SC Coils, SC-G/GS Small Type

Overview

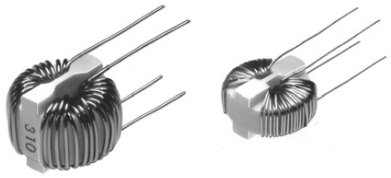
The KEMET SC Coils, SC-G/GS Small Type AC line filters are offered in a wide variety of sizes and specifications.

Applications

- Consumer Electronics
- Common mode choke

Benefits

- Wide variety of sizes and specifications
- Inductances up to 2.0 mH
- Rated Currents up to 20 A
- DC Resistances as low as 8 mΩ



Part Number System

SC-	01-	E	150	G
Series	Rated Current (A)	Thermal Class	Minimum Inductance (mH)	Terminal Base Type
SC-	0x- = x A (e.g., 02- = 2 A)	Blank = Class A E = Class E	0x = 0.x mH (e.g., 06 = 0.6 mH) x0 = x.0 mH (e.g., 20 = 2.0 mH) x00 = x0.0 mH (e.g., 100 = 10.0 mH) xx0 = xx.0 mH (e.g., 150 = 15.0 mH) Note: Code 121 = 12.0 mH	G GS

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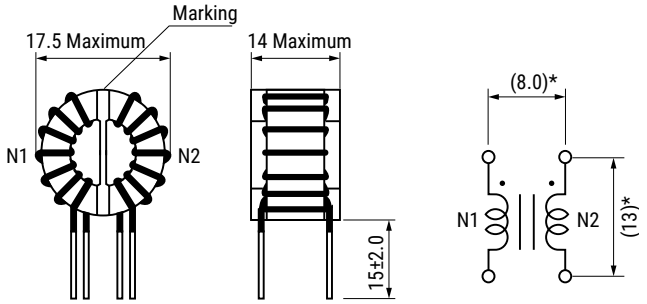
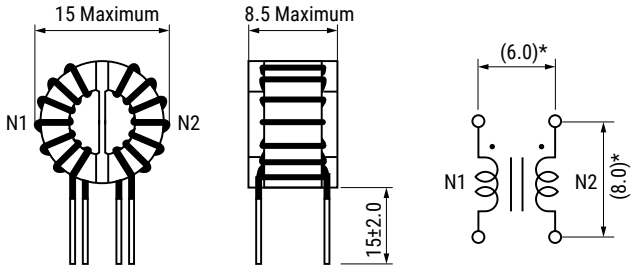
Dimensions – Millimeters

SC-G



SC-GS



**Pin pitch values are for reference only. Values are not guaranteed.*

Environmental Compliance

All KEMET AC Line Filters are RoHS Compliant.

RoHS Compliant

Table 1 – Ratings & Part Number Reference

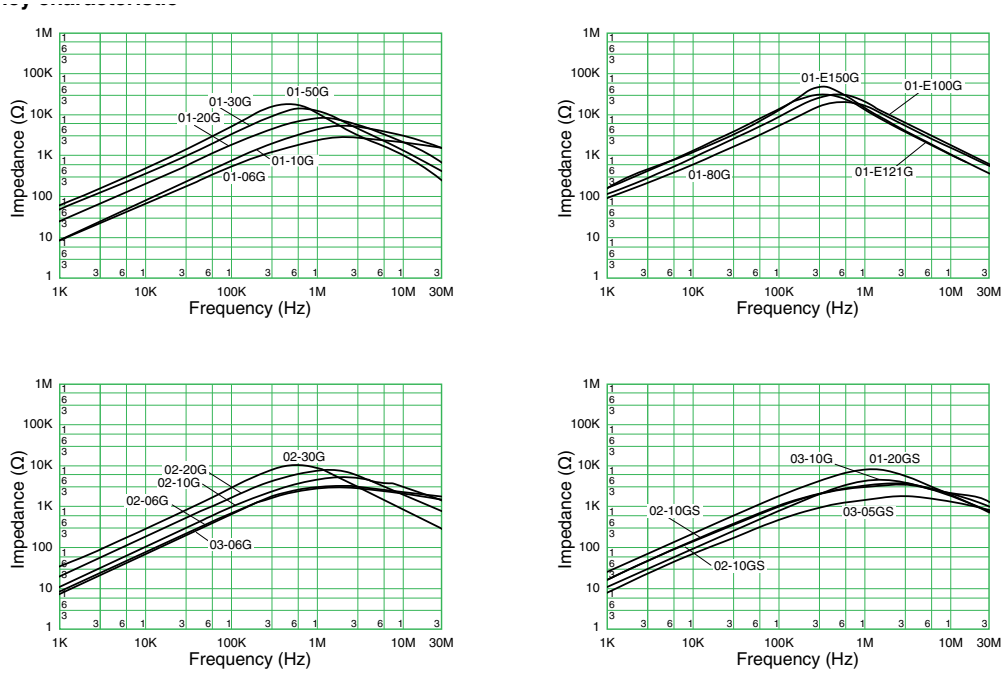
Part Number	Rated Current AC (A)	Inductance (mH) Minimum	DC Resistance/ Line (mΩ) Maximum	Temperature Rise (K) Maximum	Wire Diameter (mm)	Marking	Weight (g) Approximate
SC-01-06G[1]	1	0.6	60	40	0.4	106	5
SC-01-10G[1]	1	1.0	70	40	0.4	110	5
SC-01-20G[1]	1	2.0	100	40	0.4	120	5
SC-01-30G[1]	1	3.0	120	40	0.4	130	6
SC-01-50G[1]	1	5.0	150	40	0.4	150	7
SC-01-80G[1]	1	8.0	300	40	0.35	180	6
SC-01-E100G[2]	1	10.0	350	40	0.35	100	6
SC-01-E121G[2]	1	12.0	400	40	0.35	121	6
SC-01-E150G[2]	1	15.0	450	40	0.35	–	6
SC-02-06G[1]	2	0.6	50	40	0.5	206	6
SC-02-10G[1]	2	1.0	50	40	0.5	210	7
SC-02-20G[1]	2	2.0	70	40	0.5	220	8
SC-02-30G[1]	2	3.0	85	40	0.5	230	9
SC-03-06G[1]	3	0.6	30	40	0.6	306	7
SC-03-10G[1]	3	1.0	35	40	0.6	310	8
SC-01-10GS[1]	1	1.0	130	40	0.3	–	2
SC-01-20GS[1]	1	2.0	180	40	0.3	–	2
SC-02-10GS[1]	2	1.0	80	40	0.4	–	3
SC-03-05GS[1]	3	0.5	45	45	0.45	–	3

[1] *Thermal Class A (105°C)*
[2] *Thermal Class E (120°C)*

Specifications

Item	SC-G/GS
Rated Voltage	250 VAC/VDC
Withstanding Voltage	2,400 V (2 seconds, between lines)
Insulation Resistance	> 100 MΩ at 500 VDC (between lines)
Thermal Class	A (105°C) or E (120°C), see Table 1 footnotes
Operating Temperature Range	−25°C to T T = 105 – temperature rise (Thermal Class A) T = 120 – temperature rise (Thermal Class E)
Inductance Measurement Condition	100 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.

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