

Overview

The KEMET SC Coils, SCF Compact, High-inductance Type AC line filters are offered in a wide variety of sizes and specifications.

Applications

- Consumer Electronics
- Common mode choke

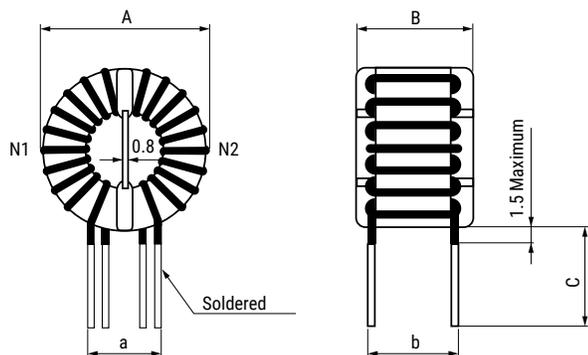
Benefits

- Wide variety of sizes and specifications
- Inductances up to 50 mH
- Rated Currents up to 15 A
- DC Resistances as low as 5 mΩ

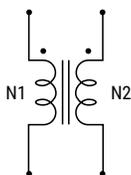
**Part Number System**

SCF	27	-10	-1300
Type	Dimension Code (See Table 1)	Rated Current (A)	Minimum Inductance (mH)
SCF	Blank 20 25 27	0x = x A (e.g., 02 = 2 A) xx = xx A (e.g., 10 = 10 A)	xx00 = xx mH (e.g., 1300 = 13 mH) xx0 = x.x mH (e.g., 650 = 6.5 mH)

Dimensions – Millimeters



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
					A (Maximum)	B (Maximum)	C	a	b		
SCF-01-5000 ²	1	50	390.0	60	15.0	12.0	15±2.0	–	–	0.35	5.0
SCF-02-1300 ²	2	13	115.0	50	15.0	12.0	15±2.0	–	–	0.45	5.0
SCF-03-650 ²	3	6.5	70.0	55	15.0	12.0	15±2.0	5	9	0.50	5.0
SCF-05-350 ²	5	3.5	35.0	55	16.0	12.0	15±2.0	5	9	0.60	5.0
SCF20-05-550	5	5.5	28.0	50	25.0	15.5	20±2.5	14	12	0.80	11.4
SCF20-05-1100	5	11	39.0	70	25.0	15.5	20±2.5	14	12	0.80	13.5
SCF25-06-2000	6	20	26.0	45	32.0	23.0	10±2.5	13	20	1.10	41.5
SCF25-08-1300	8	13	18.0	50	32.0	23.0	10±2.5	13	20	1.20	41.0
SCF27-10-1300	10	13	15.0	55	35.0	24.0	15±3.0	24	20	1.30	47.0
SCF27-15-700	15	7	5.0	70	36.0	24.0	15±3.0	24	20	1.50	48.0

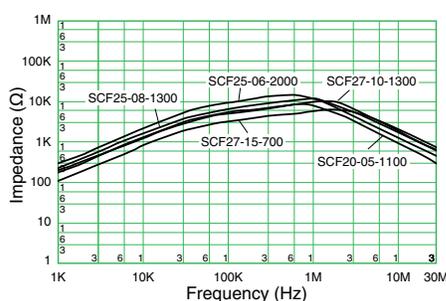
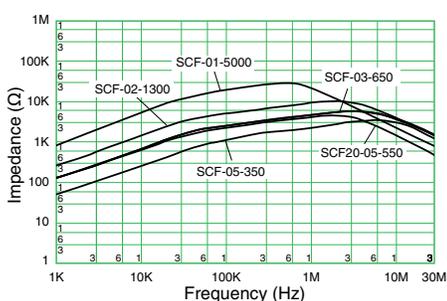
¹ Pin pitch listed above for reference only. Values not guaranteed.

² Insulation distance designed value of ≥ 2.6 mm.

Specifications

Item	SCF
Rated Voltage	250 VAC/VDC
Withstanding Voltage	2,400 V (2 seconds, between lines)
Thermal Class	E (120°C)
Operating Temperature Range	-25°C to T (T = 120 – temperature rise)
Inductance Measurement Condition	10 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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