

Class Loop Current Sensor

ELECTRICAL DATA/INPUT :

Primary Nominal R.M.S. Current Ir(A)	Primary Current Measuring Range Ip(A) at Vcc=±15V	Part Name Type	Part Number
50/100	70/150	CLTH0500/CLTH1000	CT027XXXXXXXX
Vcc	Supply Voltage		±15V ±5%
Ic	Current Consumption	CLTH0500	≤ 10mA +(Ir/1000)A
		CLTH1000	≤ 10mA +(Ir/2000)A
Iis	R.M.S. Voltage for 6KVAC Isolation test, 50/60Hz,1min		<10mA
Ris	Isolation Resistance at 500 VDC		>500Mohm
CR	Conversion ratio	CLTH0500	1:1000
		CLTH1000	1:2000

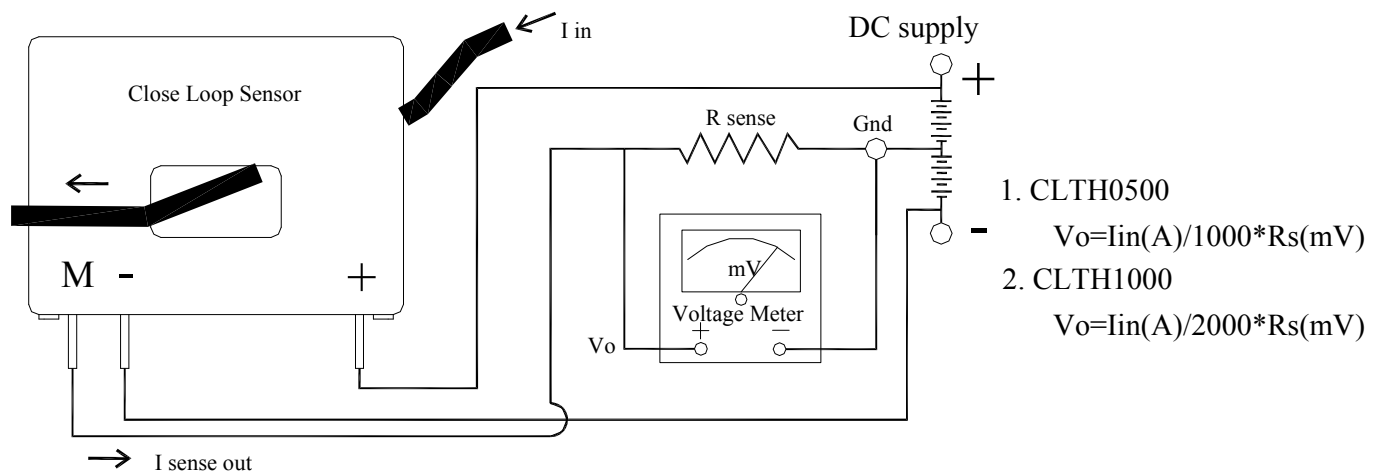
ELECTRICAL DATA/OUTPUT

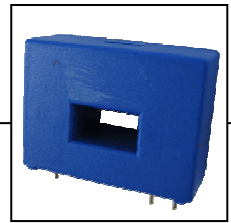
Iout	Output current , TA=25°C	50mA*Ir
RL	Load Resistor	<160 ohm
X	Accuracy at Ir , TA=25°C (without offset)	<±0.6%
EL	Linearity from 0 to Ir , TA=25°C	<±0.1%
Ioe	Electrical Offset current , TA=25°C	<±0.3mA
Iom	Magnetic Offset current (Ir→0)	<±0.2mA
Iot	Thermal Drift of Offset current	<±0.6mA/°C
Tr	Response Time to 90% of Ir(f=1KHz)	<1us
FB	Frequency Bandwidth (-3dB)	100KHz

GENERAL DATA :

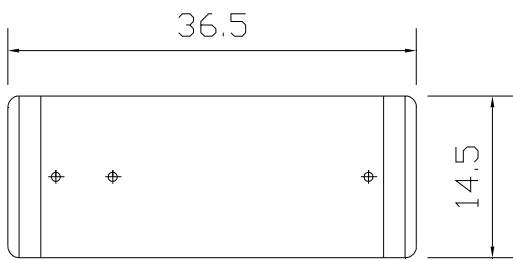
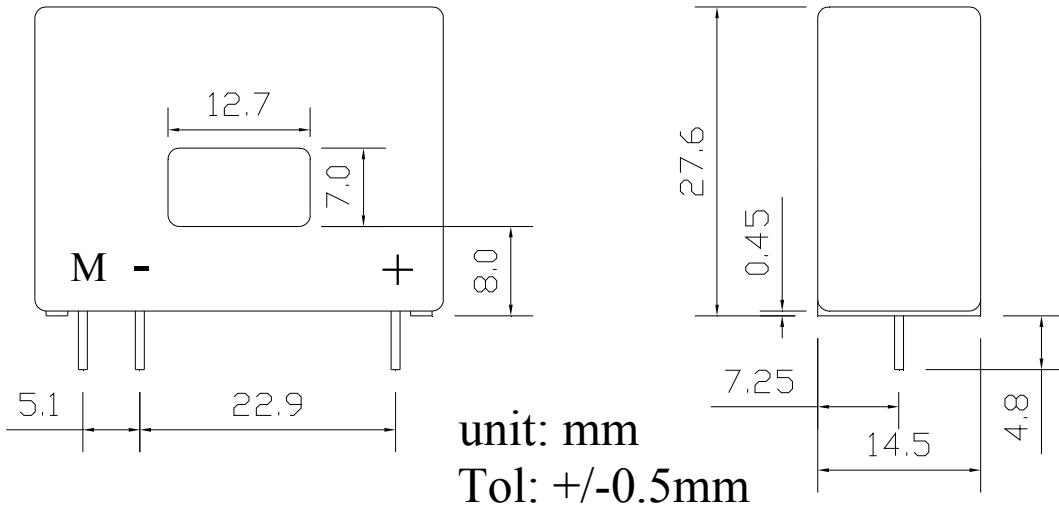
TA	Ambient Operating Temperature	-10 ~ +80°C
Ts	Ambient Storage Temperature	-25 ~ +105°C

Wire connection & test method:



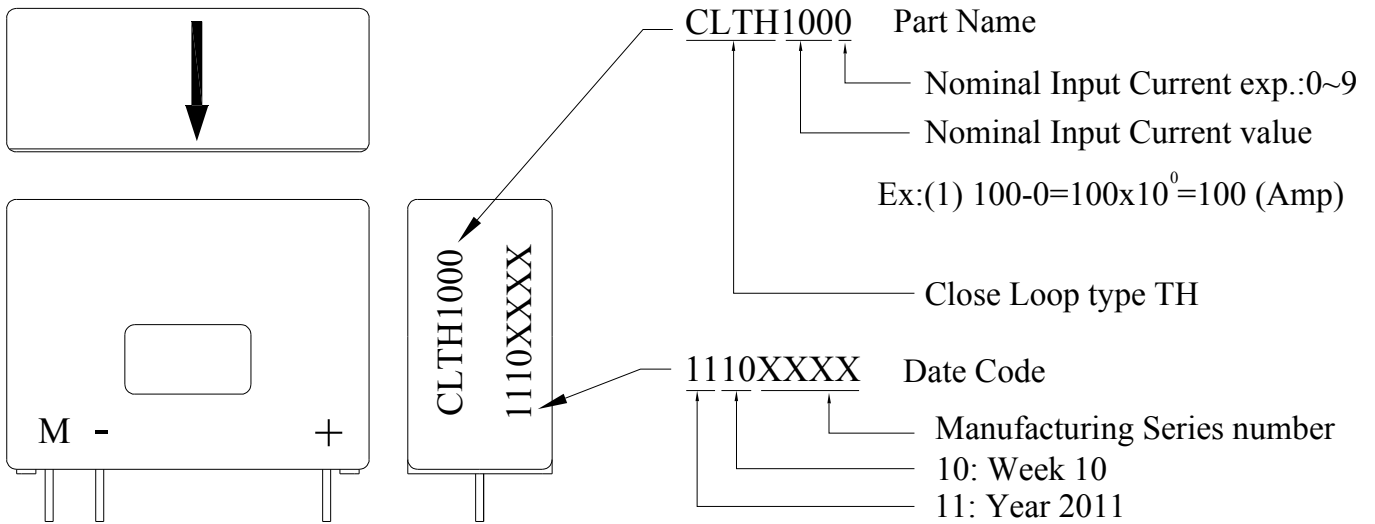


Outline dimension & Pin definition (all tolerance:±0.5)



Secondary terminals	
Terminal +	+12...15V
Terminal -	-12...15V
Terminal M	measure

Marking & Description



Remarks

1. Please use high accuracy Rs(resistor) while measuring current.
2. To avoid output saturated, use lower resistor under spec.