

Overview

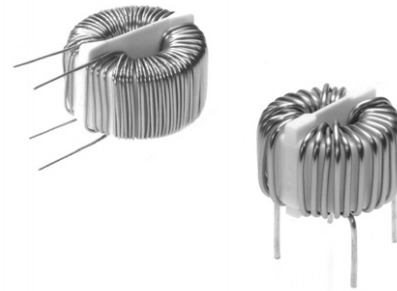
The KEMET SC Coils, Standard Type AC line filters are offered in a wide variety of sizes and specifications.

Applications

- Consumer Electronics
- Common mode choke

Benefits

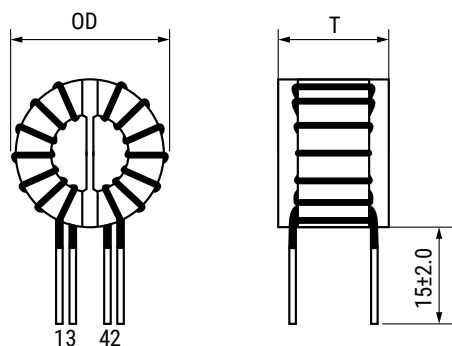
- Wide variety of sizes and specifications
- Inductances up to 8 mH
- Rated Currents up to 30 A
- DC Resistances as low as 6 mΩ

**Part Number System**

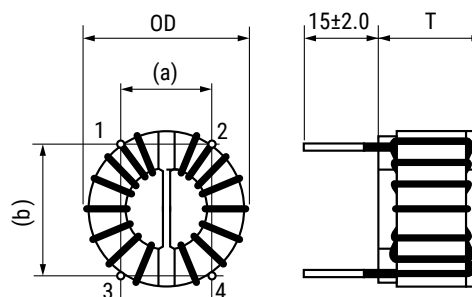
| SC- | 10- | 200 |
|------|---|--|
| Type | Rated Current (A) | Minimum Inductance (mH) |
| SC- | 0x- = x A (e.g., 02- = 2 A) x0- = x0 A (e.g., 10- = 10 A) xx- = xx A (e.g., 15- = 15 A) Note: Code 05 can equal 5 A as well as 4 A | x00 = x mH (e.g., 200 = 2 mH) Note: 1 mH can equal code 100 as well as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

Dimensions – Millimeters

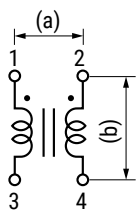
Vertical Type (≤ 5 A)



Horizontal Type (≥ 10 A)



Mounting Pitch



Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

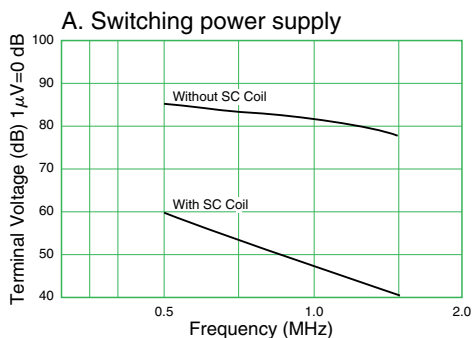
| Part Number | Rated Current AC (A) | Inductance (mH) Minimum | DC Resistance/Line (mΩ) Maximum | Temperature Rise (K) Maximum | Finished Dimensions (mm) | | Pin Pitch ¹ (reference) | | Wire Diameter (mm) | Weight (g) Approximate |
|-------------|----------------------|-------------------------|---------------------------------|------------------------------|--------------------------|-------------|------------------------------------|----|--------------------|------------------------|
| | | | | | 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.

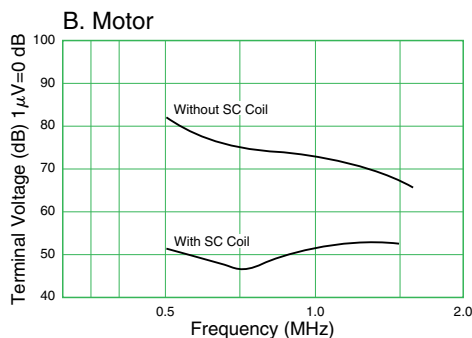
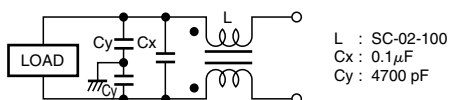
Specifications

| Item | SC |
|----------------------------------|---|
| Rated Voltage | 250 VAC/VDC |
| Withstanding Voltage | 2,400 V (2 seconds, between lines) |
| Insulation Resistance | > 100 MΩ at 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 |

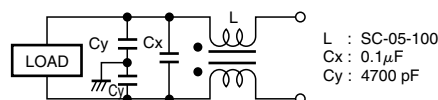
Attenuation (Static Characteristics) and Circuit Diagram



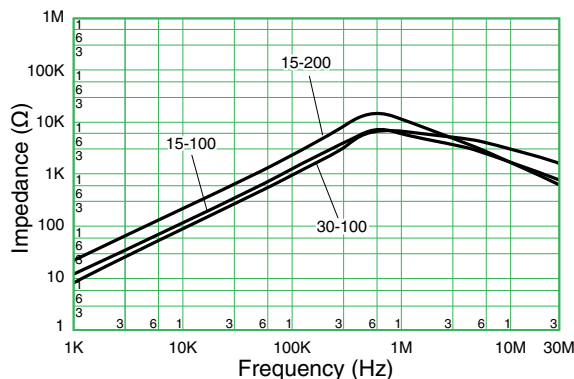
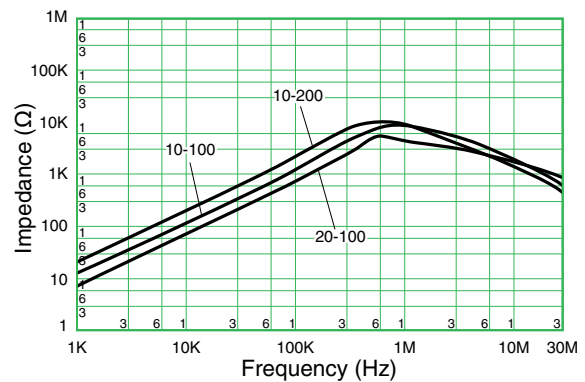
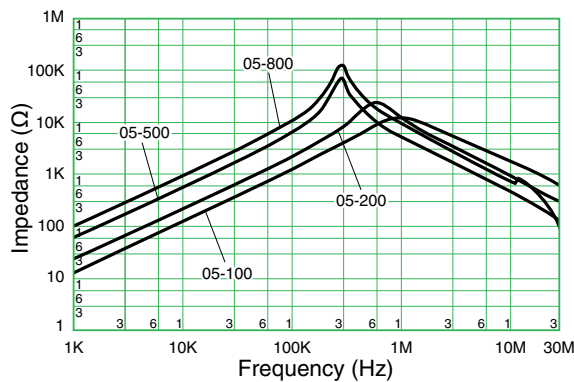
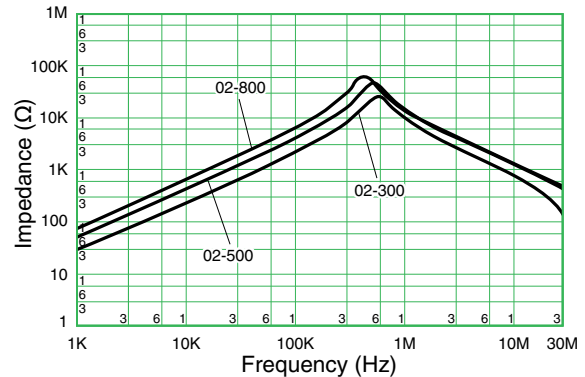
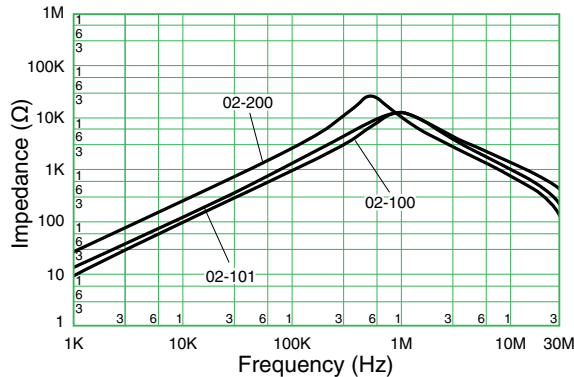
● Circuit



● Circuit



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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