

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
3~50	±Ir*2	CLCA0030~CLCA0500	CT021XXXXXXXX
Vcc	Supply Voltage		±15V ±5%
Ic	Current Consumption		≤20mA +(Ir/1000)A
Iis	R.M.S. Voltage for 2.5KVAC Isolation test, 50/60Hz, 1min		<10mA
Ris	Isolation Resistance at 500 VDC		>500Mohm

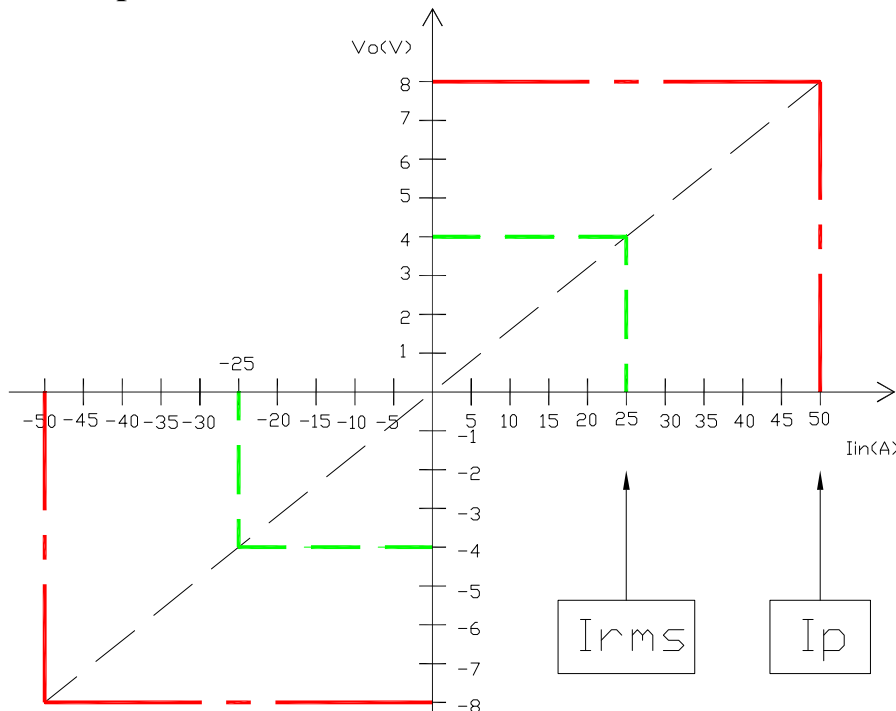
ELECTRICAL DATA/OUTPUT

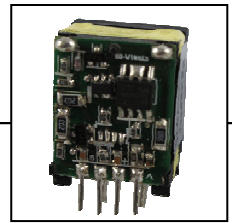
Vout	Output voltage at Ir , TA=25°C	4V±1%
Rout	Output Impedance	<150 ohm
RL	Load Resistor	>10Kohm
X	Accuracy at Ir , TA=25°C (without offset)	<±1%
EL	Linearity from 0 to Ir , TA=25°C	<±1%
Voe	Electrical Offset Voltage , TA=25°C	<±40mV
Vom	Magnetic Offset Voltage (Ir→0)	<±15mV
Vot	Thermal Drift of Offset Voltage	<±1mV/°C
T.C.	Thermal Drift (-10°C to 50°C)	<±0.1%/°C
Tr	Response Time to 90% of Ir(f=1KHz)	<2us
FB	Frequency Bandwidth (-3dB)	50KHz

GENERAL DATA :

TA	Ambient Operating Temperature	-10 ~ +80°C
Ts	Ambient Storage Temperature	-25 ~ +85°C

Output voltage v.s. Input current: Ex: Irms=25A ; Ip=25*2=50A, Vcc=±15V(Dual power)

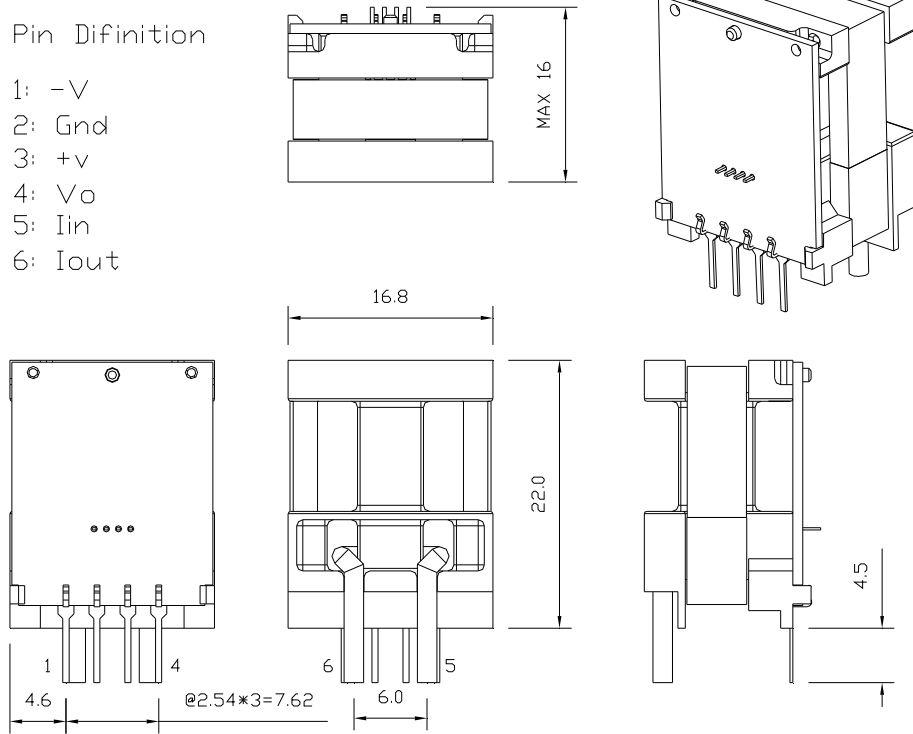




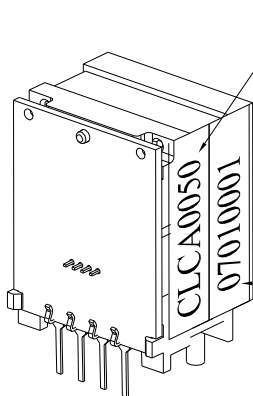
Outline dimension & Pin definition (all tolerance:±0.5)

Pin Definition

- 1: -V
- 2: Gnd
- 3: +v
- 4: Vo
- 5: Iin
- 6: Iout



Marking & Description



CLCA0050

Part Name

Nominal Input Current exp.: B=>-2; A=>-1; 0~9
 Nominal Input Current value

Ex: (1) 005-0 = $5 \times 10^0 = 5$ (Amp)
 (2) 075-A = $75 \times 10^{-1} = 7.5$ (Amp)

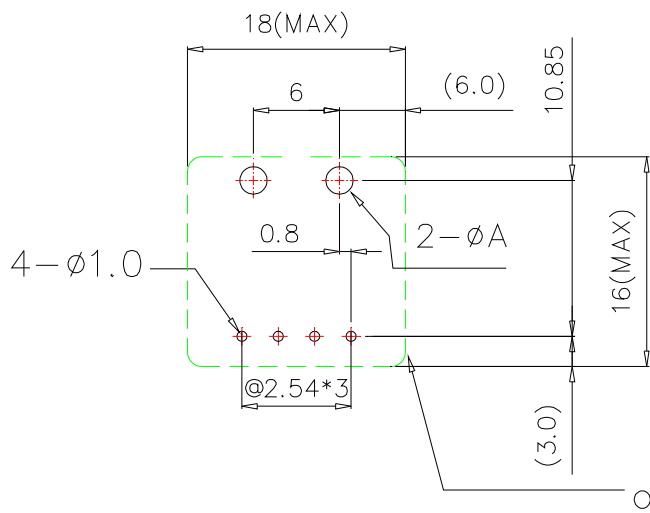
Close Loop Current sensor type A

07010001

Date Code

Manufacturing Series number
 01: Week 1
 07: Year 2007

Layout Recommend:



outline dimension

Part Name	øA(mm)
CLCA0050	ø1.0
CLCA0100	ø1.4
CLCA0150	ø2.0
CLCA0200	ø2.0
CLCA0250	ø2.0
CLCA0500	ø2.2