

Clamp-on Current Transducer Probe

The **CTC1537** clamp-on current probe is designed for applications that are limited to intermittent current measurements where wide AC input current and frequency range are highly desirable features. The CTC1537 offers a range of secondary output signal options both mA and mV. With a maximum operating voltage of 600 volts and a high impact resistant housing, the CTC1537 offers superior operator protection and safety.

Specifications:

Continuous Working Current	Output Options	Accuracy Class	Secondary Burden (ohms)
0.5A to 1,000A	0 to 20 mA (A0), 4 to 20 mA (A1), 0 to 5V (V1), 1 to 5V (V2)	1%	≤ 250

Frequency: 50/60 Hz
Maximum Non-destructive Input Current: 2,000 A
Working Voltage: 600V_{AC RMS}

Output:

Ambient Temperature Influence:
 < 0.1% per °C for temperatures from
 -10°C to 18°C and from 28°C to 50°C
Rise/ Fall Time: < 400ms
Burden Resistance: ≤ 250 Ohms

Operating:

Operating Temperature:
 -10°C to +50°C (14°F - 122°F):
 100mA - 800 A_{AC RMS} Continuous
 800 - 1000 A_{AC RMS} 5 minutes On,
 15 minutes Off
 -10°C to +30°C (14°F - 86°F)
 100 mA - 1000 A_{AC RMS} continuous
Storage Temperature:
 -40°C to +70°C (-40°F - +160°F)



Relative Humidity: 0% - 85% (10°C - 30°C)
 0% - 75% (30°C - 40°C)
 0% - 45% (40°C - 50°C)

Note: Accurate and linear measurements are obtained when the Ampere – Second product (average current amplitude times duration of the current pulse) is below 1.0 A-S. A-S pulses greater than 1.0 A-S might result in core saturation and reduced transformation accuracy.

Physical:

Safety:	CAT III 600V
Opening:	50mm (2.05")
Dimensions:	216mm (8.5") x 111mm (4.4") x 45mm (1.8")
Weight:	0.65 kg (1.4lbs)
Output Cable:	1.5m (60") PVC insulated reinforced coaxial cable

Cable Termination Options:

BNC connector
Ø 4mm RED/ BLACK banana plugs

Case:

PC UL 94 V-0 rated.

Designed to IEC 61010-1, IEC61010-2-032 and EN 61010-1 - Protection Class II, double or reinforced insulation requirement

Protection – IP30 (IEC 529)

Drop Test – IEC 68-2-32, 1 meter

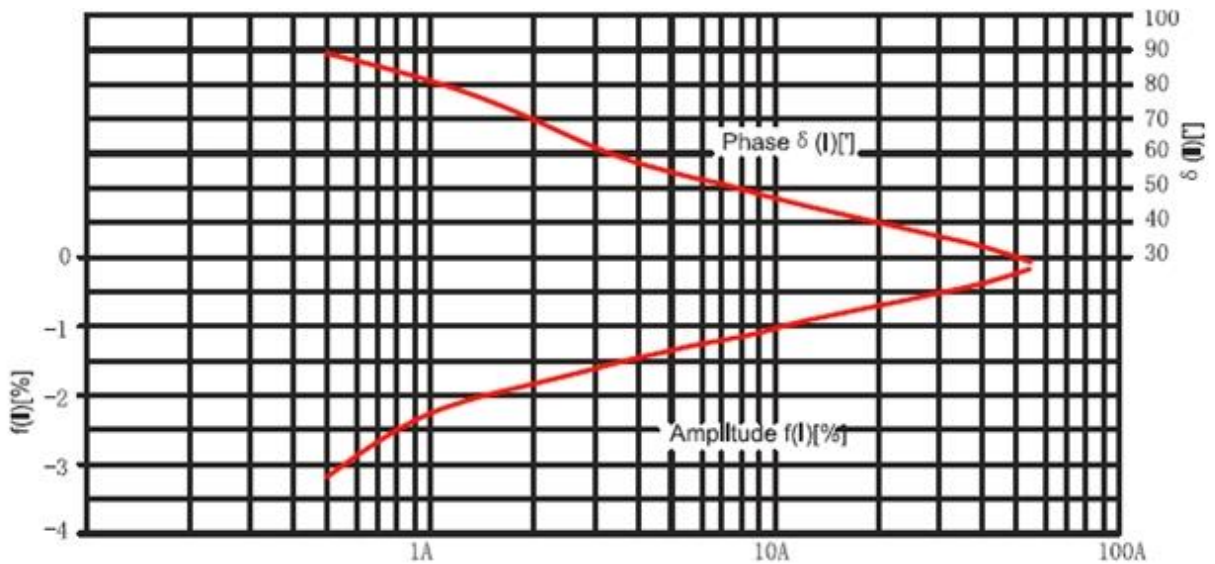
Mechanical Shock – IEC 68-2-27, 100G

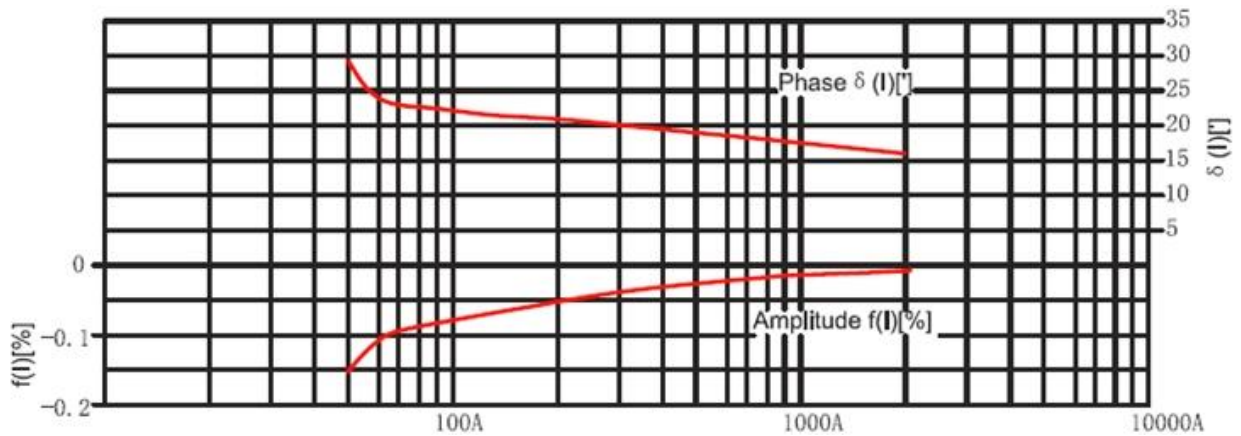
RoHS compliant.



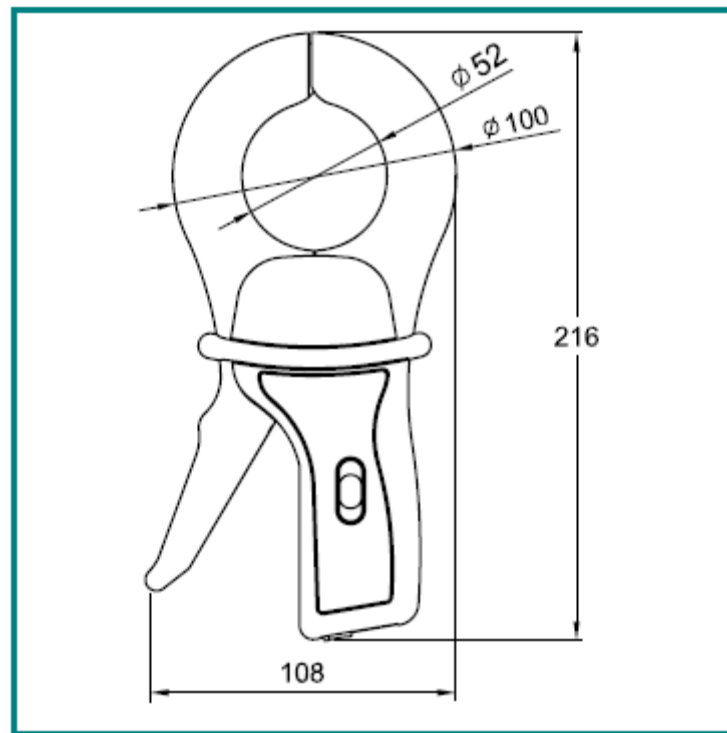
Typical Performance:

Ratio 1:1000, Frequency 50Hz. Burden 1 ohm, Ambient Temperature 25° C





Outline Drawing:



Custom clamp-on current probe designs are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to engineering@tichenassociates.com or the address below.