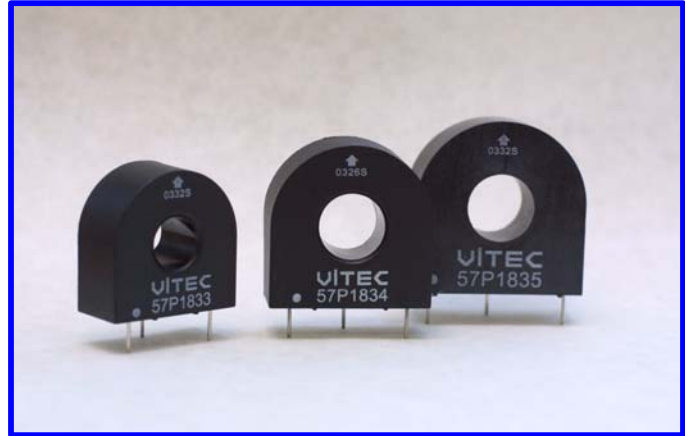


TYPE 57P

CURRENT SENSE INDUCTORS

FEATURES

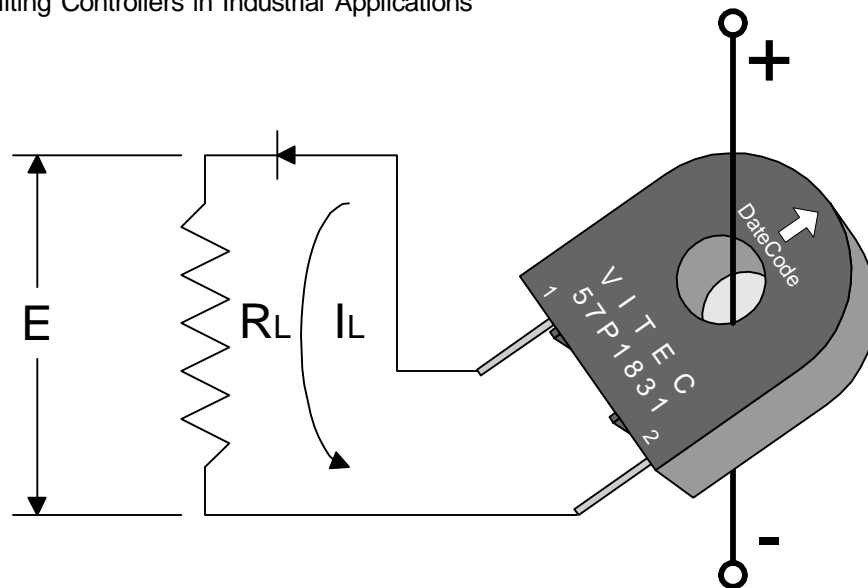
- Frequency Range of 50Hz to 120Hz.
- Fully Encapsulated Construction
- Rated for 25 to 480 Amps RMS Sense Current
- Operating Temperature Range of -40°C to 125°C
- Primary to Secondary Isolation of 3500 VAC
- Materials Meets Flammability Requirement of UL94V-0



APPLICATIONS

Vitec Electronics' Current Sense Inductors shown on this data sheet are the secondary portion of a current transformer created by the user placing a turn or more through the center hole of the package. The current flow through the turn or turns installed by the user are detected by Vitec's inductor and is converted to proportional but smaller current that is then used in the following applications:

- Overload Sensing
- Ground Fault Detection
- Metering
- Analog to Digital Circuitry
- Power Limiting Controllers in Industrial Applications

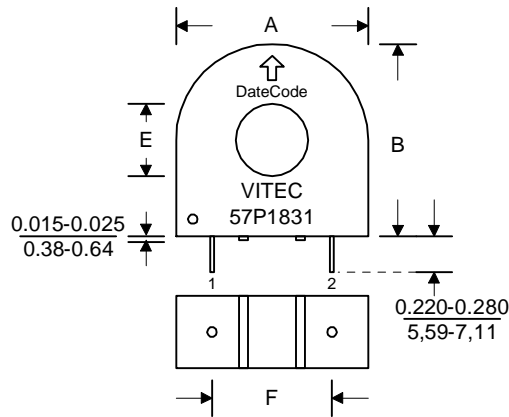


Typical Application Circuit

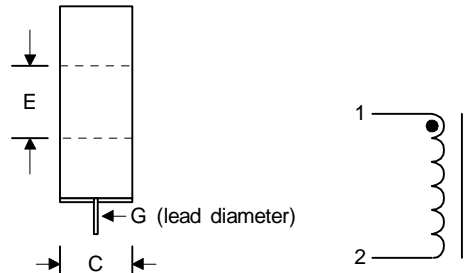
TYPE 57P

CURRENT SENSE INDUCTORS

PACKAGE 57P1831

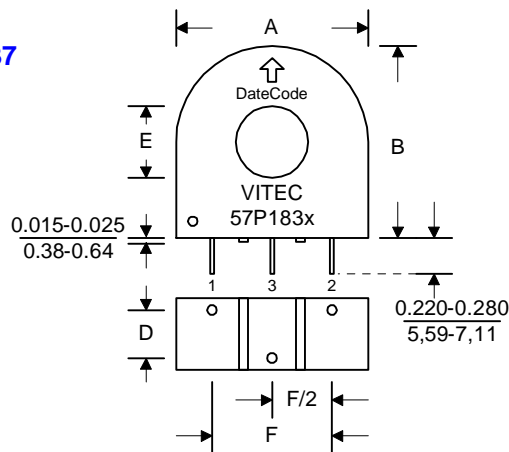


SCHEMATIC

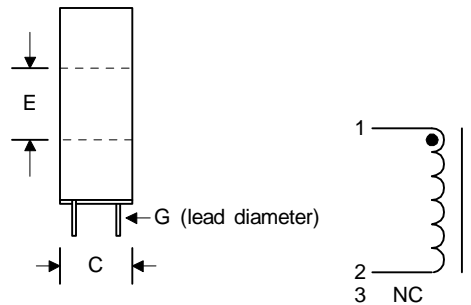


Dimensions: Inches/mm.
Tolerances: +/- 0.010"/0,25mm unless otherwise noted

PACKAGE 57P1832 - 57P1837



SCHEMATIC



Dimensions: Inches/mm.
Tolerances: +/- 0.010"/0,25mm unless otherwise noted

ELECTRICAL CHARACTERISTICS @ +25°C

DIMENSIONS

Part Number		Lp **	Turns	DCR	Rated Current *	R _L	Volt per Ampere	A	B	C	D	E	F	G
								MAX	MAX	MAX	NOM	MIN	NOM	NOM
Classic	RoHS	H	#	Ohm	Amp	Ohm	Volts	MAX	MAX	MAX	NOM	MIN	NOM	NOM
		MIN	+/- 1%	MAX	MAX	MAX	NOM	MAX	MAX	MAX	NOM	MIN	NOM	NOM
57P1831	57PR1831	2.00	1000	38.00	25.00	72.00	0.072	0.670 17,02	0.800 20,32	0.375 9,54	N/A	0.180 4,57	0.500 12,70	0.032 0,81
57P1832	57PR1832	2.00	1000	24.00	60.00	58.30	0.058	1.050 26,67	1.150 29,21	0.450 11,43	0.300 7,62	0.350 8,89	0.600 15,24	0.032 0,81
57P1833	57PR1833	3.60	1000	24.00	150.00	43.30	0.043	1.190 30,23	1.200 30,48	0.575 14,61	0.400 10,16	0.420 10,67	0.800 20,32	0.032 0,81
57P1834	57PR1834	3.60	1000	20.00	180.00	36.10	0.036	1.375 34,93	1.375 34,93	0.575 14,61	0.400 10,16	0.540 13,72	1.000 25,40	0.032 0,81
57P1835	57PR1835	4.20	1000	18.00	250.00	36.00	0.036	1.550 39,37	1.550 39,37	0.640 16,26	0.400 10,16	0.570 14,48	1.200 30,48	0.032 0,81
57P1836	57PR1836	5.00	1000	15.00	330.00	33.30	0.033	1.750 44,45	1.750 44,45	0.640 16,26	0.400 10,16	0.690 17,53	1.400 35,56	0.032 0,81
57P1837	57PR1837	5.00	1000	10.00	480.00	37.50	0.037	2.200 55,88	2.200 55,88	0.870 22,10	0.500 12,70	0.880 22,35	1.800 45,72	0.040 1,02

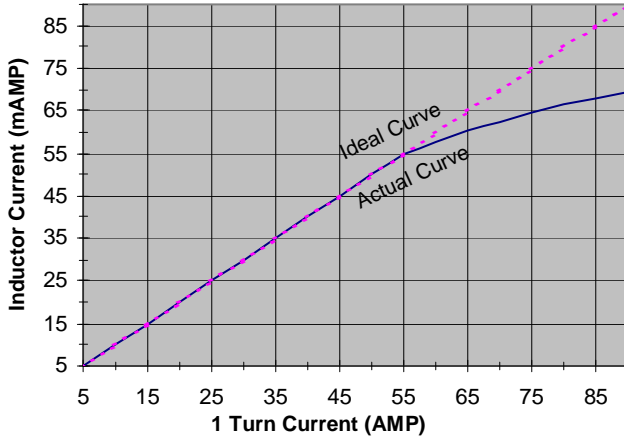
Notes: * Rated current is for <1% linearity.
** Tested @ 120 Hz, 1 Vrms.

Variations to standard product offering is also available. Please contact factory.

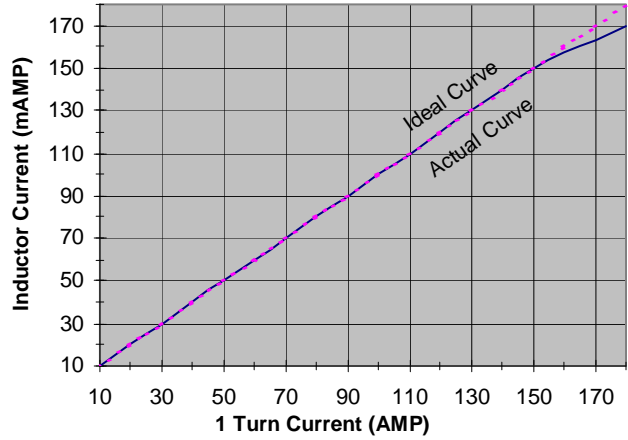
TYPE 57P

CURRENT SENSE INDUCTORS

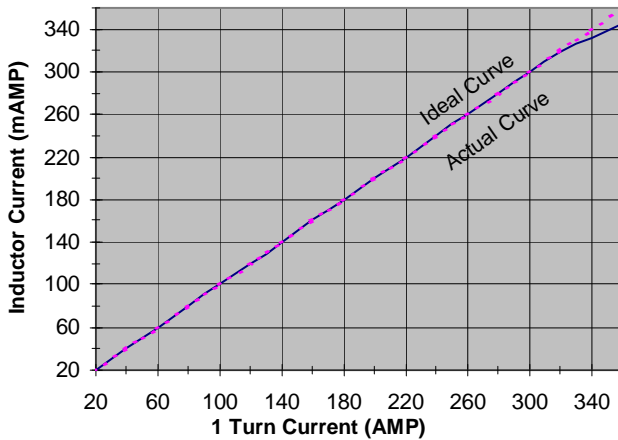
57P1831 LINEARITY GRAPH
Input vs. Output Current with 72 Ohms Load



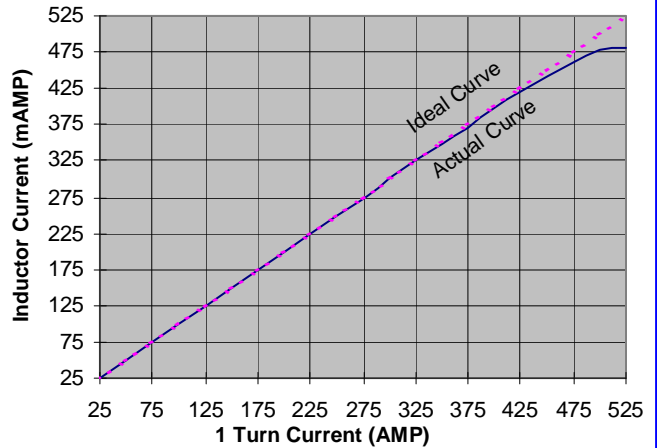
57P1832 LINEARITY GRAPH
Input vs. Output Current with 58.3 Ohms Load



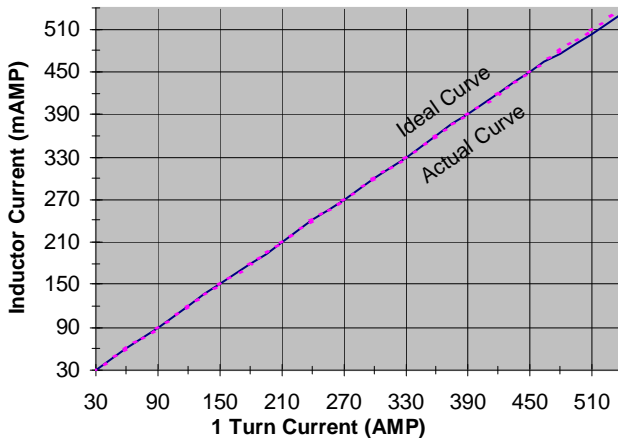
57P1833 LINEARITY GRAPH
Input vs. Output Current with 43.3 Ohms Load



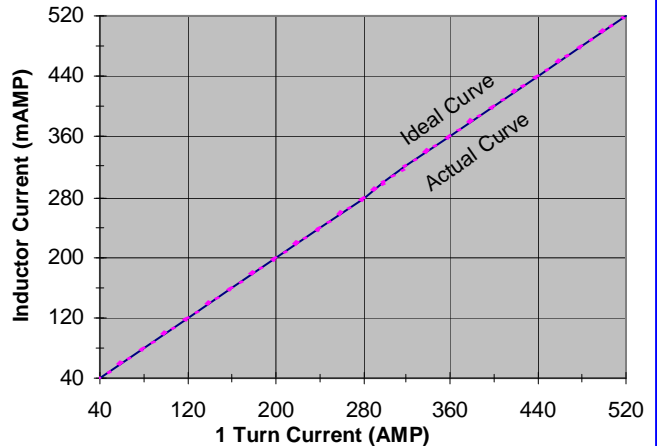
57P1834 LINEARITY GRAPH
Input vs. Output Current with 36.1 Ohms Load



57P1835 LINEARITY GRAPH
Input vs. Output Current with 36.0 Ohms Load



57P1836 LINEARITY GRAPH
Input vs. Output Current with 33.3 Ohms Load

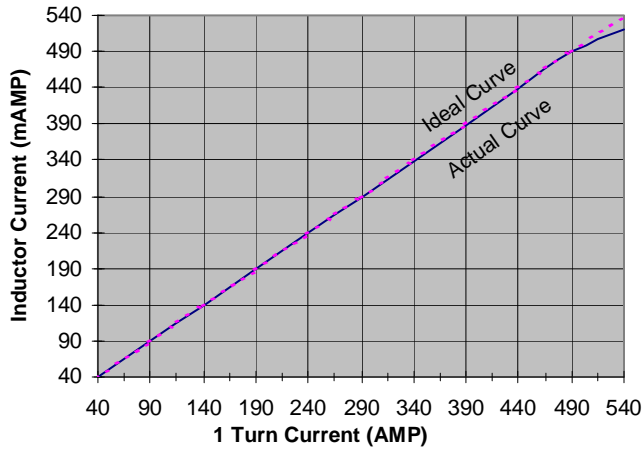


TYPE 57P

CURRENT SENSE INDUCTORS

57P1837 LINEARITY GRAPH

Input vs. Output Current with 37.5 Ohms Load



ENVIRONMENTAL & RELIABILITY

- Storage temperature: -40°C to +125°C
- Operating temperature: -40°C to +125°C
- Marking permanency: Tested per JESD 22-B107-A
- Solderability: Tested per MIL-STD-750D

ABOUT US

Vitec Electronics Corporation, founded in 1986, is a worldwide leader in the design, manufacture and sale of magnetic solutions. Vitec's market focus includes the power, power conditioning, telecom, networking, communications and computing. Vitec has also established strong alliances with chip manufacturers whereby magnetic solutions are designed in conjunction with unique silicon requirements and are offered as reference designs by the chip companies.

With its Corporate Headquarters and Research & Development center located in Carlsbad, California, and its state of the art manufacturing facility and material sourcing in China, Vitec is uniquely positioned to supply the latest technology at the lowest cost. Vitec offers both standard and custom product design capabilities with all of its facilities being ISO certified.

QUALITY POLICY

Vitec will provide products and services that meet or exceed our Customer's requirements, conform to company policies and standards, and exhibit continuously improving levels of Quality.

COMMITMENT

VITEC Electronics empowers each of its employees by providing a business environment that encourages a commitment to excellence, a sense of ownership and personal accountability to all Vitec Customers.

Competitive Pricing, Quality Products, and On Time Deliveries are expected from today's World Class Magnetics Suppliers. The high standards of today's customer are strengthening the dedication and commitment of VITEC Electronics to provide Total Customer Service.

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