- Unit: mm
- Tolerance:  $\pm 0.2\text{mm}$
- Pin length:  $3.0 \pm 0.5\text{mm}$

## 2. The main technical parameters

Model	ZMCT205D-2
Rated input current	5A
Rated output current	5mA
turns ratio	10001
phase angle error	$\leq 60'$ (input 5A, sampling resistor 25 $\Omega$ )
linear range	0~8A (sampling resistor 25 $\Omega$ )
linearity	$\leq 0.5\%$ (5%dot ~120%dot)
Permissible error	$-0.5\% \leq f \leq +0.5\%$ (input 5A, sampling resistor 25 $\Omega$ )
isolation voltage	4500V
application	simple current monitoring and control
Encapsulation	Epoxy
installation	PCB mounting
operating temperature	-25 $^{\circ}\text{C}$ ~+85 $^{\circ}\text{C}$

## 3. Test datas

### Testing Report

Date: 2016.12.20

Spec.	Ultra-micro current transformer								
Model	ZMCT205D								
Testing instrument	HESE micro current transformer calibrator								
Testing environment	Room temperature, the rated input current 5A, 5A/5mA								
Testing dot		R=0 $\Omega$		R=20 $\Omega$		R=50 $\Omega$		R=75 $\Omega$	
Rated current (%)	Input current (A)	Ratio error (%)	Phase error (')	Ratio error (%)	Phase error (')	Ratio error (%)	Phase error (')	Ratio error (%)	Ratio error (')
1	0.05	-0.016	67.7	-0.074	74.0	-0.326	113.0	-0.603	142.1
5	0.25	-0.133	63.6	-0.183	70.9	-0.481	95.0	-0.804	108.0
10	0.5	-0.491	54.8	-0.598	54.6	-0.977	63.1	-1.315	73.2
25	1.25	-0.033	40.2	-0.134	37.8	-0.368	44.5	-1.016	41.0
50	2.5	-0.050	26.2	-0.121	25.7	-0.291	31.3	-0.402	37.7
75	3.75	-0.007	19.5	-0.073	21.6	-0.212	31.0	-0.337	42.1
100	5	0.040	16.2	-0.026	21.9	-0.173	35.8	-0.311	63.3
120	6	0.070	15.5	-0.013	23.2	-0.164	49.7	-2.367	181.4
150	7.5	0.086	15.9	-0.003	27.2	-1.623	143.2		
175	8.75	0.094	16.8	-0.001	34.5				
200	10	0.101	19.2	-0.265	66.8				
250	12.5	0.101	27.1	-2.310	133.8				
300	15	-0.752	82.0						
<b>Remark: Red font represent the saturation point</b>									
Test by	Jixiang Tao			checked by			TingTing Wang		

### 4. Direction for use

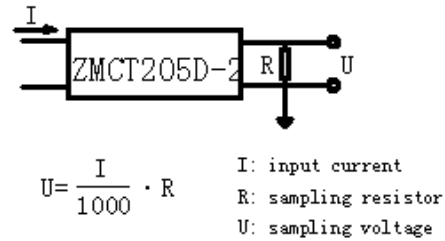
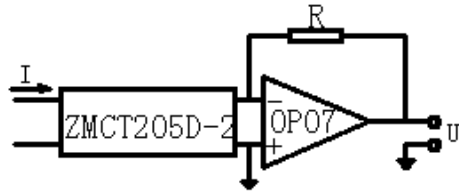


Figure I

Figure II

ZMCT205D-2 used for the measurement, the typical usage is shown in Figure I and Figure II . R is a sampling resistor.

### 5. Material list

NO.	Material	Spec, model	UL code	SGS
1	Ultracrystallite core	Ø10*12.4*3.2	-	yes
2	Core Shell	PBT	E332375	yes
3	Tape	Flame retardant, Environmental protection, V0 105 degrees, (Plaster) Yellow Glue	E165111	yes
4	Enameled wire (Winding wire)	2UEW、Ø0.08, 1000T	E258243	yes
5	Outer covering/Outside Shell	ZCT1-1, Environmental protection	E238981	yes
6	Fills and seals material	TXH-9201-10 epoxy resin insulating compound	E196959	yes
7	PINS	STEEL		yes