

CURRENT TRANSFORMER DESIGN FORM

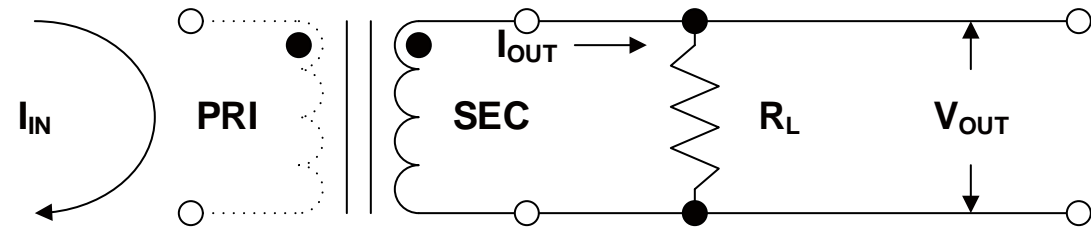
Date:	Telephone Number:
Customer Name:	Fax Number:
Design Engineer:	E-mail Address:
Program/Project Name:	Application: <input type="checkbox"/> Measurement <input type="checkbox"/> Control <input type="checkbox"/> Monitor <input type="checkbox"/> Other_____

Input (Primary):

Output (Secondary):

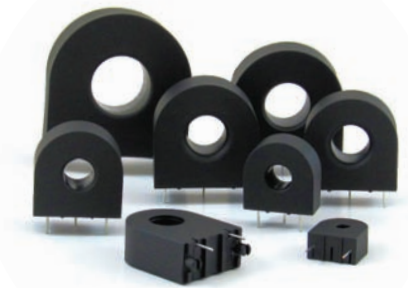
Operating Frequency	Hz
Maximum Current	A _{RMS}
Applicable Duty Cycle	

Output	V _{RMS}	A _{RMS}
Burden	Ohms	V/A Volts per Amp
Topology of SMPS	(If Applicable)	



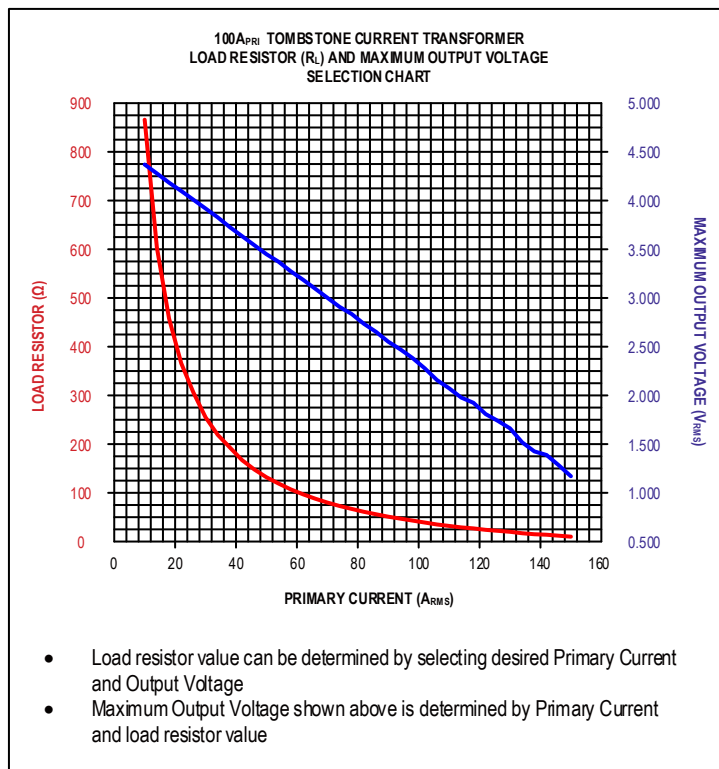
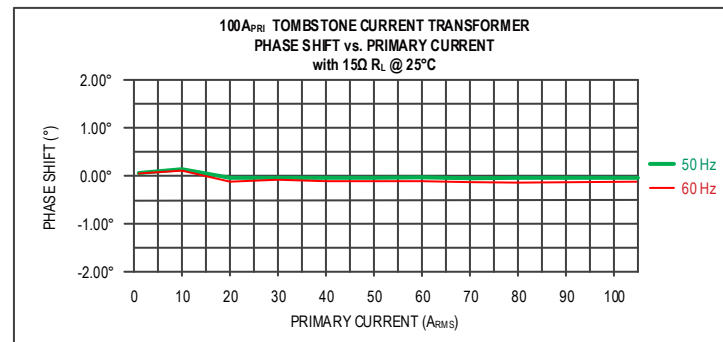
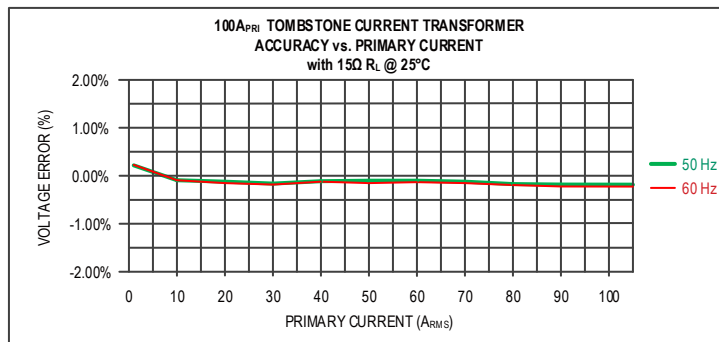
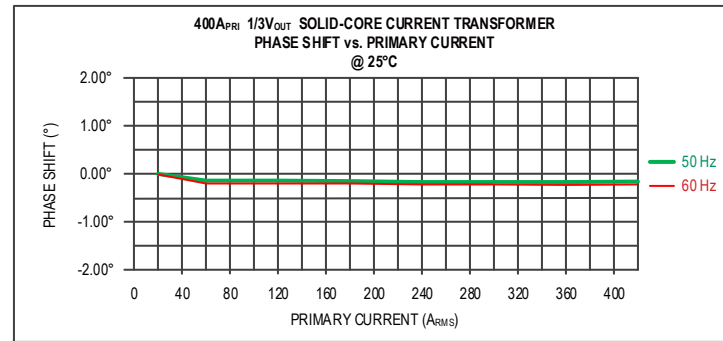
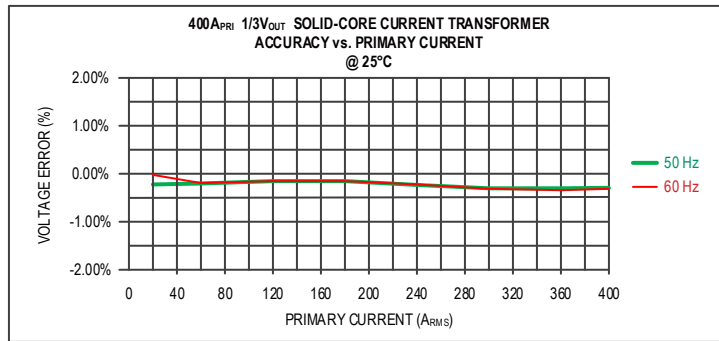
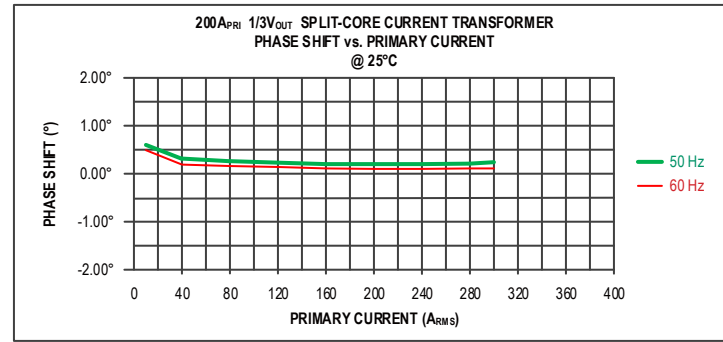
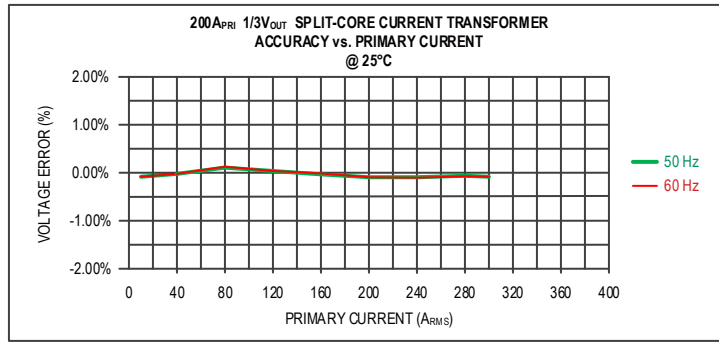
Maximum Desired Size: _____(Length) x _____(Width) x _____(Height)			
Minimum Inside Diameter: _____(PRI Conductor) ; Maximum Outside Diameter: _____(SEC. Coil)			
Termination:			
<input type="checkbox"/> UL1015 Stranded Wire	<input type="checkbox"/> TEFLON Stranded Wire	<input type="checkbox"/> Lead Length _____	
<input type="checkbox"/> PC Pins _____	<input type="checkbox"/> SMD _____	<input type="checkbox"/> Other _____	
Insulation Class: <input type="checkbox"/> B (130°C) <input type="checkbox"/> F (155°C) <input type="checkbox"/> H (180°C) <input type="checkbox"/> Other _____			
Dielectric Isolation between PRI and SEC: _____V _{RMS} for _____seconds			
Temperature & Cooling Information: Max. Ambient _____°C			
Applicable Standards: <input type="checkbox"/> IEC _____ <input type="checkbox"/> ANSI _____ <input type="checkbox"/> Other _____			
Current Range (Primary Conductor): _____			
Accuracy: <input type="checkbox"/> 0.5% <input type="checkbox"/> 1.0% <input type="checkbox"/> 2.0% <input type="checkbox"/> Other _____			
Phase Errors: <input type="checkbox"/> 0.5° <input type="checkbox"/> 1.0° <input type="checkbox"/> 1.5° <input type="checkbox"/> 2.0° <input type="checkbox"/> Other _____			
Constructions: <input type="checkbox"/> Secondary Coil only <input type="checkbox"/> Primary Conductor Built-in <input type="checkbox"/> Other _____			
Note:			

[DESIGN FORM is available at URL: <http://www.VitecCorp.com>]



Current Sensing Capabilities Brochure

- 0.2 and 0.5 Accuracy Class Electricity Meters
- Alternative Energy:
 - Solar (PV-Photovoltaic)
 - Windmill & etc.
- Sub-metering Systems
- Revenue Meters
- Measurement Instruments
- Power Distribution Units
- Branch Circuits and Power Monitoring Systems
- Uninterruptible Power Supply (UPS) Manufacturers
- Power Supplies:
 - AC-DC Rectifiers
 - DC-DC Converters
 - AC-AC Inverters
- Telecommunications
- Electronics Data Processing
- Data-communications
- Instrumentations



- For Switch Mode Power Supply Applications -

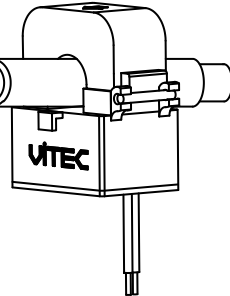
Product Selection Considerations:

Current Sense Transformers used in a SMPS normally are for control, circuit protection, and monitoring features:

- Switching Frequency [f]
- Maximum Duty Cycle [DuCy_{MAX}]
- Range of Current being measured [I_{RATED}]
- Primary Peak Current [I_{PPK}]
- Primary Conductor / Secondary Winding Turns Ratio [r = N_S / N_P]
- Output Voltage [V_{REF}]
- Terminating Resistor [R_T]
- Size
- Mounting Structure

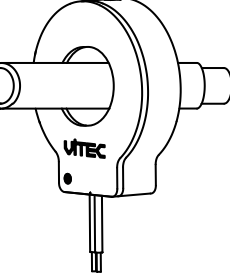
VOLTAGE-MODE or CURRENT-MODE SPLIT-CORE CURRENT TRANSFORMERS

- Frequency Range: from 50~60 Hz
 - Rated Current of Primary Conductor: 50A, 100A, and 200A
 - Linearity Accuracy ± 1% between 5% to 120% or Rated Current
 - Excellent Phase Shift at 1° MAX on 100A and 200A Devices
 - Various Voltage Outputs: 0.3333V, 1V, and Custom
 - Dielectric Strength: starting at 3000V_{RMS} MIN.
- Power Meters
 - Power Distribution Units
 - Branch Circuit Monitoring Systems
 - Data Acquisition and Recording Systems
 - Energy Distribution Management Systems
 - Alternative Energy Monitoring Systems



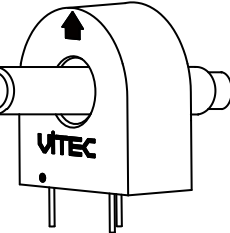
VOLTAGE-MODE OR CURRENT-MODE SOLID-CORE CURRENT TRANSFORMERS

- Frequency Range: from 50 Hz to 400 Hz
 - Rated Current of Primary Conductor: Up to 1000A
 - Phase Shift < 1° between 5% to 120% of Rate Current
 - Linearity Accuracy ± 0.5% between 5% to 120% of Rate Current
 - Dielectric Strength: 3750 V_{RMS} MIN.
 - Operating Temperature Range: from -40°C to 85°C
 - Various Voltage Outputs
 - UL Recognized 6" Bonded Lead Wires as Output Terminations
- Power Meters
 - Power Distribution Units
 - Branch Circuit Monitoring Systems
 - Data Acquisition and Recording Systems
 - Energy Distribution Management Systems
 - Alternative Energy Monitoring Systems



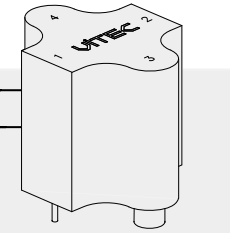
PRECISION TOMBSTONE CURRENT SENSE TRANSFORMERS

- Frequency Range: from 50 Hz to 400 Hz or Above 50 kHz
 - Measurement Applications: High Accuracy and Low Phase-Shift
 - Excellent linearity over rated current range
 - Rated Current of Primary Conductor: Up to 500A
 - Variety of Encapsulated Sizes
 - Dielectric Strength: starting at 3500 V_{RMS} MIN.
 - Application-Specific Mounting Structure Available upon Request
- Energy Metering and Power Monitoring
 - Metering, Relays and Control Panels
 - Electronic and Instrumentation Measurements
 - Sensor Control and Data Acquisition
 - Analog to Digital Circuits
 - Ground Fault Detection



THT CURRENT SENSE TRANSFORMER WITH PRIMARY CONDUCTOR(S) BUILT-IN

- Frequency Range: from 10 KHz to 300 KHz
 - Rated Current of Primary Conductor: Up to 200A
 - Various Secondary Outputs Available
 - Variety of Encapsulated Packages
 - Dielectric Strength (Sealed): starting at 3750 V_{RMS} MIN.
 - Dielectric Strength (Open Frame): starting at 1250 V_{RMS} MIN.
- Overload Sensing in SMPS
 - Isolated current feed-back signal in SMPS
 - Motor current load/overload
 - Switch Controls
 - Isolated bi-directional current sensor with full wave bridge rectifier



SMT CURRENT SENSE TRANSFORMER WITH PRIMARY CONDUCTOR(S) BUILT-IN

- Frequency Range: from 20 KHz to 1MHz
 - Rated Current of Primary Conductor: Up to 35A
 - Various Secondary Outputs Available
 - Variety of Miniature Package Selections
 - Dielectric Strength Voltages: starting at 500 V_{RMS} MIN.
 - Height: starting at 3.5mm MAX.
- Feedback Control in Supplies
 - Overload Sensing
 - Detecting Load Drop or Shutdown
 - Motor Protection
 - Lighting

