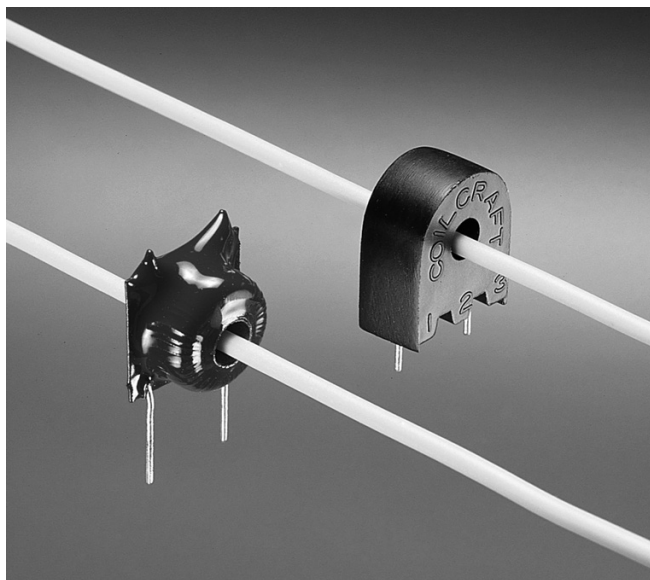




Current Sensors – D18xx, CS1xxx



Designed for use above 20 kHz, these sensors function as the secondaries of a current transformer. The conductor carrying the current to be measured is the “one turn primary.” Sensitivity can be set at 1 Volt per Ampere or at other desired values. It can also be doubled by looping the conductor through the hole twice. Applications include sensing branch circuit overload, switcher feedback, and detecting load drop or shutdown.

They come in a molded version (CS1xxx Series) or encapsulated model (D18xx Series).

Coilcraft **Designer's Kit P403** contains samples of the CS1050, CS1100 and CS1200 sensors, current transformer versions with equivalent ratings, plus two 50/60 Hz current sensors. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

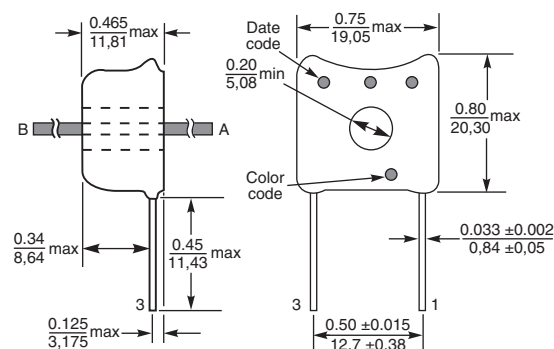
Part number	Turns	Inductance min (mH)	Sensed current I_{in} max (A)	Sensitivity		Terminating resistor R_T (Ohms) ¹	Color code
				V_{out} (V)	I_{in} (A)		
D1869L	50	5	10	1	1	50	Green
D1870L	100	20	24	1	1	100	Brown
D1871L	200	80	35	1	1	200	Red
CS1050L	50	5	10	1	1	50	
CS1100L	100	20	24	1	1	100	
CS1200L	200	80	35	1	1	200	
CS1750L	750	1125	30	1	1	750	

1. Varying terminating resistance will increase or decrease output Voltage/Ampere in conductor.

2. Ambient temperature range -40°C to $+85^{\circ}\text{C}$.

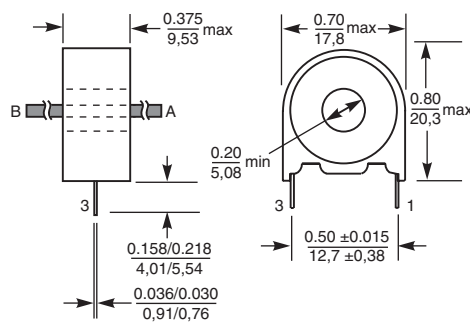
3. Electrical specifications at 25°C .

D18xx Series



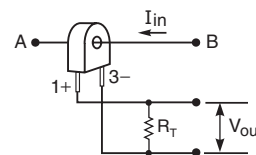
Terminations: Tin-silver over copper
Weight: 4.0 – 4.5 g

CS1xxx Series



Terminations: Tin-silver over copper
Weight: 5.3 – 5.8 g

Typical Circuit



Leads 3 and A are in phase per orientation shown above.