

Open 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*3	CTC0030~CTC0500	CT003XXXXXXXX
Vcc	Supply Voltage		±15V ±5%
Ic	Current Consumption		<20mA
Iis	R.M.S. Voltage for 2.5KVAC Isolation test, 50/60Hz, 1min		<10mA
Ris	Isolation Resistance at 500 VDC		>500Mohm

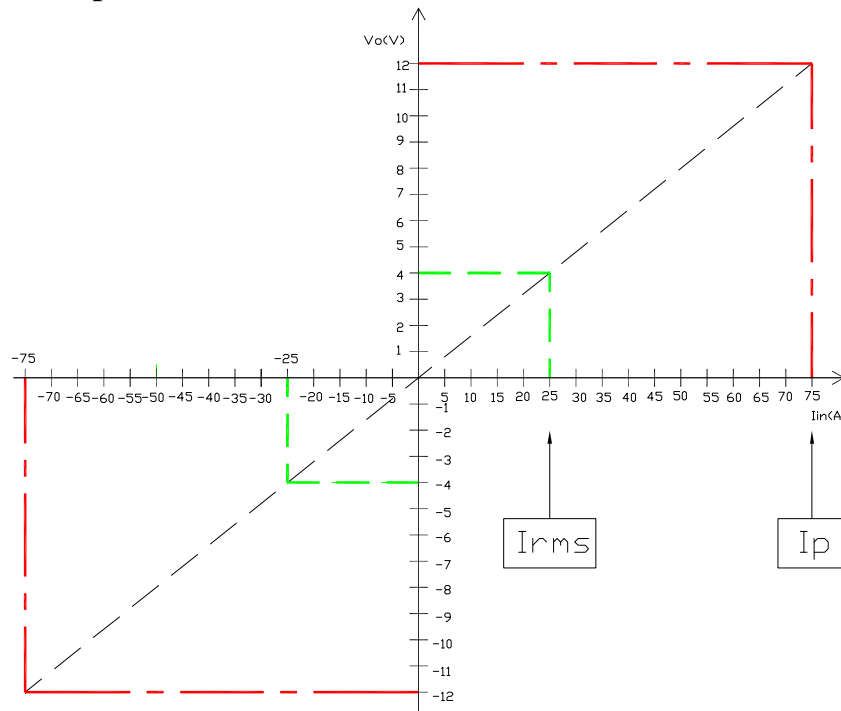
ELECTRICAL DATA/OUTPUT

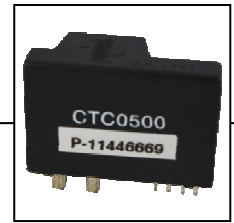
Vout	Output voltage at Ir , TA=25°C	4V±1%
Rout	Output Impedance	<150 ohm
RL	Load Resistor	>10Kohm
X	Accuracy at Ir , TA=25°C (without offset)	<±1%
EL	Linearity from 0 to Ir , TA=25°C	<±1%
Voe	Electrical Offset Voltage , TA=25°C	<±40mV
Vom	Magnetic Offset Voltage (Ir→0)	<±15mV
Vot	Thermal Drift of Offset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

GENERAL DATA :

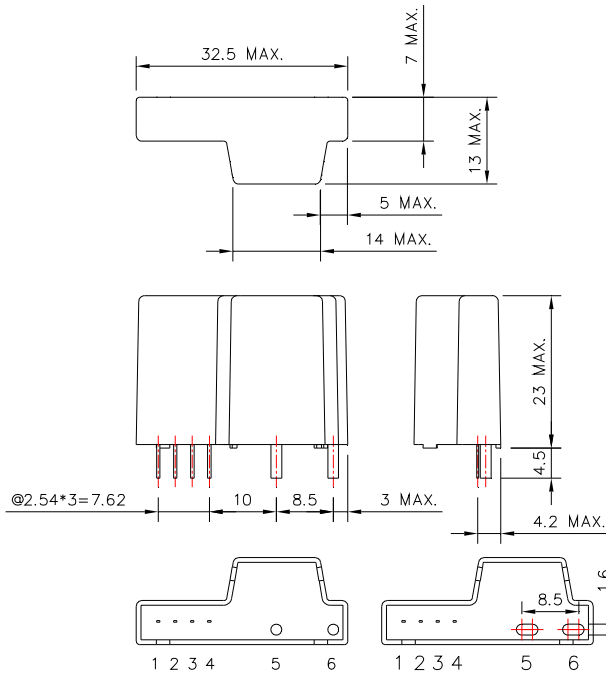
TA	Ambient Operating Temperature	-10 ~ +80°C
Ts	Ambient Storage Temperature	-25 ~ +85°C

Output voltage v.s. Input current: Ex: Irms=25A ; Ip=25*3=75A, Vcc=±15V(Dual power)





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



Terminal Pin Identification

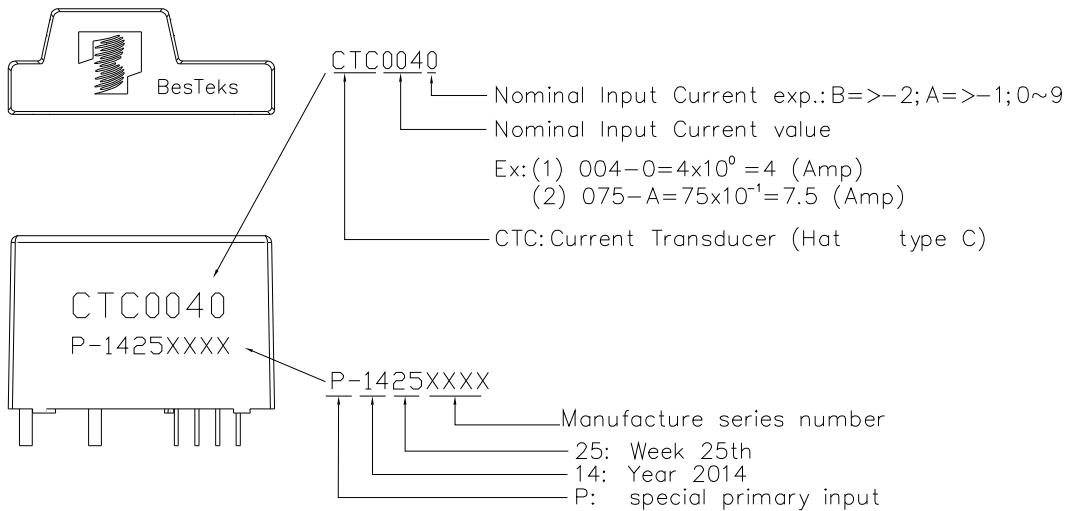
- 1. V+
- 2. V-
- 3. Output
- 4. Ground
- 5. Coil Input +
- 6. Coil Input -

Primary Conductor Terminal

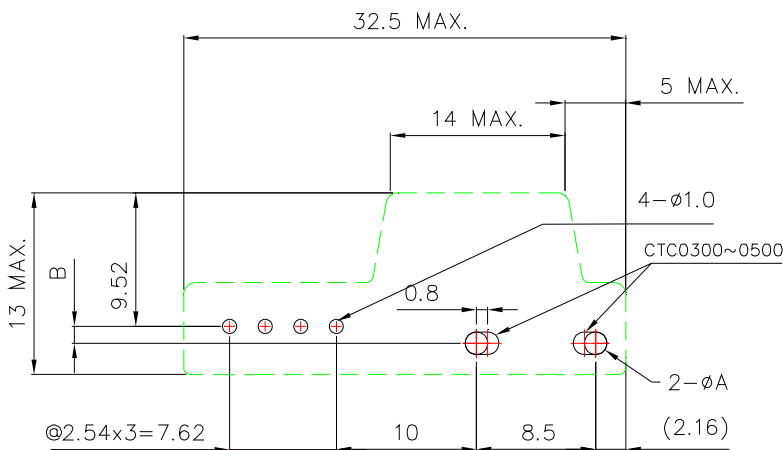
CTC0030	∅0.6	CTC0100	∅1.0
CTC375B	∅0.6	CTC125A	∅1.6
CTC0040	∅0.6	CTC0150	∅1.6
CTC0050	∅0.8	CTC185A	∅1.6
CTC625B	∅0.8	CTC0200	∅1.6
CTC075A	∅1.0	CTC0250	∅1.6

CTC0300~0500

Marking & Description



Layout Recommend:



Part Name	∅A(mm)	B(mm)
CTC0030	1.0	1.225
CTC375B	1.0	1.225
CTC0040	1.0	1.225
CTC0050	1.2	1.325
CTC625B	1.2	1.325
CTC075A	1.4	1.425
CTC0100	1.4	1.425
CTC125A	2.0	1.725
CTC0150	2.0	1.725
CTC185A	2.0	1.725
CTC0200	2.0	1.725
CTC0250	2.0	1.725
CTC0300~0500	2.0	1.725