

**Overview**

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

**Applications**

- Consumer Electronics
- Common mode choke

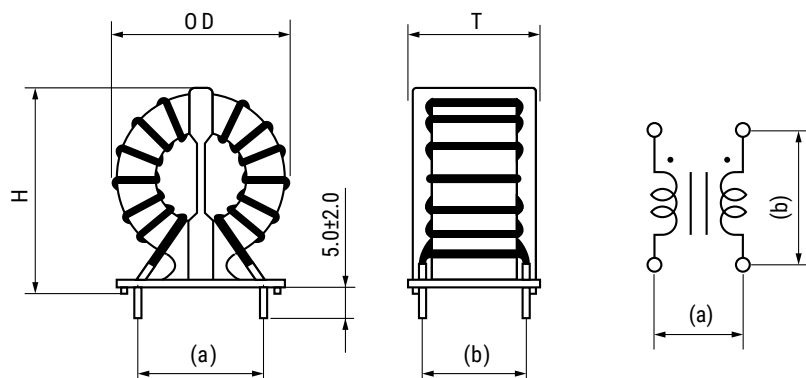
**Benefits**

- Wide variety of sizes and specifications
- Inductances up to 8 mH
- Rated Currents up to 18 A
- DC Resistances as low as 7 mΩ

**Part Number System**

SC-	10-	20	J
Series	Rated Current (A)	Minimum Inductance (mH)	Terminal Base Type
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	x0 = x mH (e.g., 20 = 2 mH) xx = x.x mH (e.g., 15 = 1.5 mH) 0x = 0.x mH (e.g., 05 = 0.5 mH)	J

## Dimensions – Millimeters



## 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)					Wire Diameter (mm)	Weight (g) Approximate
					OD (Maximum)	T (Maximum)	H (Maximum)	a	b		
SC-02-10J <sup>1</sup>	2	1	100	40	25	20	27	10	15	0.6	15
SC-02-20J <sup>1</sup>	2	2	110	40	25	20	27	10	15	0.6	15
SC-02-30J <sup>1</sup>	2	3	110	40	25	20	27	10	15	0.6	16
SC-02-50J <sup>1</sup>	2	5	120	40	25	20	27	10	15	0.6	20
SC-05-10J <sup>1</sup>	5	1	50	40	25	20	27	10	15	0.8	20
SC-05-20J <sup>1</sup>	5	2	70	40	34	23	33	18	16	0.8	25
SC-05-30J <sup>1</sup>	5	3	70	55	34	23	33	18	16	0.8	30
SC-05-50J <sup>1</sup>	4	5	80	60	34	23	33	18	16	0.8	32
SC-05-80J <sup>1</sup>	4	8	90	60	34	23	33	18	16	0.8	42
SC-10-10J <sup>2</sup>	10	1	20	40	34	23	33	12	17	1.3	42
SC-10-20J <sup>2</sup>	10	2	22	50	42	29	44	18	22	1.4	70
SC-10-30J <sup>1</sup>	10	3	30	75	34	24	33	18	16	1.2	65
SC-12-15J <sup>2</sup>	12	1.5	18	50	42	29	44	18	22	1.5	70
SC-15-05J <sup>1</sup>	15	0.5	8	60	34	23	33	18	16	1.5	40
SC-15-10J <sup>2</sup>	15	1	12	55	44	30	44	18	22	1.7	75
SC-18-05J <sup>2</sup>	18	0.5	7	50	44	30	44	18	22	1.8	60

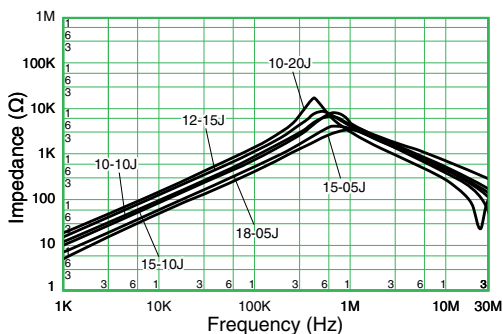
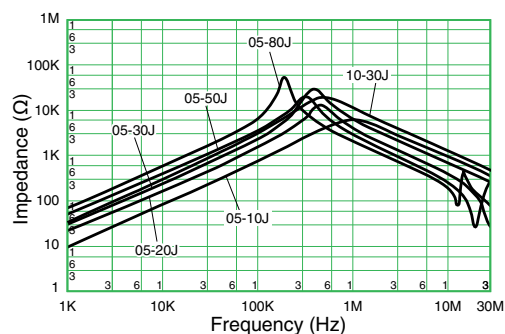
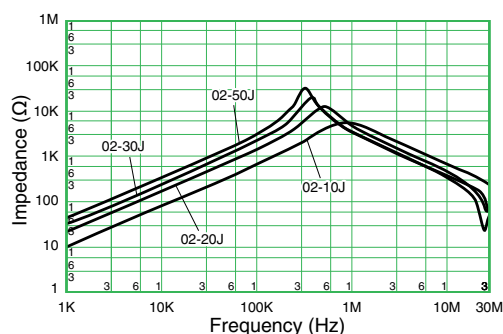
<sup>1</sup> Thermal Class E (120°C)

<sup>2</sup> Thermal Class A (105°C)

## Specifications

Item	SC-J
Rated Voltage	250 VAC/VDC
Withstanding Voltage	2,400 V (2 seconds, between lines)
Insulation Resistance	> 100 MΩ at 500 VDC (between lines)
Thermal Class	A (105°C) or E (120°C), see Table 1 footnotes
Operating Temperature Range	-25°C to T T = 105 – temperature rise (Thermal Class A) T = 120 – temperature rise (Thermal Class E)
Inductance Measurement Condition	100 kHz, 1 mA, KC547

## 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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