

# Differential Mode SN Coils, SN-JA Series, Terminal Base Type

## Overview

The KEMET SN-JA coils are normal mode choke coils with a wide variety of characteristics. These coils are designed with our proprietary Fe dust cores and are useful in various noise countermeasure fields.

## Applications

- Home appliances
- Power supplies

## Benefits

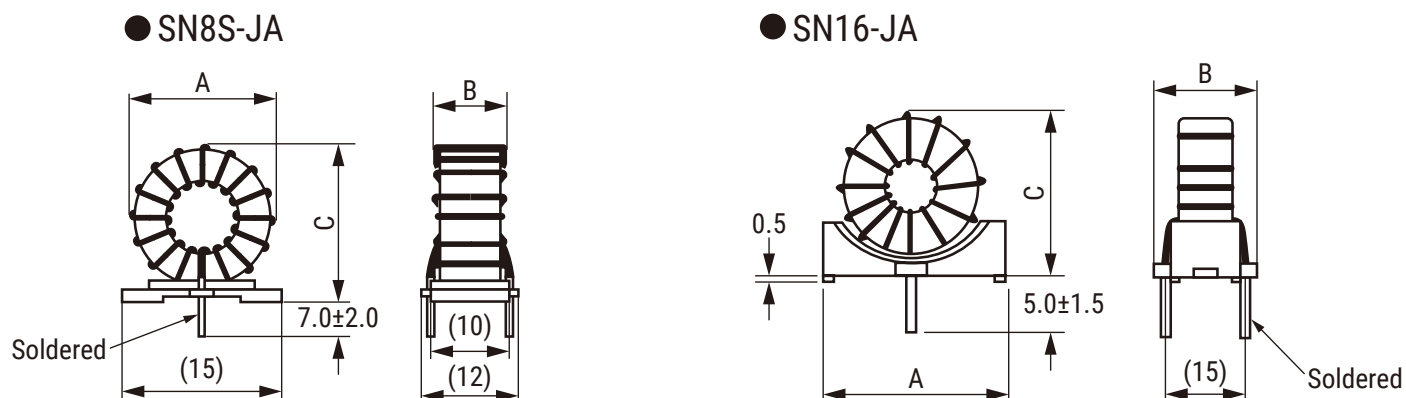
- Proprietary Fe dust core material
- Excellent for normal mode noise countermeasures
- Large core loss
- Wide variety of sizes and specifications
- Operating temperature range from  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$
- UL 94 V-0 flame retardant rated cap



## Part Number System

SN	8S-	300	JA
Series	Dimension Code (See Dimensions)	Specification Code (See Table 1)	Terminal Base Type (See Dimensions)
SN	8S 16	300 400 500	JA

## Dimensions – Millimeters



Part Number	Dimensions (mm)		
	A Maximum	B Maximum	C Maximum
SN8S-300JA	18	–	18
SN8S-400JA	18	–	18
SN16-300JA	35	19	39
SN16-400JA	35	20	39
SN16-500JA	35	21	39

## Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.



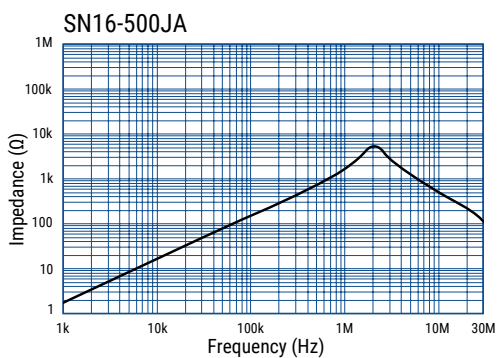
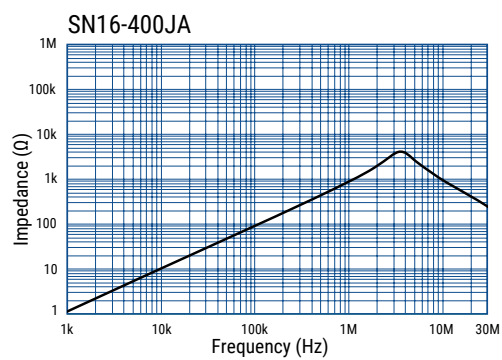
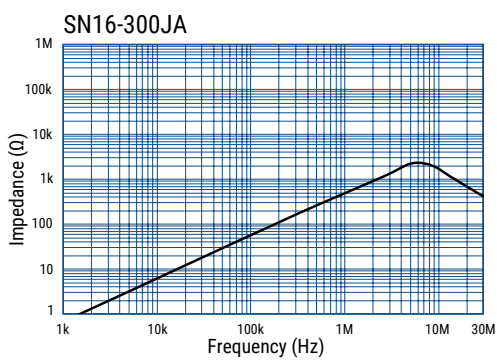
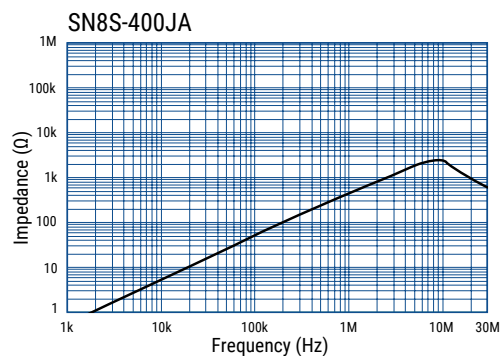
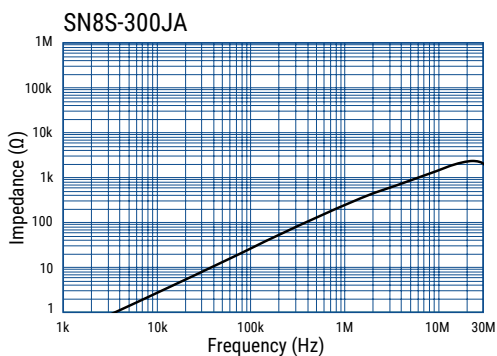
## Performance Characteristics

Item	Performance Characteristics
Rated Current Range	2 – 8 A
Rated Inductance Range	26 – 168 $\mu$ H minimum
Inductance Measurement Condition	100 kHz
Wire Type	1 PVF, 1 UEW, and 1 PEW
Thermal Class	A (105°C)
Operating Temperature Range	-40°C to +105°C (include self temperature rise)

### Table 1 – Ratings & Part Number Reference

Part Number	Rated Current (A)	Inductance ( $\mu$ H) Minimum	DC Resistance/ Line ( $m\Omega$ ) Maximum	Temperature Rise (K) Maximum	Wire Diameter (mm)	Weight (g) Approximate
SN8S-300JA	2	26	0.042	19	0.6	4.4
SN8S-400JA	2	46	0.052	20	0.6	5.0
SN16-300JA	8	60	0.021	21	1.5	40.6
SN16-400JA	8	108	0.027	24	1.5	45.0
SN16-500JA	8	168	0.031	36	1.5	53.6

## Frequency Characteristics



## Packaging

Type	Packaging Type	Pieces Per Box
SN8S-JA	Tray	600
SN16-JA		200

## 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.

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