NOT FOR NEW DESIGN

Common Mode SSR Coils, 21HS Series, Wide Range Impedance Series

Overview

The KEMET SSR21HS Series AC line filters are compact, low profile, and lightweight.

Applications

- Audio-visual equipment
- Office automation equipment
- Digital appliances
- Power supply devices
- Common mode choke

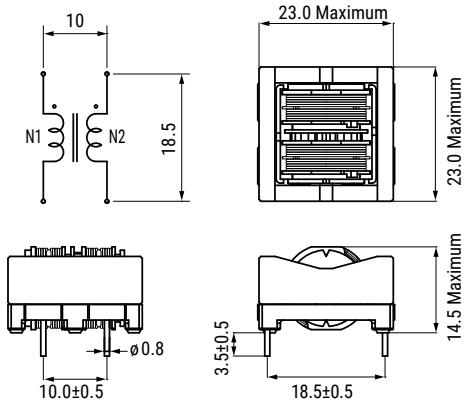
Benefits

- High degree of characterization as a result of using industry's highest standard, high permeability core.
- Optimized design for compact size, low profile, and lightweight
- Non-split bobbin design for strong high frequency characteristics and broad bandwidth
- Inductances up to 135 mH
- Rated Currents up to 2.0 A
- DC Resistances as low as 0.1 Ω

Part Number System

SSR	21	HS-	5	490
Series	Core Size (mm)	Core Orientation and Bobbin Type	Rated Current AC (A)	Inductance (mH) Minimum
SSR	21 = 20.9 mm	HS = Horizontal, bobbin with sectional winding structure	0x = 0.x A xx = x.x A Examples: 05 = 0.5 A 10 = 1.0 A	xxx0 = xxx mH xx0 = xx mH xxx = xx.x mH 0xx = x.x mH Examples: 1350 = 135 mH 930 = 93 mH 245 = 24.5 mH 095 = 9.5 mH

Dimensions – Millimeters



Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.

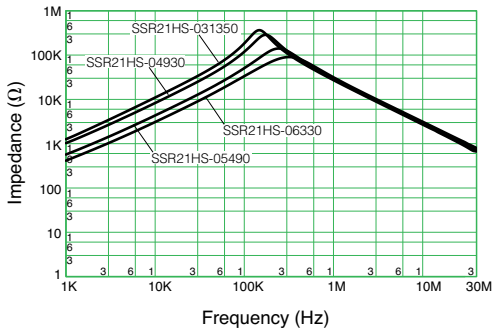
Table 1 – Ratings & Part Number Reference

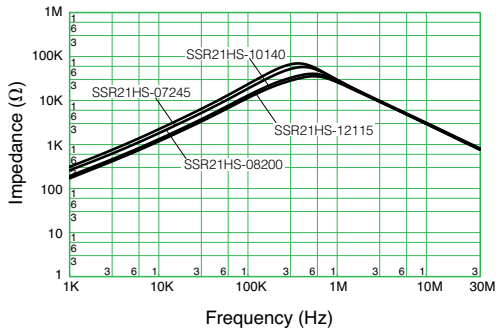
Part Number	Rated Current AC (A)	Inductance (mH) Minimum	DC Resistance/ Line (Ω) Maximum	Temperature Rise (K) Maximum	Wire Diameter (mm)	Weight (g) Approximate
SSR21HS-031350	0.3	135.0	3.30	45	0.2	14
SSR21HS-04930	0.4	93.0	2.10	45	0.2	14
SSR21HS-05490	0.5	49.0	1.20	45	0.3	14
SSR21HS-06330	0.6	33.0	0.83	45	0.3	14
SSR21HS-07245	0.7	24.5	0.59	45	0.3	14
SSR21HS-08200	0.8	20.0	0.48	45	0.3	14
SSR21HS-10140	1.0	14.0	0.33	45	0.4	14
SSR21HS-12115	1.2	11.5	0.27	45	0.4	14
SSR21HS-13095	1.3	9.5	0.22	45	0.4	14
SSR21HS-15070	1.5	7.0	0.15	45	0.5	14
SSR21HS-20029	2.0	2.9	0.10	45	0.5	14

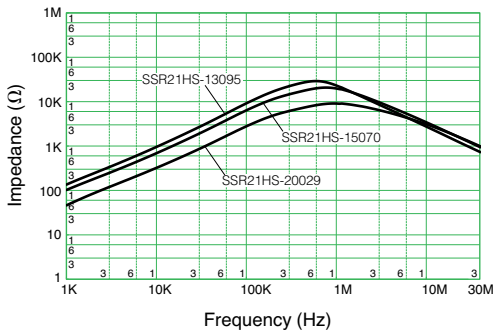
Performance Characteristics

Item	SSR21HS
Rated Voltage	250 VAC
Withstanding Voltage	2,400 VAC (2 seconds, between lines)
Insulation Resistance	> 100 MΩ at 500 VDC (between lines)
Rated Current AC Range	0.3 – 2.0 A
Rated Inductance Range	2.9 – 135.0 mH minimum
Inductance Measurement Condition	10 kHz, 1 mA
Thermal Class	E (120°C)
Operating Temperature Range	–25°C to +120°C (include self temperature rise)

Frequency Characteristics







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.

KEMET Electronics Corporation Sales Offices

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

Disclaimer

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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.