SC Coils, Standard Type

Overview

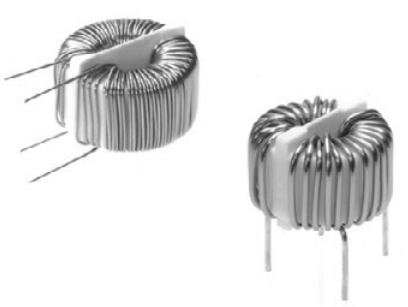
The KEMET SC Coils, Standard Type AC line filters are offered in a wide variety of sizes and specifications.

Applications

- Consumer Electronics
- Common mode choke

Benefits

- Wide variety of sizes and specifications
- Inductances up to 8 mH
- Rated Currents up to 30 A
- DC Resistances as low as 6 mΩ



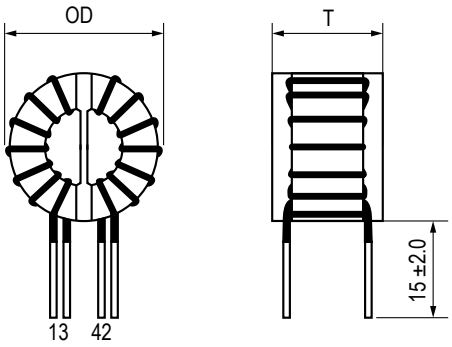
Part Number System

SC-	10-	200
Type	Rated Current (A)	Minimum Inductance (mH)
SC-	0x- = x A (e.g., 02- = 2 A) x0- = x0 A (e.g., 10- = 10 A) xx- = xx A (e.g., 15- = 15 A) Note: Code 05 can equal 5 A as well as 4 A	x00 = x mH (e.g., 200 = 2 mH) Note: 1 mH can equal code 100 as well as code 101

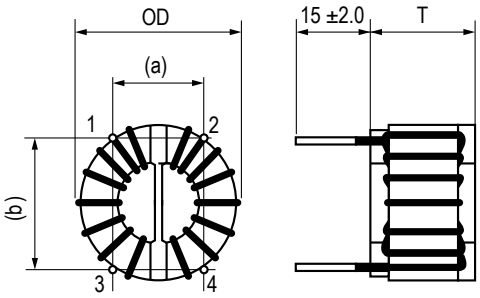
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Dimensions – Millimeters

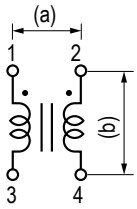
Vertical Type (≤ 5 A)



Horizontal Type (≥ 10 A)



Mounting Pitch



Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

Part Number	Rated Current AC (A)	Inductance (mH) Minimum	DC Resistance/ Line (mΩ) Maximum	Temperature Rise (K) Maximum	Finished Dimensions (mm)		Pin Pitch[1] (reference)		Wire Diameter (mm)	Weight (g) Approximate
					OD (Maximum)	T (Maximum)	a	b		
SC-02-101	2	1	110	40	23.0	13.0	6	11	0.6	15
SC-02-100	2	1	100	40	23.0	18.5	6	17	0.6	15
SC-02-200	2	2	110	40	23.0	18.5	6	17	0.6	15
SC-02-300	2	3	100	40	27.0	20.0	6	17	0.6	16
SC-02-500	2	5	100	45	27.0	20.0	6	17	0.6	20
SC-02-800	2	8	150	40	34.0	23.0	7	20	0.6	25
SC-05-100	5	1	50	40	25.0	18.5	6	17	0.8	20
SC-05-200	5	2	70	40	32.0	22.0	7	21	0.8	25
SC-05-500	4	5	80	50	34.0	23.0	7	21	0.8	30
SC-05-800	4	8	85	60	34.0	23.0	7	21	0.8	40
SC-10-100	10	1	20	40	34.0	24.0	22	21	1.3	40
SC-10-200	10	2	28	40	47.0	27.0	30	30	1.3	80
SC-15-100	15	1	12	40	49.0	27.0	35	35	1.8	100
SC-15-200	15	2	12	45	50.0	28.0	35	35	1.8	110
SC-20-100	20	1	8	45	60.0	30.0	40	40	2.3	135
SC-30-100	30	1	6	40	62.0	35.0	55	20	2.6	190

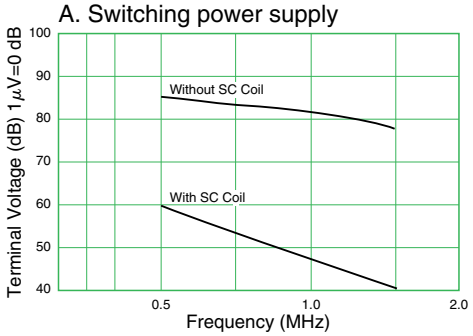
[1] *Pin pitch listed above for reference only. Values not guaranteed.*

Specifications

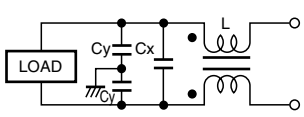
Item	SC
Rated Voltage	250 VAC/VDC
Withstanding Voltage	2400 V (2 seconds, between lines)
Insulation Resistance	> 100 MΩ @ 500 VDC (between lines)
Thermal Class	A (105°C)
Operating Temperature Range	-25°C to T (T = 105 - temperature rise)
Inductance Measurement Condition	100 kHz, 1 mA, KC547

Attenuation (Static Characteristics) and Circuit Diagram

A. Switching power supply

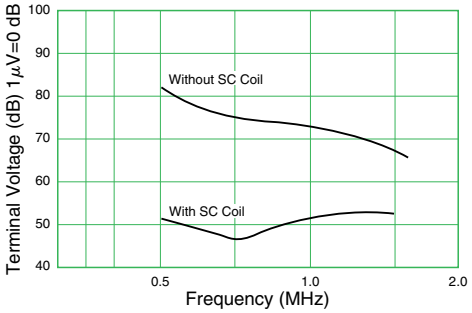


●Circuit

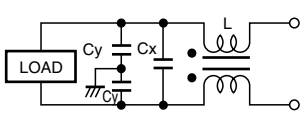


L : SC-02-100
Cx : 0.1μF
Cy : 4700 pF

B. Motor

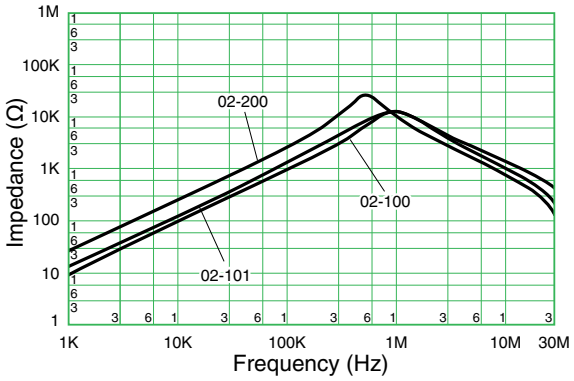


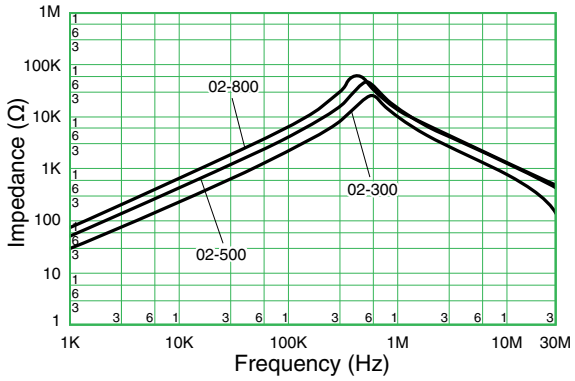
●Circuit

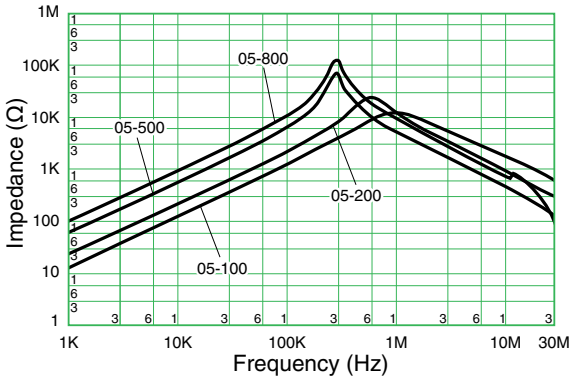


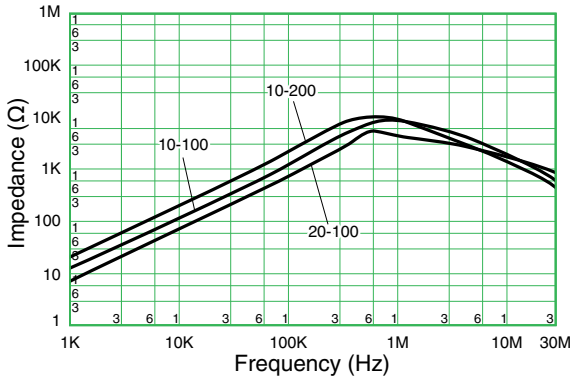
L : SC-05-100
Cx : 0.1μF
Cy : 4700 pF

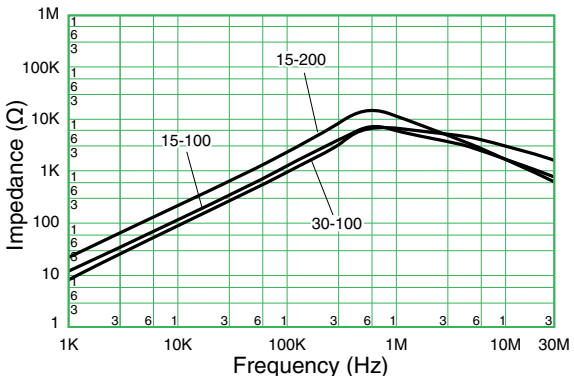
Frequency Characteristics











Notes on Use

Shelf Life

- Use within 6 months. If the product is used after a storage period of 6 months or longer, confirm its solderability before use.

Storage Condition

- Avoid storage in high temperature and high humidity environment, as such condition may deteriorate the solderability of external electrode.
- Avoid storage in atmosphere containing toxic gases or acid (e.g., sulphur and chlorine), as such gas may deteriorate the solderability of external electrode.
- Avoid storage near strong magnetic field, as such condition may magnetize the product.

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Although all product–related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicted or that other measures may not be required.