

Current-compensated Chokes



- Rated currents from 0.25 to 0.7 A
- DC to 400 Hz frequency
- 100 kHz to 3 MHz common-mode resonance frequency
- Dual-choke configurations
- Multiple PCB-mounting options



Performance indicators					
Inducta	ance val	ue [mH]			
0	20	40	60	80	100
4.7		47			
Rated o	urrent [A]			
0	3	6	9	12	15
<mark>0.25</mark> 0.7					

Technical Specifications

Nominal operating voltage	250 V/
Rated currents	0.25 to
Operating frequency	DC to
Rated inductance	4.7 to 4.7 to
Stray inductance	Typica
Inductance reduction (DC bias with IN)	Less th
Surge current @ 10 msec	20 x In
Temperature range (operation and storage)	-40°C acc. IE
Flammability corresponding to	UL 94'

Design corresponding to MTBF (Mil-HB-217F) 250 VAC 0.25 to 0.7 A @ 40°C DC to 400 Hz 4.7 to 47 MILLIHENRY 4.7 to 47 mH Typically 1% of L_N Less than 10% (25°C) 20 x I_N @ 25°C -40°C to 125°C (40/125/56) acc. IEC 60068-1 UL 94V-0 IEC/EN 60938-2 >5,000,000 h @ 40°C/230 V

Approvals & Compliances



RC chokes are attenuating common-mode or asymmetric (P/N=> E) interference signals, by being connected in series with the phase and neutral lines of an AC powerline input. Symmetrical components of the noise are also attenuated by the leakage inductance (stray inductance) of the windings. These chokes are typically used in conjunction with suppression capacitors.

Features and Benefits

- High saturation resistance and excellent thermal behavior
- Through hole pin connections
- Dual-choke configuration
- Small compact design
- Multiple housing options
- Custom-specific versions are available on request
- Environmental friendly open design

Typical Applications

- Switch-mode power applications
- DC/DC converters
- HVAC, typically in EMI input filter for ventilation
- LED driver circuit
- For suppression-equipment with no earth connection, e.g. medical
- Phase-angle control circuits in combination with saturating chokes
- Consumer electronics, EDP, test equipment, electronic ballasts in lamps etc.
- Applicable for low frequency signaling effective from 10kHz to 30MHz

Choke Selection Table

Choke	Buy	Current	@ Ambient	Inductance	Stray Inductance	Resistance	Pin 1-2**	Pin 1-3	Height	Weight
		(I _N)	Temperature*	(L _N)	(Ls)	(R _D c)	(Pin 3-4)			
		[A]	[° C]	[mH]	[mH]	[mOhm]	[mm]	[mm]	[mm]	(g)
RC112-0.25-47M	¥	0.25	40	47.0	0.6	2400	10	15	8	3
RC112-0.3-30M	¥	0.3	40	30.0	0.5	2200	10	15	8	3
RC112-0.35-22M	¥	0.35	40	22.0	0.4	1900	10	15	8	3
RC112-0.4-15M	¥	0.4	40	15.0	0.25	1350	10	15	8	3
RC112-0.5-10M	¥	0.5	40	10.0	0.17	1000	10	15	8	3
RC112-0.6-6M8	¥	0.6	40	6.8	0.12	630	10	15	8	3
RC112-0.7-4M7	¥	0.7	40	4.7	0.075	440	10	15	8	3
RC212-0.25-47M	¥	0.25	40	47.0	0.6	2400	5.08 (2.54)	12.7	17.6	3
RC212-0.3-30M	¥	0.3	40	30.0	0.5	2200	5.08 (2.54)	12.7	17.6	3
RC212-0.35-22M	¥	0.35	40	22.0	0.4	1900	5.08 (2.54)	12.7	17.6	3
RC212-0.4-15M	¥	0.4	40	15.0	0.25	1350	5.08 (2.54)	12.7	17.6	3
RC212-0.5-10M	¥	0.5	40	10.0	0.17	1000	5.08 (2.54)	12.7	17.6	3
RC212-0.6-6M8	4	0.6	40	6.8	0.12	630	5.08 (2.54)	12.7	17.6	3
RC212-0.7-4M7	¥	0.7	40	4.7	0.075	440	5.08 (2.54)	12.7	17.6	3

Test conditions: Measuring frequency: 10 kHz; 50 mV; Inductance tolerance: +50%, -30%; Resistance tolerance: ±15% @ 25°C; Electrical characteristics @ 25°C: ±2°C

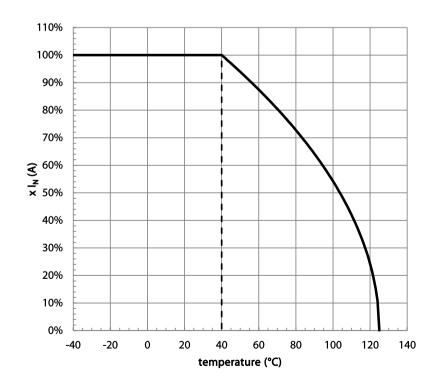
* Rated ambient temperature according to approval. For other ambient temperatures, please make use of the derating graph below.

** Values in brackets show the pin-out distance between pin 3 and 4. Symmetrical pin-out on request.

Product selector	
RC XYY-II-LML	
	Rated Inductivity L _N (mH)
	Rated Current I _N (A)
	Size 12
	Orientation (1 = horizontal; 2 = vertical) Familyname

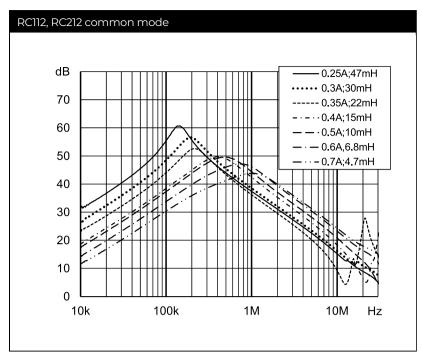
Thermal Derating

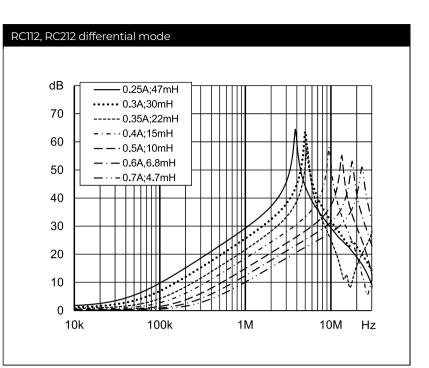
If higher ambient temperatures than the specified apply, the nominal current needs to be reduced according to the graph below.



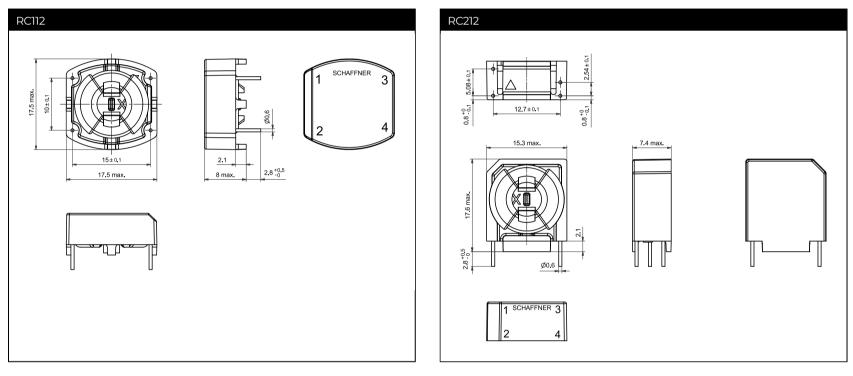
Typical Attenuation/Resonance Frequency Characteristics

Per CISPR 17; 50 Ω/50 Ω





Mechanical Data



For dimensions [mm] without tolerances: ISO 2768-m/ EN 22768-m applies Pin material: Steel (base), Cu (under plating), Sn (final plating 6µm)

Headquarters, Global Innovation and Development

Switzerland

Schaffner Group Industrie Nord Nordstrasse 5 4542 Luterbach +41 32 681 66 26 info@schaffner.com

To find your local partner within Schaffner's global network <u>schaffner.com</u>

© 2025 Schaffner Group

The content of this document has been carefully checked and understood. However, neither Schaffner nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifica-tionsw are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Schaffner does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Swiss law and resulting disputes shall be settled by the courts at the place of business of Schaffner Holding AG. Latest publications and a complete disclaimer can be downloa-ded from the Schaffner website. All trademarks recoanized.

Sales and Application Centers

Finland

Schaffner Oy Lohjanharjuntie 1109 08500 Lohja + 358 50 468 72 84 finlandsales@schaffner.com

France

Schaffner EMC S.A.S. 16-20 Rue Louis Rameau 95875 Bezons +33 1 34 34 30 60 francesales@schaffner.com

Germany

Schaffner Deutschland GmbH Ohiostr. 8 76149 Karlsruhe +49 721 56910 germanysales@schaffner.com

Italy

Schaffner EMC S.r.l. Via Ticino, 30 20900 Monza (MB) +39 335 120 44 32 italysales@schaffner.com

Japan

Schaffner EMC K.K. ISM Sangenjaya 7F 1-32-12 Kamiuma Setagaya-ku 154-0011 Tokyo +81 3 5712 3650 japansales@schaffner.com

Singapore

Schaffner EMC Pte Ltd. Blk 3015A Ubi Road 1 #05-09 Kampong Ubi Industrial Estate 408705 Singapore +65 63773283 singaporesales@schaffner.com

Sweden

Schaffner EMC AB Östermalmstrorg 1 114 42 Stockholm +46 8 5050 2425 swedensales@schaffner.com

Switzerland

Schaffner EMV AG Industrie Nord Nordstrasse 5 4542 Luterbach +41 32 681 66 26 switzerlandsales@schaffner.com

India

Schaffner India Pvt. Ltd Regus World Trade Centre WTC 22nd Floor Unit No 2238 Brigade Gateway Campus 26/1 Dr. Rajkumar Road Malleshwaram (W) 560055 Bangalore +91 8067935355 indiasales@schaffner.com

United Kingdom

Schaffner Ltd. Suite 1 Oakmede Place Terrace Road RG42 4JF Binfield +44 118 9770070 schaffner.uksales@te.com

United States

Schaffner EMC Inc. 52 Mayfield Avenue Edison, New Jersey +1 732 225 9533 usasales@schaffner.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schaffner:

RC112-0.4-15M
RC212-0.5-10M
RC112-0.6-6M8
RC212-0.3-30M
RC212-0.7-4M7
RC212-0.4-15M
RC112-0.35

22M
RC112-0.7-4M7
RC212-0.25-47M
RC112-0.5-10M
RC112-0.3-30M
RC212-0.35-22M
RC212-0.6-6M8
RC112-0.35

0.25-47M
0.25-47M
RC112-0.5-10M
RC112-0.3-30M
RC212-0.35-22M
RC212-0.6-6M8
RC112-0.35