

## Overview

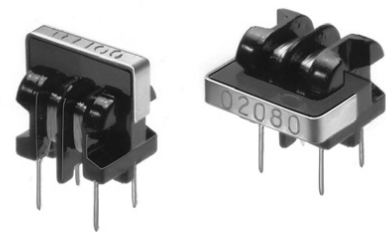
The KEMET SU Coils, SU 9V/9H Type AC line filters are offered in a wide variety of sizes and specifications.

## Applications

- Consumer Electronics
- Common mode choke

## Benefits

- Wide variety of sizes and specifications
- Inductances up to 18 mH
- Rated Currents up to 1.0 A
- DC Resistances as low as 0.3  $\Omega$

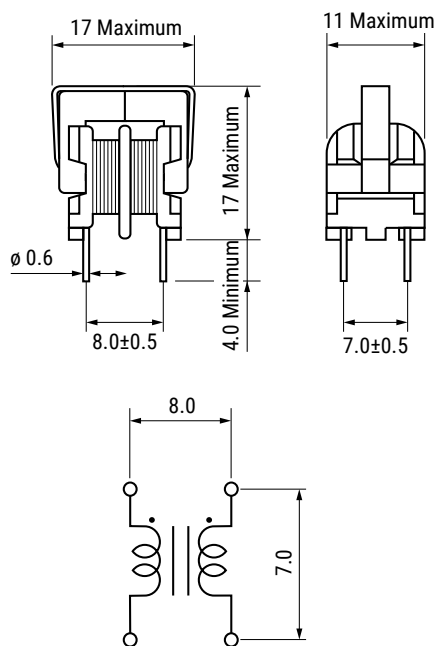


## Part Number System

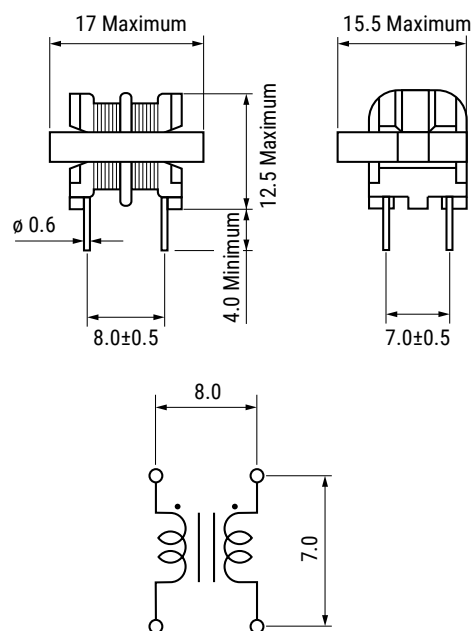
SU	9	V-	R	2	140
Series	Core Size (mm)	Core Orientation	Core Type	Rated Current AC (A)	Inductance (mH) Minimum
SU	9 = 9.0 mm	V- = Vertical	Blank = Standard R = High permeability	0x = 0.x A xx = x.x A  Examples: 02 = 0.2 A 10 = 1.0 A	xx0 = xx.0 mH 0xx = x.x mH 00x = 0.x mH  Examples: 140 = 14.0 mH 020 = 2.0 mH 005 = 0.5 mH

## Dimensions – Millimeters

### SU9V



### SU9H



## Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.



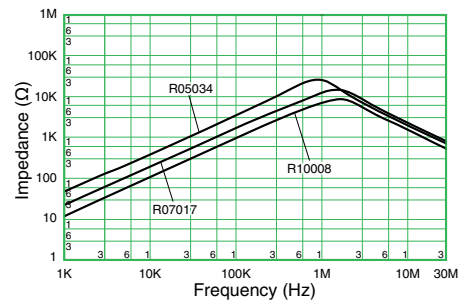
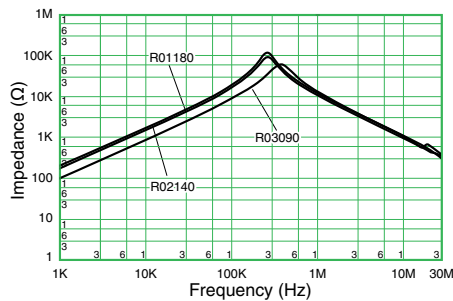
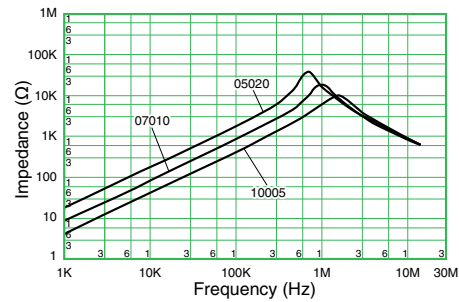
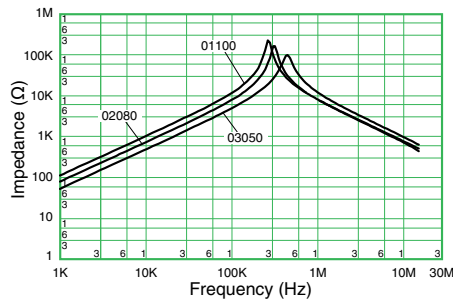
**Table 1 – Ratings & Part Number Reference**

Part Number	Rated Current AC (A)	Inductance (mH) Minimum	DC Resistance/Line ( $\Omega$ ) Maximum	Temperature Rise (K) Maximum	Marking	Weight (g) Approximate
SU9H-01100	0.1	10.0	8.0	40	01100	3.0
SU9V-01100	0.1	10.0	8.0	40	01100	3.0
SU9H-02080	0.2	8.0	6.0	40	02080	3.2
SU9V-02080	0.2	8.0	6.0	40	02080	3.2
SU9H-03050	0.3	5.0	3.0	40	03050	3.4
SU9V-03050	0.3	5.0	3.0	40	03050	3.4
SU9H-05020	0.5	2.0	1.0	40	05020	3.5
SU9V-05020	0.5	2.0	1.0	40	05020	3.5
SU9H-07010	0.7	1.0	0.6	40	07010	3.5
SU9V-07010	0.7	1.0	0.6	40	07010	3.5
SU9H-10005	1.0	0.5	0.3	40	10005	3.4
SU9V-10005	1.0	0.5	0.3	40	10005	3.4
SU9H-R01180	0.1	18.0	8.0	40	R 01180	3.0
SU9V-R01180	0.1	18.0	8.0	40	R 01180	3.0
SU9H-R02140	0.2	14.0	6.0	40	R 02140	3.2
SU9V-R02140	0.2	14.0	6.0	40	R 02140	3.2
SU9H-R03090	0.3	9.0	3.0	40	R 03090	3.4
SU9V-R03090	0.3	9.0	3.0	40	R 03090	3.4
SU9H-R05034	0.5	3.4	1.0	40	R 05034	3.5
SU9V-R05034	0.5	3.4	1.0	40	R 05034	3.5
SU9H-R07017	0.7	1.7	0.6	40	R 07017	3.5
SU9V-R07017	0.7	1.7	0.6	40	R 07017	3.5
SU9H-R10008	1.0	0.8	0.3	40	R 10008	3.4
SU9V-R10008	1.0	0.8	0.3	40	R 10008	3.4

## Specifications

Item	SU 9V/9H
Rated Voltage	250 VAC
Withstanding Voltage	2,400 VAC (2 seconds, between lines)
Insulation Resistance	> 100 M $\Omega$ at 500 VDC (between lines)
Thermal Class	E (120°C)
Operating Temperature Range	-25°C to T (T = 120 – temperature rise)
Inductance Measurement Condition	1 kHz, 1 V, KC530

## 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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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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