

Current-compensated Chokes



- Rated currents from 6 to 64 A
- Up to 600 VAC or 850 VDC
- DC to 400 Hz frequencies
- Dual, triple and quad-choke configurations



Approvals & Compliances

RoHS

RD 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 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 or wire connections
- Dual, triple and quad-choke configuration
- Up to 64 A quad configuration
- Multiple housing options
- Custom-specific versions are available on request

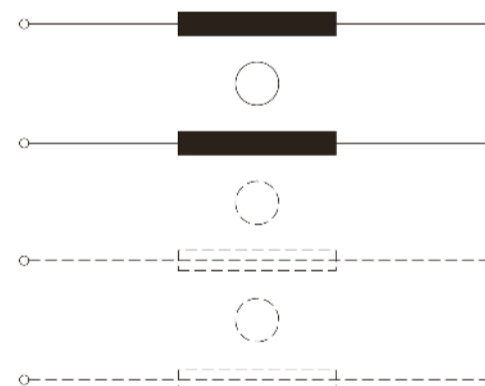
Typical Applications

- Phase-angle control circuits in combination with saturating chokes
- EMI input filters
- For suppressing equipment with no earth connection
- Suppressing high interference levels











































Technical Specifications

Maximum continuous operating voltage	600 VAC/850 VDC @ 40°C
Operating frequency	DC to 400 Hz
Rated currents	6 to 64 A @ 40°C max.
High potential test voltage winding-to-winding	2500 V, 50 Hz, 2 sec, factory test 2500 VAC, 60 sec, guaranteed
winding-to-housing	4000 VAC, 60 sec, guaranteed
Surge current @ 10 msec	20 x I _N @ 25 °C
Temperature range (operation and storage)	-25°C to +110°C (25/110/21)
Flammability corresponding to MTBF @ 40°C/230 V (Mil-HB-217F)	UL 94 V-0 (insulation tubes UL 94 V-2) >5,000,000 hours

Typical electrical schematic



Choke Selection Table

Choke	Buy	Nominal current @ 40°C [A]	Inductance L [mH/path]	Resistance R [mΩ/path]	Choke configuration [Qty]	Input/Output connections	Pin footprint connections [mm]	Weight [g]
RD5122-6-9m6		6	9.6	52.55	2	-02	Ø1	160
RD5122-10-6m0		10	6	24.25	2	-02	Ø1.3	160
RD5122-16-2m0		16	2	9.5	2	-02	Ø1.6	160
RD5132-6-5m0		6	5	38	3	-02	Ø1	160
RD5132-10-3m0		10	3	17.6	3	-02	Ø1.3	160
RD5132-16-1m0		16	1	6.9	3	-02	Ø1.6	160
RD6127-6-15m0		6	15	66.65	2	-07	Ø1	235
RD6127-10-9m0		10	9	25.9	2	-07	Ø1.5	235
RD6127-16-3m0		16	3	10.9	2	-07	Ø1.8	235
RD6137-6-7m5		6	7.5	49	3	-07	Ø1	235
RD6137-10-4m5		10	4.5	18.35	3	-07	Ø1.5	235
RD6137-16-1m5		16	1.5	8.3	3	-07	Ø1.8	235
RD7127-6-25m0		6	25	84.2	2	-07	Ø1	320
RD7127-10-14m0		10	14	33.5	2	-07	Ø1.4	350
RD7127-16-5m7		16	5.7	14.1	2	-07	Ø1.8	370
RD7127-25-2m8		25	2.8	6.4	2	-07	Ø2.4	400
RD7127-36-1m0		36	1	3.3	2	-07	Ø2.7	380
RD7137-6-12m0		6	12	60.6	3	-07	Ø1	340
RD7137-10-6m6		10	6.6	21.9	3	-07	Ø1.5	380
RD7137-16-2m8		16	2.8	10.7	3	-07	Ø1.8	380
RD7137-25-1m3		25	1.3	4.45	3	-07	Ø2.5	440
RD7137-36-0m5		36	0.5	2.75	3	-07	Ø2.7	400
RD7147-6-6m0		6	6	45.1	4	-07	Ø1	320
RD7147-10-3m5		10	3.5	19.1	4	-07	Ø1.4	370
RD7147-16-1m5		16	1.5	8.5	4	-07	Ø1.8	390
RD7147-25-0m7		25	0.7	3.65	4	-07	Ø2.4	430
RD7147-36-0m2		36	0.2	2.3	4	-07	Ø2.5	400
RD8127-16-12m0		16	12	20.05	2	-07	Ø2	590
RD8127-25-5m0		25	5	8.45	2	-07	Ø2.4	630
RD8127-36-3m0		36	3	4.55	2	-07	1.5 x 4.5	690
RD8127-50-1m0		50	1	2.5	2	-07	1.7 x 5	640
RD8127-64-0m8		64	0.8	1.6	2	-07	2.5 x 5	710
RD8137-16-5m0		16	5	11.6	3	-07	Ø2	630
RD8137-25-2m5		25	2.5	6.4	3	-07	Ø2.4	650
RD8137-36-1m5		36	1.5	3.65	3	-07	1.5 x 4.5	720
RD8137-50-0m6		50	0.6	2.15	3	-07	1.7 x 5	700
RD8137-64-0m5		64	0.5	1.35	3	-07	2.5 x 5	780
RD8147-16-3m0		16	3	9.25	4	-07	Ø2	650
RD8147-25-1m3		25	1.3	5.05	4	-07	Ø2.4	650
RD8147-36-0m8		36	0.8	3	4	-07	1.5 x 4.5	760
RD8147-50-0m3		50	0.3	1.75	4	-07	1.7 x 5	740
RD8147-64-0m2		64	0.2	1.1	4	-07	2.5 x 5	820

Test conditions:

Measuring frequency: 1 kHz; 500 µA >0.16 mH >1.6 mH; 50 µA >1.6 mH <160 mH

Inductance tolerance: +50%, -30%

Resistance tolerance: ±15% @ 25 °C

Electrical characteristics @ 25°C: ±2°C

Distribution Inventory

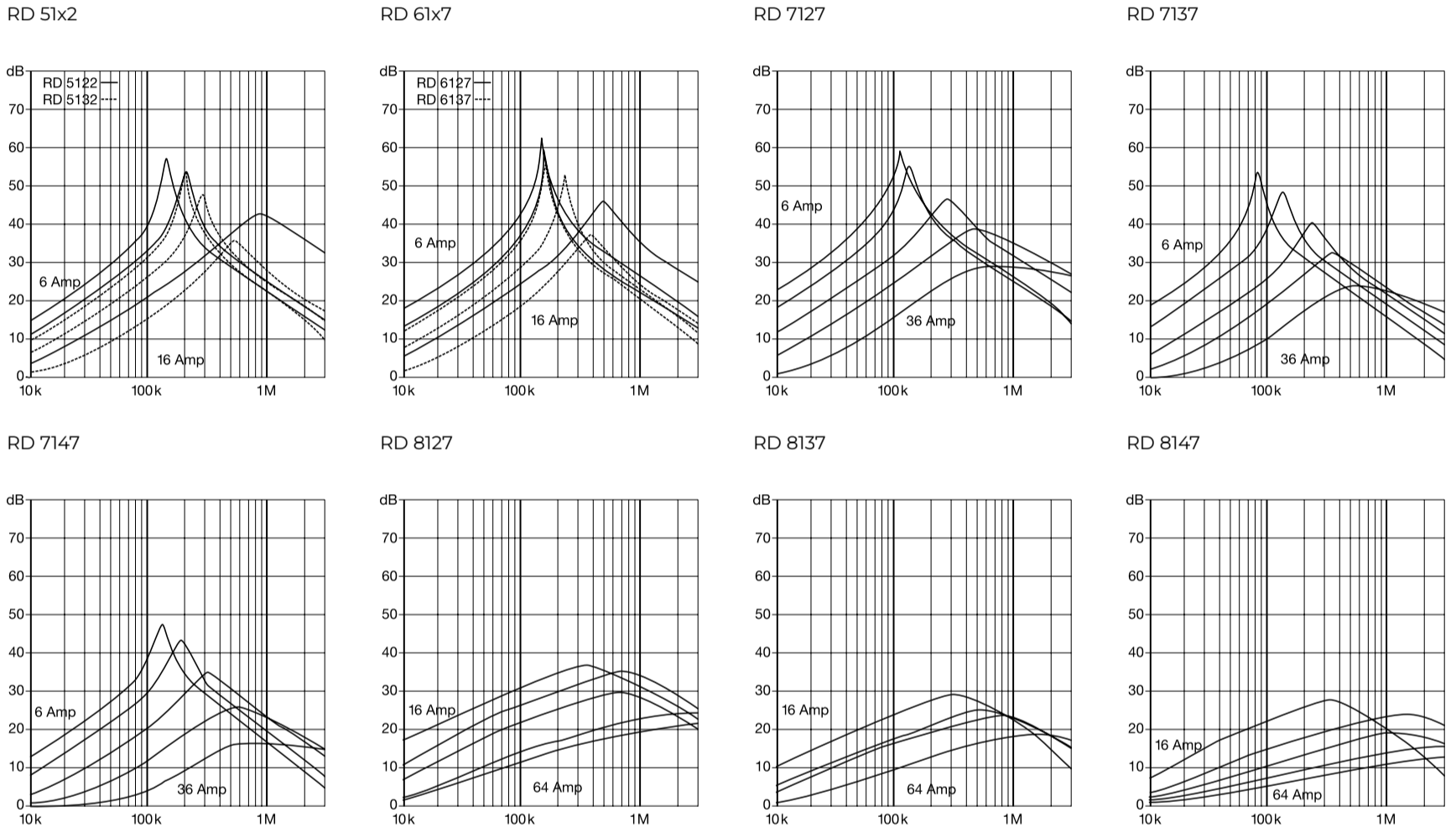
Up-to-date inventory levels for global distributors is available at

<https://products.schaffner.com/stock>



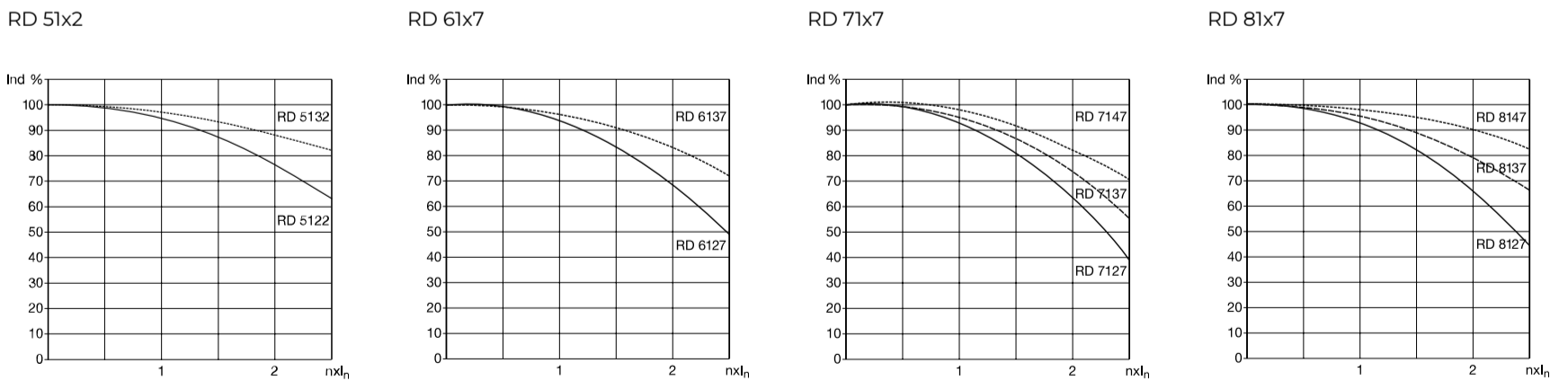
Typical Choke Attenuation/Resonance Frequency Characteristics

Per CISPR 17; 50 Ω/50 Ω asym

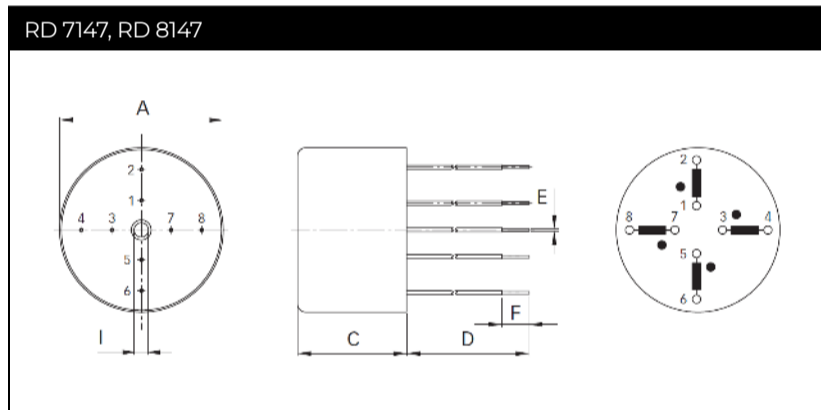
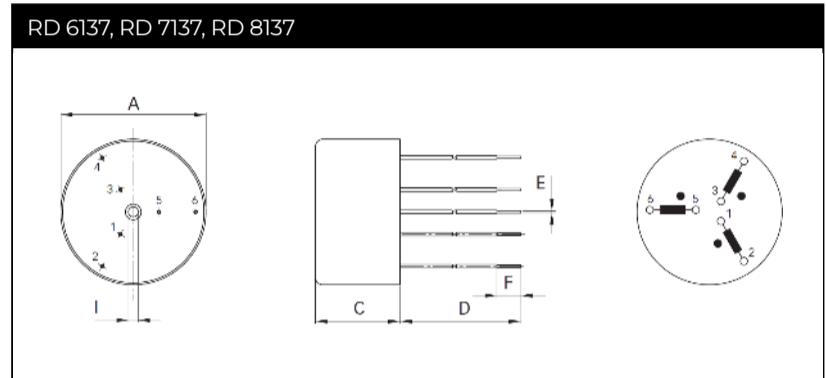
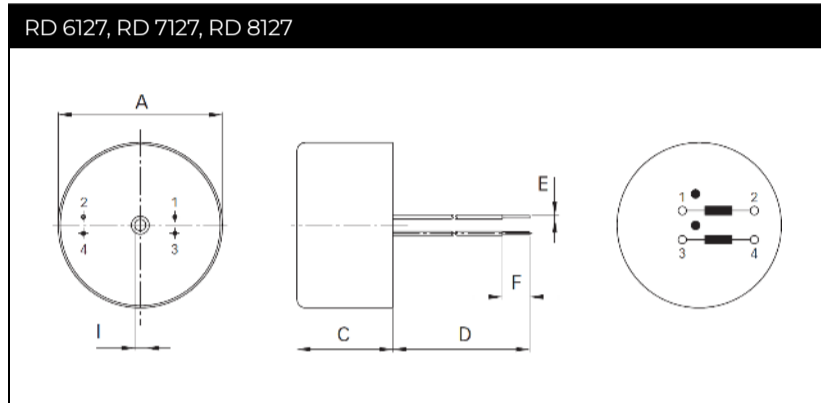
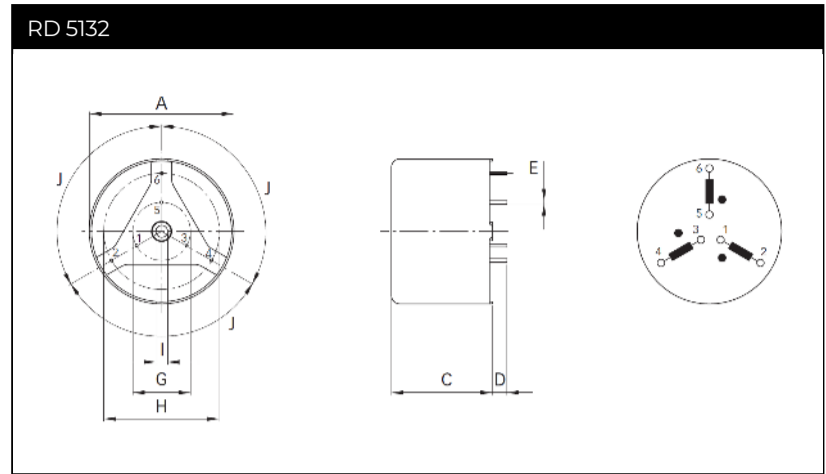
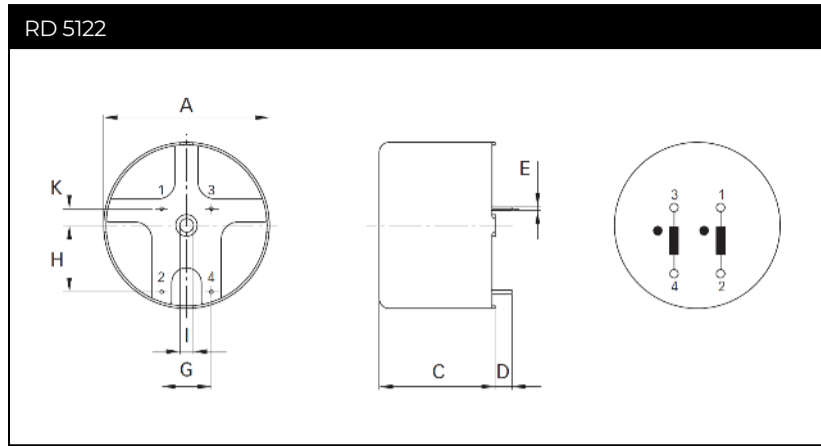


Typical Saturation Characteristics

Inductance (typical value in %) vs. nominal current (A DC)



Mechanical Data



Dimensions

	RD 5122	RD 5132	RD 6127	RD 6137	RD 7127	RD 7137	RD 7147	RD 8127	RD 8137	RD 8147	Tolerances
A	50	50	60	60	70	70	70	80	80	80	±0.5
C	35	35	35	35	40	40	40	50	50	50	±0.5
D	5 ±0.5	5 ±0.5	150	150	150	150	150	200	200	200	+5/-0
E	see choke selection table										
F			10	10	10	10	10	20	20	20	±1
G	15	20									±0.3
H	20	40 ±0.4									±0.3
I	4.1 +3/-0	4.1 +3/-0	4.1 +3/-0	4.1 +3/-0	6.1	6.1	6.1	6.1	6.1	6.1	+6/-0
J		120°									
K	5										

All dimensions in mm; 1 inch = 25.4 mm
 Tolerances according: ISO 2768-m/EN 22768-m

Please visit www.schaffner.com to find more details on filter connectors.

Headquarters, Global Innovation and Development

Switzerland

Schaffner Holding AG

Industrie Nord
Nordstrasse 11e
4542
Luterbach
+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
+86 2138139500
cschina@schaffner.com

Finland

Schaffner Oy

Sauvonrinne 19 H
8500
Lohja
+358 50 468 7284
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

Schoemperlenstrasse 12B
76185
Karlsruhe
+49 721 56910
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
+91 8067935355
indiasales@schaffner.com

Italy

Schaffner EMC S.r.l.

Via Ticino, 30
20900
Monza (MB)
+39 039 21 41 070
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

Spain

Schaffner EMC España

Calle Caléndula 93, Miniparc III, Edificio E El Soto de Moraleja, Alcobendas
28109
Madrid
+34 917 912 900
spainsales@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 11e
4542
Luterbach
+41 32 681 66 26
switzerlandsales@schaffner.com

Taiwan

Schaffner EMV Ltd.

U-Town
20 Floor-2, No 97, Section 1, XinTai 5th Road, XiZhi District
22175
New Taipei City
+886 226975500
taiwansales@schaffner.com

Thailand

Schaffner EMC Co. Ltd.

Sathorn Square Tower
Room 3780, 37FL, 98 North-Sathorn Rd, Silom, Bangrak
10500
Bangkok
+66 621056397
thailandsales@schaffner.com

United Kingdom

Schaffner Ltd.

1, Oakmede Place
Terrace Road
RG42 4JF
Binfield
+44 118 9770070
uksales@schaffner.com

United States

Schaffner EMC Inc.

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

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