

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	CTF0030~CTF0500	CT006XXXXXXXX
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

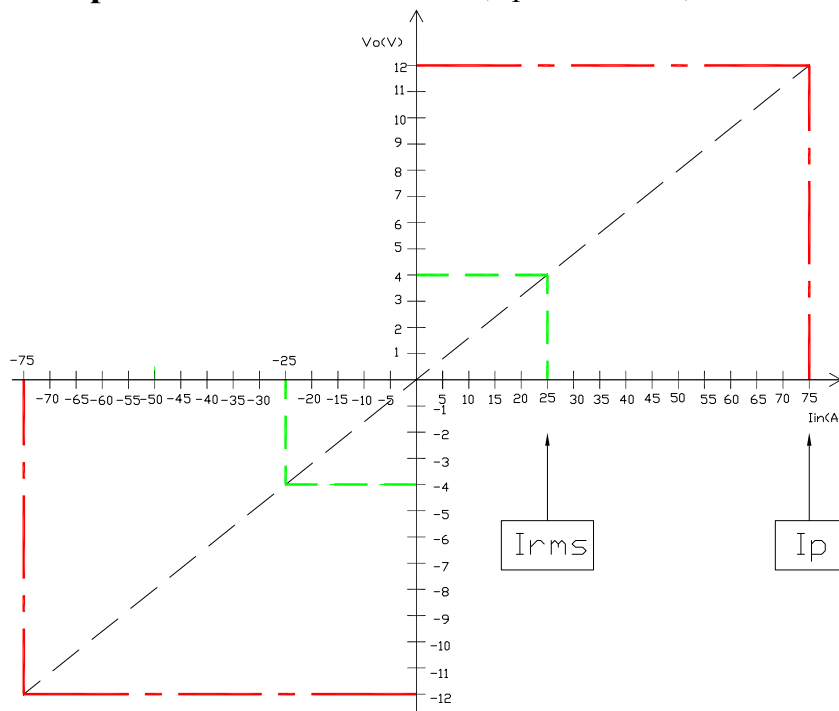
ELECTRICAL DATA/OUTPUT

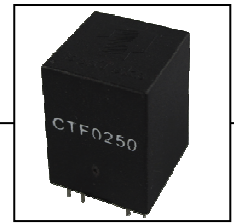
Vout	Output voltage at Ir , TA=25°C	4V±1%
Rout	Output Impedance	<150 ohm
RL	Load Resistor	>10Kohm
X	Accuracy at Ir , TA=25°C (without offset)	<±1%
EL	Linearity from 0 to Ir , TA=25°C	<±1%
Voe	Electrical Offset Voltage , TA=25°C	<±40mV
Vom	Magnetic Offset Voltage (Ir→0)	<±15mV
Vot	Thermal Drift of Offset 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 :

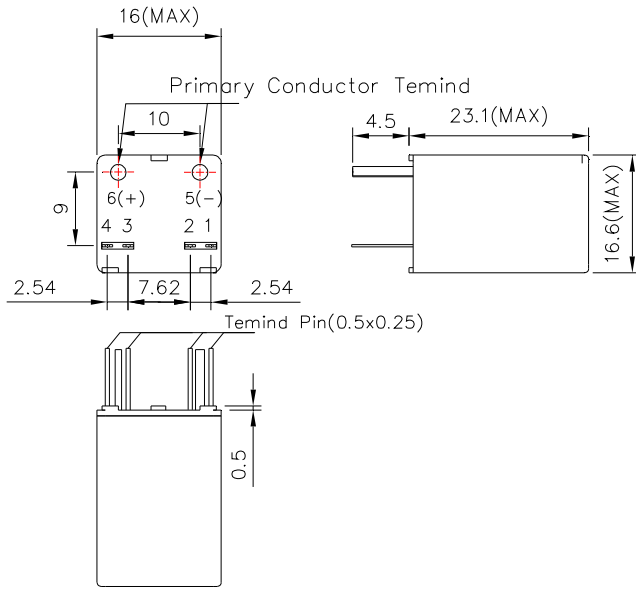
TA	Ambient Operating Temperature	-10 ~ +80°C
Ts	Ambient Storage Temperature	-25 ~ +85°C

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)



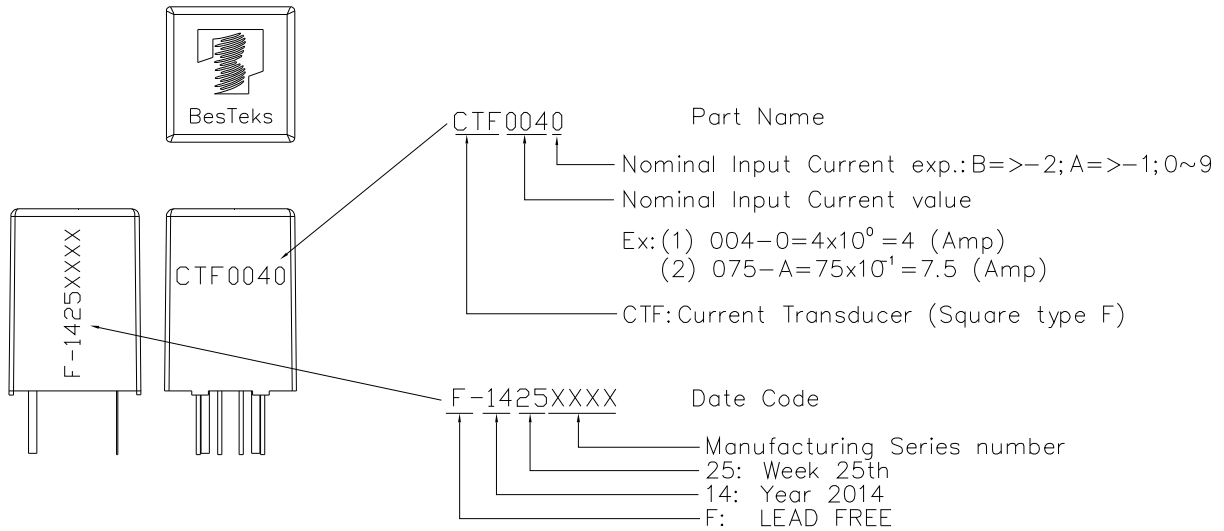
Terminal Pin Identification

- 1. OUT
- 2. V+
- 3. V-
- 4. GND
- 5. Coil Input -
- 6. Coil Input +

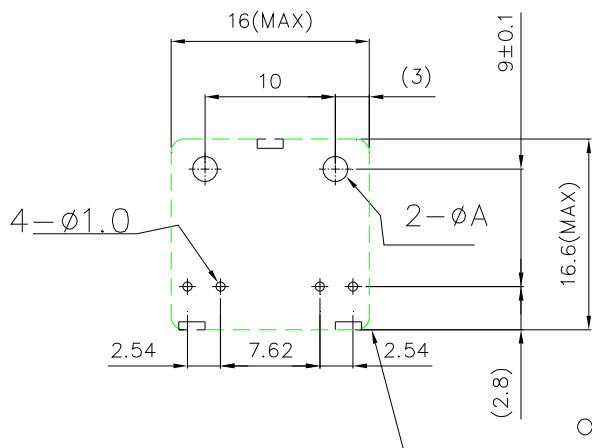
Primary Conductor Terminal

CTF0030	∅0.6	CTF125A	∅1.6
CTF375B	∅0.6	CTF0150	∅1.6
CTF0040	∅0.6	CTF175A	∅1.6
CTF0050	∅0.8	CTF0200	∅1.6
CTF625B	∅0.8	CTF0250	∅1.6
CTF075A	∅1.0	CTF375A	∅1.6
CTF0100	∅1.0	CTF0500	∅2.2

Marking & Description



Layout Recommend:



Part Name ∅A(mm)

CTF0030	1.0	CTF125A	2.0
CTF375B	1.0	CTF0150	2.0
CTF0040	1.0	CTF175A	2.0
CTF0050	1.2	CTF0200	2.0
CTF625B	1.2	CTF0250	2.0
CTF075A	1.4	CTF375A	2.0
CTF0100	1.4	CTF0500	2.6

outline dimension