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!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

# SC Coils, SCF Compact, High-inductance Type

## 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

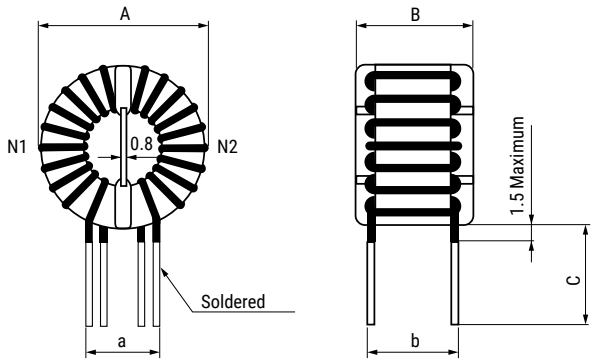
## Benefits

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

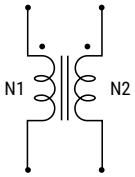
## Part Number System

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

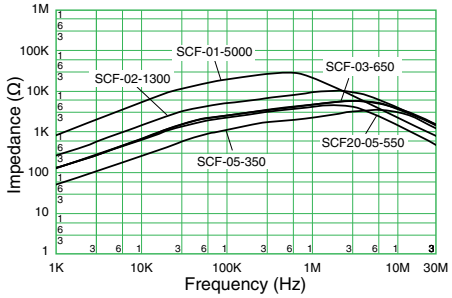
| Part Number | Rated Current AC (A) | Inductance (mH) Minimum | DC Resistance/ Line (mΩ) Maximum | Temperature Rise (K) Maximum | Finished Dimensions (mm) | | | Pin Pitch[1] (reference) | | Wire Diameter (mm) | Weight (g) Approximate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | A (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 | 15.5 | 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 |

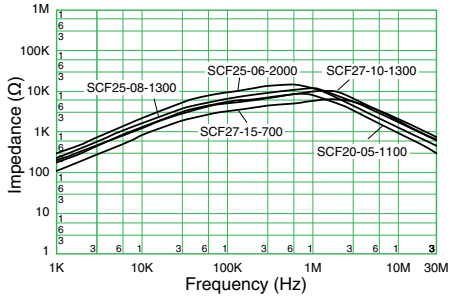
[1] *Pin pitch listed above for reference only. Values not guaranteed.*
[2] *Insulation distance designed value of ≥ 2.6 mm.*

## 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.

## KEMET Electronics Corporation Sales Offices

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

## Disclaimer

All product specifications, statements, information and data (collectively, the "Information") in this datasheet are subject to change. The customer is responsible for checking and verifying the extent to which the Information contained in this publication is applicable to an order at the time the order is placed.

All Information given herein is believed to be accurate and reliable, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

Statements of suitability for certain applications are based on KEMET Electronics Corporation's ("KEMET") knowledge of typical operating conditions for such applications, but are not intended to constitute – and KEMET specifically disclaims – any warranty concerning suitability for a specific customer application or use. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by KEMET with reference to the use of KEMET's products is given gratis, and KEMET assumes no obligation or liability for the advice given or results obtained.

Although KEMET designs and manufactures its products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

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.