



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Overview

The KEMET SC Coils, SC-D High Frequency 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 100 μH
- Rated Currents up to 20 A
- DC Resistances as low as 8 m Ω

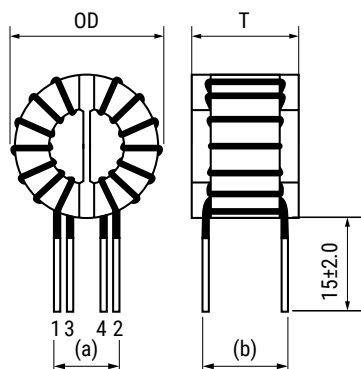


Part Number System

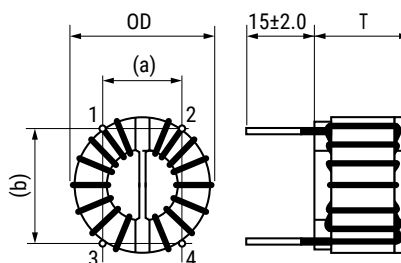
| SC- | 10- | D | 050 |
|--------|--|--|--|
| Series | Rated Current (A) | Type | Minimum Inductance (μH) |
| SC- | 0x = x A (e.g., 05 = 5 A) xx = xx A (e.g., 10 = 10 A) | D = Ni-Zn ferrite core, high frequency | xxx = xxx μH (e.g., 100 = 100 μH) 0xx = xx μH (e.g., 060 = 60 μH) |

Dimensions – Millimeters

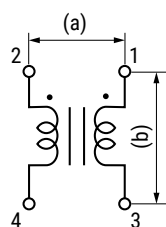
Vertical Type (≤ 5 A)



Horizontal Type (≥ 8 A)



Mounting Pitch



Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

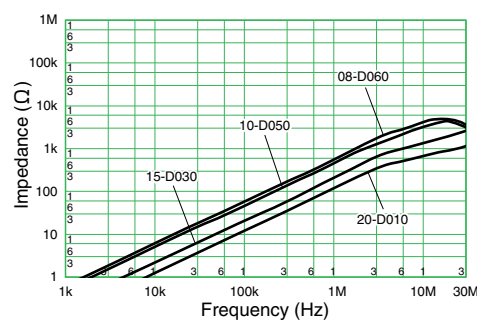
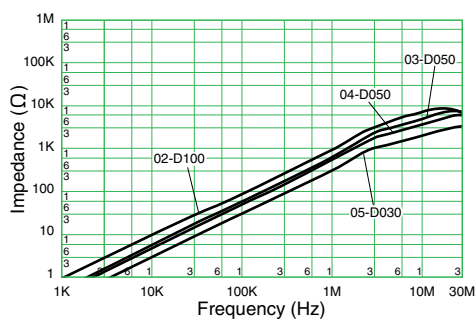
| Part Number | Rated Current AC (A) | Inductance (μ H) Minimum | DC Resistance/Line ($m\Omega$) Maximum | Temperature Rise (K) Maximum | Finished Dimensions (mm) | | Pin Pitch ¹ (reference) | | Wire Diameter (mm) | Weight (g) Approximate |
|-------------|----------------------|-------------------------------|--|------------------------------|--------------------------|-------------|------------------------------------|----|--------------------|------------------------|
| | | | | | OD (Maximum) | T (Maximum) | a | b | | |
| SC-02-D100 | 2 | 100 | 70 | 40 | 23 | 13 | 10 | 13 | 0.5 | 7 |
| SC-03-D050 | 3 | 50 | 40 | 40 | 23 | 13 | 10 | 13 | 0.6 | 8 |
| SC-04-D050 | 4 | 50 | 25 | 40 | 25 | 19 | 10 | 19 | 0.7 | 14 |
| SC-05-D030 | 5 | 30 | 20 | 40 | 25 | 19 | 10 | 19 | 0.8 | 14 |
| SC-08-D060 | 8 | 60 | 30 | 45 | 34 | 23 | 22 | 21 | 1.0 | 30 |
| SC-10-D050 | 10 | 50 | 16 | 45 | 34 | 23 | 22 | 21 | 1.2 | 34 |
| SC-15-D030 | 15 | 30 | 12 | 50 | 34 | 23 | 22 | 21 | 1.4 | 34 |
| SC-20-D010 | 20 | 10 | 8 | 50 | 34 | 23 | 22 | 21 | 1.7 | 33 |

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

Specifications

| Item | SC-D |
|----------------------------------|---|
| 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 |

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.

KEMET Electronics Corporation Sales Offices

For a complete list of our global sales offices, please visit www.kemet.com/sales.

Disclaimer

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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 indicated or that other measures may not be required.

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