

## Common Mode SS Coils, 17HB Series

### Overview

The KEMET SS Coils, SS17HB Type AC line filters are offered in a wide variety of sizes and specifications.

### Applications

- Consumer Electronics
- Common mode choke

### Benefits

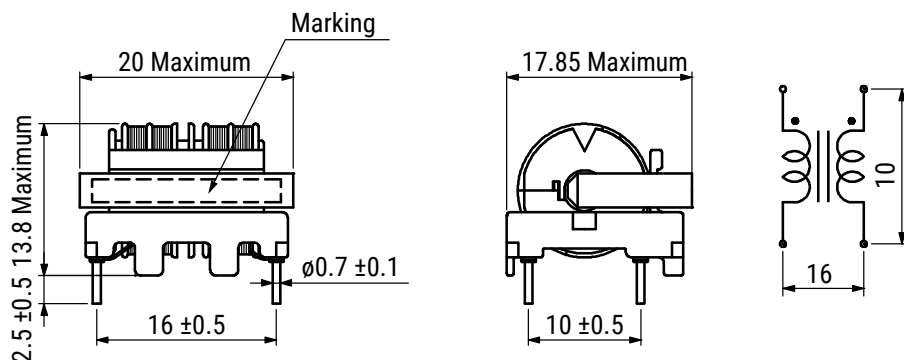
- Wide variety of sizes and specifications
- Inductances up to 30 mH
- Rated Currents up to 1.7 A
- DC Resistances as low as 0.10  $\Omega$



### Part Number System

SS	17	HB-	R	13	020
Series	Core Size (mm)	Core Orientation	Core Type	Rated Current AC (A)	Inductance (mH) Minimum
SS	17 = 17.0 mm	HB- = Horizontal	Blank = Standard R = High permeability	0x = 0.x A xx = x.x A  Examples: 04 = 0.4 A 13 = 1.3 A	00x = 0.x mH 0xx = x.x mH xxx = xx.x mH  Examples: 008 = 0.8 mH 020 = 2.0 mH 125 = 12.5 mH

## Dimensions – Millimeters



## Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.



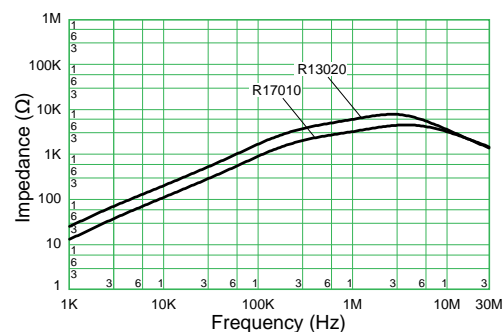
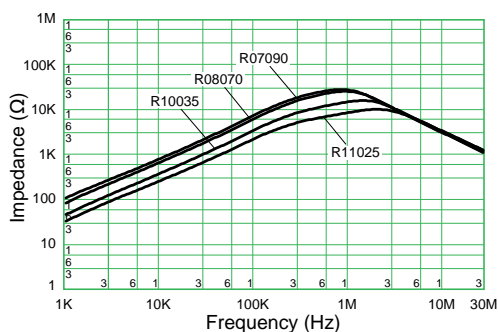
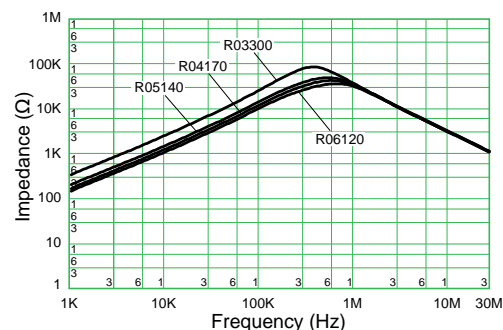
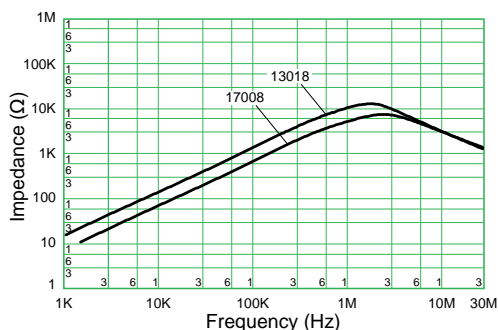
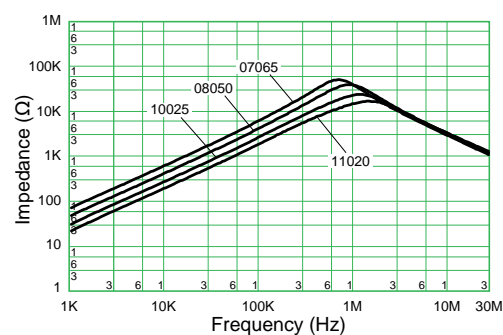
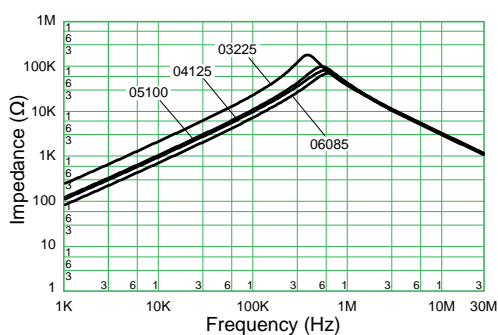
**Table 1 – Ratings & Part Number Reference**

Part Number	Rated Current AC (A)	Inductance (mH) Minimum	DC Resistance/ Line (Ω) Maximum	Temperature Rise (K) Maximum	Wire Diameter (mm)	Marking	Weight (g) Approximate
SS17HB-03225	0.3	22.5	2.60	48	0.20	03 Lot No.	5.9
SS17HB-04125	0.4	12.5	1.40	53	0.23	04 Lot No.	6.5
SS17HB-05100	0.5	10.0	1.10	55	0.25	05 Lot No.	6.4
SS17HB-06085	0.6	8.5	0.84	45	0.28	06 Lot No.	6.0
SS17HB-07065	0.7	6.5	0.70	50	0.30	07 Lot No.	6.0
SS17HB-08050	0.8	5.0	0.45	58	0.30	08 Lot No.	5.9
SS17HB-10025	1.0	2.5	0.38	50	0.37	10 Lot No.	6.3
SS17HB-11020	1.1	2.0	0.24	65	0.37	11 Lot No.	6.3
SS17HB-13018	1.3	1.5	0.18	55	0.40	13 Lot No.	6.2
SS17HB-17008	1.7	0.8	0.12	55	0.45	17 Lot No.	6.1
SS17HB-R03300	0.3	30.0	2.60	48	0.20	R03 Lot No.	5.9
SS17HB-R04170	0.4	17.0	1.40	53	0.23	R04 Lot No.	6.5
SS17HB-R05140	0.5	14.0	1.10	55	0.25	R05 Lot No.	6.4
SS17HB-R06120	0.6	12.0	0.84	45	0.28	R06 Lot No.	6.0
SS17HB-R07090	0.7	9.0	0.70	50	0.30	R07 Lot No.	6.0
SS17HB-R08070	0.8	7.0	0.45	58	0.30	R08 Lot No.	5.9
SS17HB-R10035	1.0	3.5	0.38	50	0.37	R10 Lot No.	6.3
SS17HB-R11025	1.1	2.5	0.24	65	0.37	R11 Lot No.	6.3
SS17HB-R13020	1.3	2.00	0.18	55	0.40	R13 Lot No.	6.2
SS17HB-R17010	1.7	1.0	0.12	55	0.45	R17 Lot No.	6.1

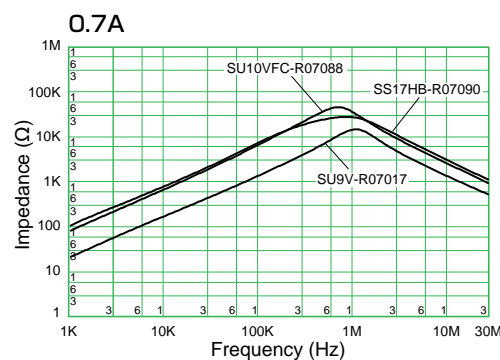
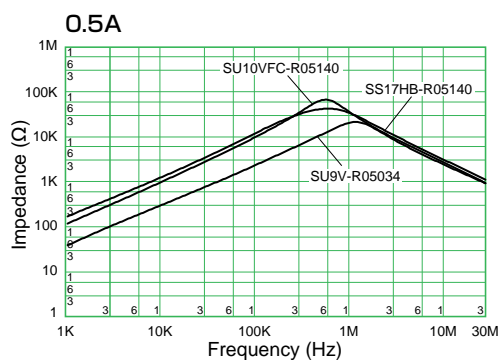
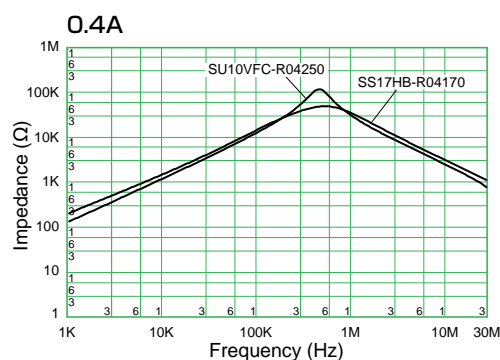
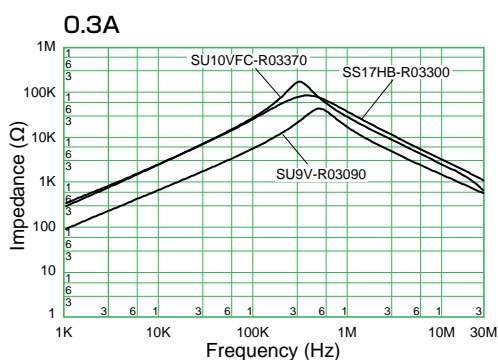
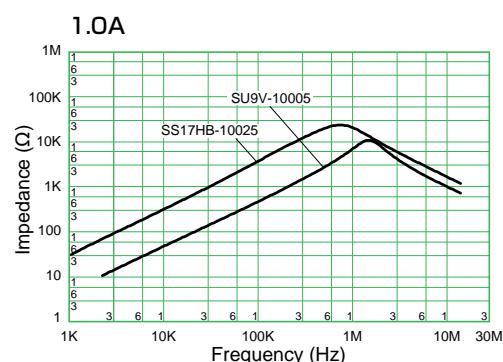
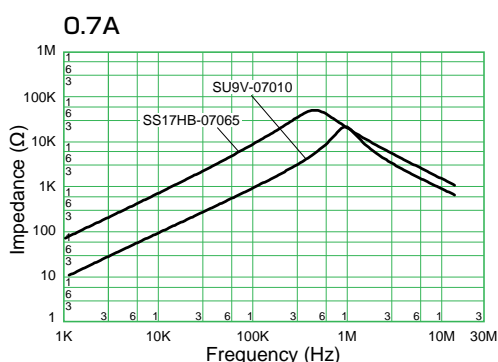
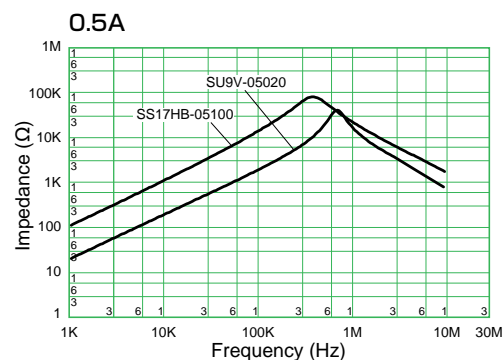
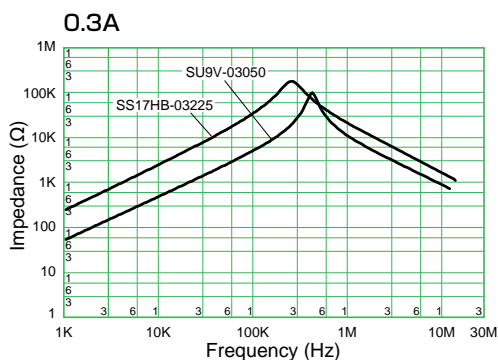
## Performance Characteristics

Item	SS17HB
Rated Voltage	250 VAC
Withstanding Voltage	2,400 VAC (2 seconds, between lines)
Rated Current AC Range	0.3 – 1.7 A
Rated Inductance Range	0.8 – 30.0 mH minimum
Inductance Measurement Condition	1 kHz
Thermal Class	E (120°C)
Operating Temperature Range	-25°C to +120°C (include self temperature rise)

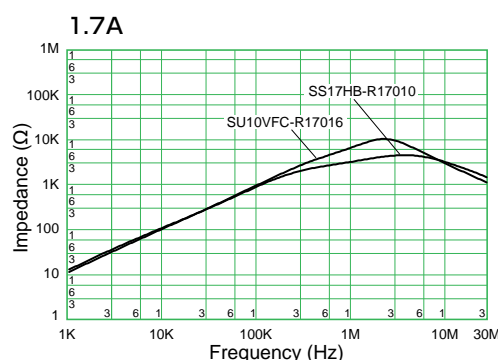
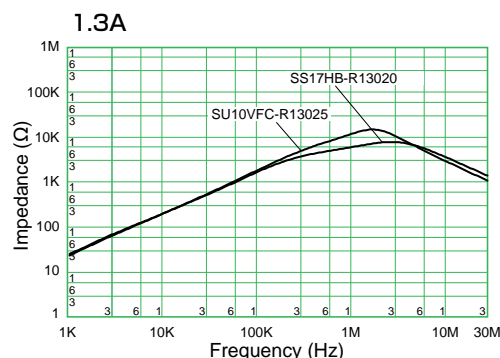
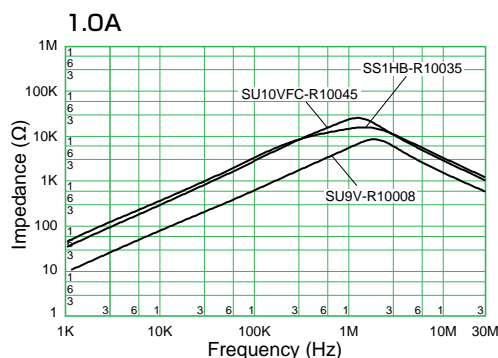
## Frequency Characteristics



## Frequency Characteristics cont.



## Frequency Characteristics cont.



## Handling Precautions

### Precautions for product storage

AC Line Filters should be stored in normal working environments. While the chokes themselves are quite robust in other environments, solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long term storage.

KEMET recommends that maximum storage temperature not exceed 40°C and maximum storage humidity not exceed 70% relative humidity. Atmospheres should be free of chlorine and sulfur bearing compounds. Temperature fluctuations should be minimized to avoid condensation on the parts. Avoid storage near strong magnetic fields, as this might magnetize the product.

For optimized solderability, AC line filters stock should be used promptly and preferably within 6 months of receipt.

### Product temperature rise values

The values listed for temperature rise are the result of self-heating in wires when the rated current (commercial frequency) is applied.

When using the product, check and evaluate the value of the core temperature rise under actual operating conditions.

## Export Control

### **For customers in Japan**

For products that are controlled items subject to the “Foreign Exchange and Foreign Trade Law” of Japan, the export license specified by the law is required for export.

### **For customers outside Japan**

AC line filters should not be used or sold for the use in the development, production, stockpiling, or utilization of any conventional weapons, mass-destruction weapons (nuclear, chemical, biological weapons, or missiles), or any other weapons.

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