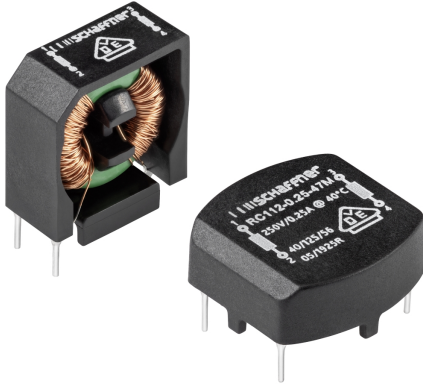


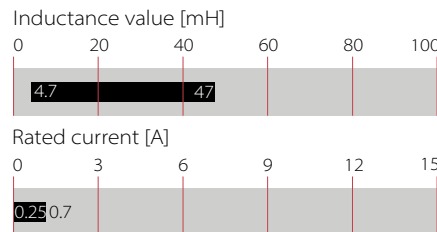
Current-compensated Chokes



- 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



Technical specifications

Rated operating voltage	250 VAC
Operating frequency	DC to 400 Hz
Rated currents	0.25 to 0.7 A @ rated ambient temperature
Rated inductance	4.7 to 47 mH
Stray inductance	Typically 1% of L_N
Inductance reduction (DC bias with IN)	Less than 10% (25°C)
High potential test voltage winding-to-winding @ 25°C	1500 VAC, 60 sec, guaranteed 1500 VAC, 2 sec, factory test
winding-to-housing @ 25°C	4000 VAC, 60 sec, guaranteed
Surge current @ 10 msec	20 x I_N @ 25°C
Temperature range (operation and storage)	-40°C to 125°C (40/125/56) acc. IEC 60068-1
Flammability corresponding to	UL 94V-0
Design corresponding to	IEC/EN 60938-2
MTBF @ Rated amb. Temp./Voltage (Mil-HB-217F)	> 5,000,000 hours

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.

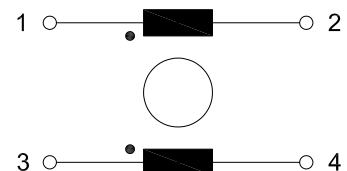
Features and benefits

- 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

Typical electrical schematic



Choke selection table

Choke	Buy	Current (I_N) [A]	@ Ambient Temperature* [°C]	Inductance (L_N) [mH]	Stray Inductance (L_s) [mH]	Resistance (R_{DC}) [mOhm]	Pin 1-2** (Pin 3-4) [mm]	Pin 1-3 [mm]	Height [mm]	Weight (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		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

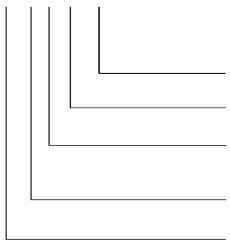
Test conditions: Measuring frequency: 10 kHz; 50 mV; Inductance tolerance: +50%, -30%; Resistance tolerance: $\pm 15\%$ @ 25°C; Electrical characteristics @ 25°C: $\pm 2^\circ\text{C}$

* 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

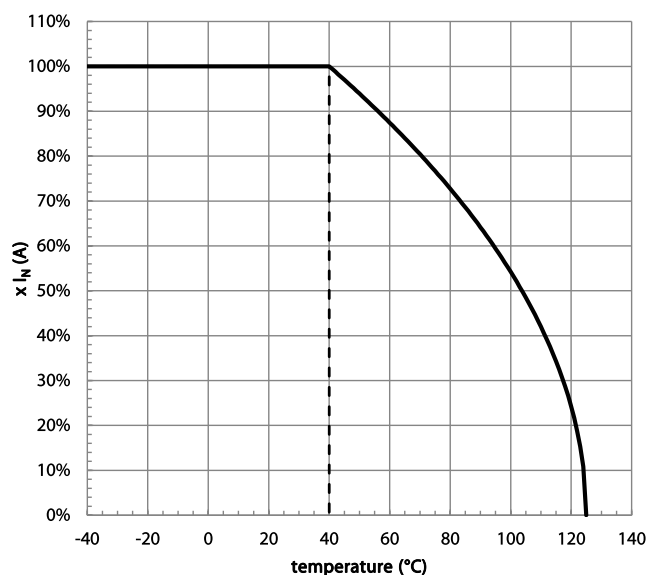
RC XYY-II-LML



- Rated Inductivity L_N (mH)
- Rated Current I_N (A)
- Size 12
- Orientation (1 = horizontal; 2 = vertical)
- Familyname

Thermal Derating

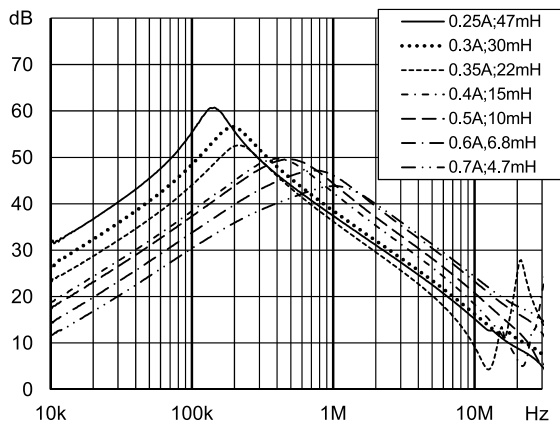
If higher ambient temperatures than the specified apply, the nominal current needs to be reduced according to the graph below.



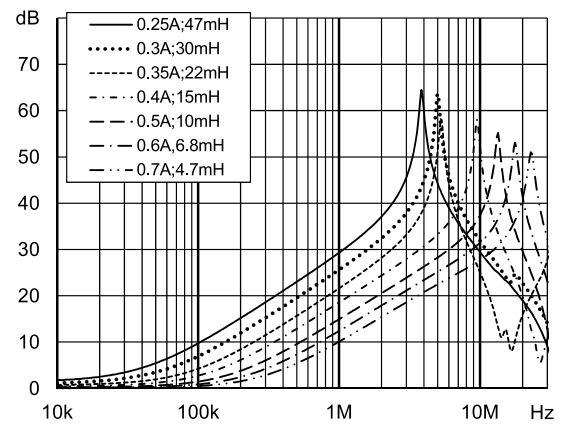
Typical attenuation/resonance frequency characteristics

Per CISPR 17; 50 Ω /50 Ω

RC112, RC212 common mode

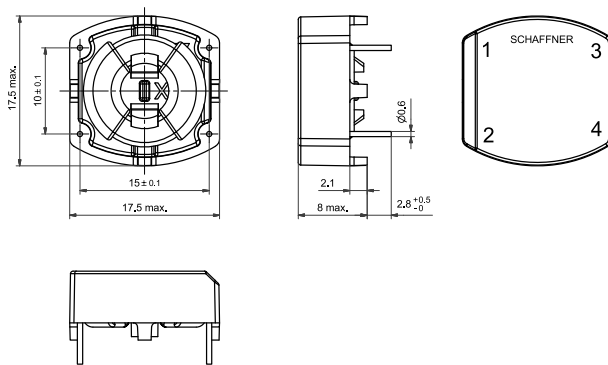


RC112, RC212 differential mode

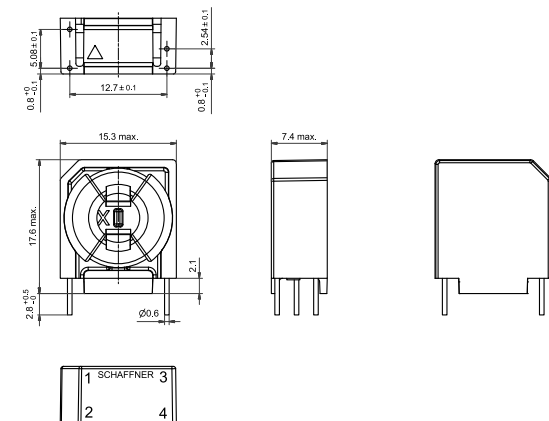


Mechanical data

RC112



RC212



For dimensions [mm] without tolerances: ISO 2768-m/ EN 22768-m applies

Pin material: Steel (base), Cu (under plating), Sn (final plating 6 μ m)



Headquarters, global innovation and development

Switzerland

Schaffner Group

Industrie Nord
Nordstrasse 11e
4542 Luterbach
T +41 32 681 66 26
info@schaffner.com



Sales and application centers

China

Schaffner EMC Ltd. Shanghai

T20-3 C, No 565 Chuangye Road,
Pudong district
201201 Shanghai
T +86 21 3813 9500
cschina@schaffner.com
www.schaffner.com.cn

Finland

Schaffner Oy

Sauvonrinne 19 H
08500 Lohja
T +358 10 567 2855
finlandsales@schaffner.com

France

Schaffner EMC S.A.S.

16-20 Rue Louis Rameau
95875 Bezons
T +33 1 34 34 30 60
F +33 1 39 47 02 28
francesales@schaffner.com

Germany

Schaffner Deutschland GmbH

Schoemperlenstrasse 12B
76185 Karlsruhe
T +49 721 56910
F +49 721 569110
germanysales@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
T +91 80 67935355
indiasales@schaffner.com

Italy

Schaffner EMC S.r.l.

Via Ticino, 30
20900 Monza (MB)
T +39 039 21 41 070
italysales@schaffner.com

Japan

Schaffner EMC K.K.

Taiju-Seimei Sangenjaya Bldg.
1-32-12, Kamiuma, Setagaya-ku
154-0011 Tokyo
T +81 3 5712 3650
F +81 3 5712 3651
japansales@schaffner.com
www.schaffner.jp

Singapore

Schaffner EMC Pte Ltd.

#05-09, Kg Ubi Ind. Estate
408705 Singapore
T +65 6377 3283
F +65 6377 3281
singaporesales@schaffner.com

Spain

Schaffner EMC España

Calle Caléndula 93, Miniparc III, Edificio E
El Soto de Moraleja, Alcobendas
28109 Madrid
T +34 917 912 900
F +34 917 912 901
spainsales@schaffner.com

Sweden

Schaffner EMC AB

Östermalmstorg 1
114 42 Stockholm
T +46 8 5050 2425
swedensales@schaffner.com
www.schaffner.com

Switzerland

Schaffner EMV AG

Industrie Nord
Nordstrasse 11e
4542 Luterbach
T +41 32 681 66 88
T +41 32 681 66 26
switzerlandsales@schaffner.com

Taiwan R.O.C.

Schaffner EMV Ltd.

20 Floor-2, No 97, Section 1, XinTai 5th Road
22175 XiZhi District New Taipei City 22175
T +886 2 2697 5500
F +886 2 2697 5533
taiwansales@schaffner.com
www.schaffner.com.tw

Thailand

Schaffner EMC Co. Ltd.

Northern Region Industrial Estate
67 Moo 4 Tambon Ban Klang
Amphur Muangng P.O. Box 14
51000 Lamphun
T +66 53 58 11 04
F +66 53 58 10 19
thailandsales@schaffner.com

United Kingdom

Schaffner Ltd.

1, Oakmede Place
Binfield
RG42 4JF Berkshire
T +44 118 9770070
F +44 118 9792969
uksales@schaffner.com

USA

Schaffner EMC Inc.

52 Mayfield Avenue
Edison, New Jersey
T +1 732 225 9533
F +1 732 225 4789
usasales@schaffner.com
www.schaffnerusa.com

Schaffner North America

6722 Thirlane Road
24019 Roanoke, Virginia
T +1 276 228 7943
F +1 276 228 7953

Schaffner North America

823 Fairview Road
24382 Wytheville, Virginia
T +1 276 228 7943
F +1 276 228 7258

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