

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

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 applications

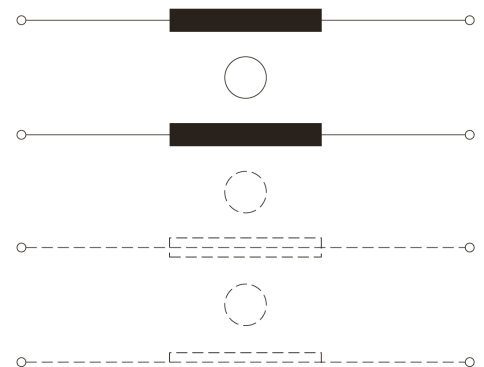
- | Phase-angle control circuits in combination with saturating chokes

- | EMI input filters











































- | For suppressing equipment with no earth connection

- | Suppressing high interference levels

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

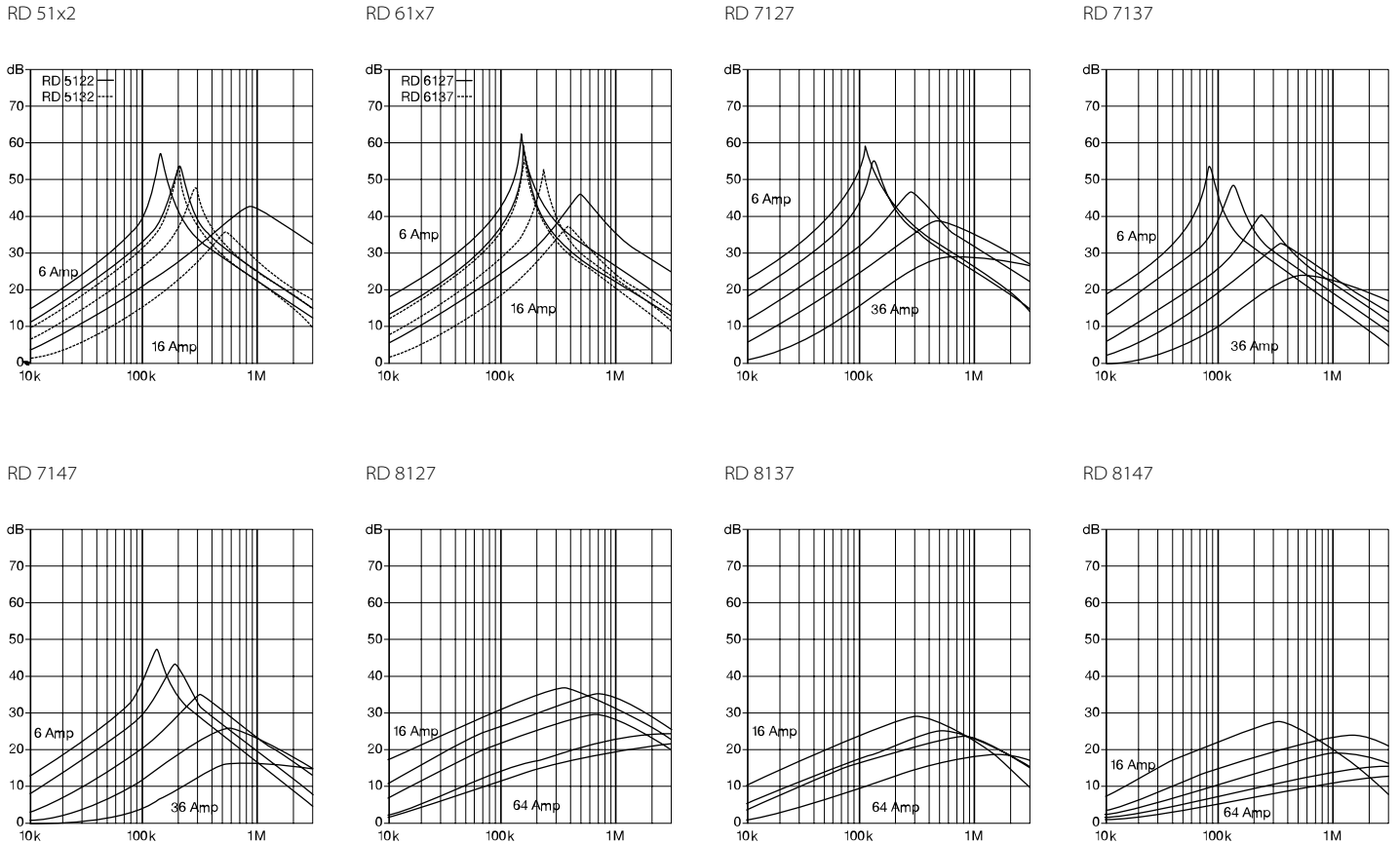
Up-to-date inventory levels for global distributors is available at

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



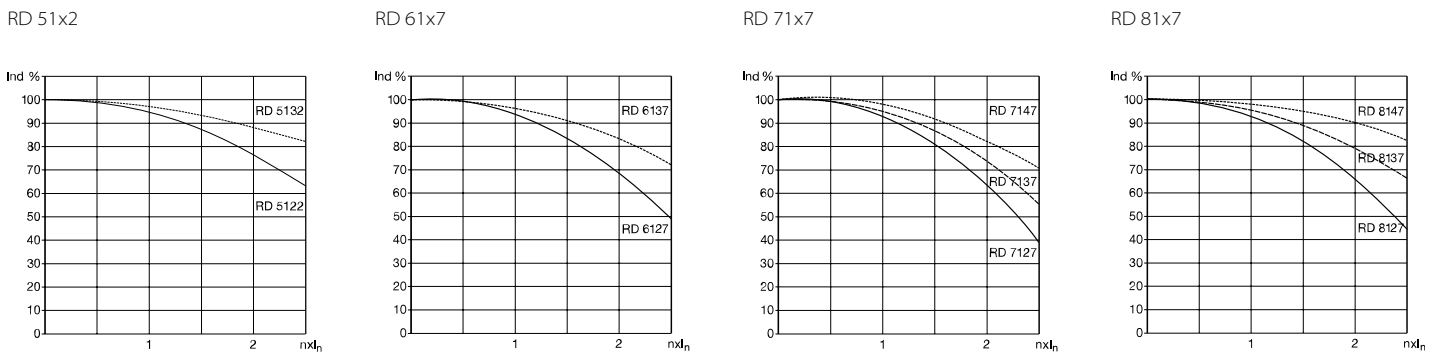
Typical choke attenuation/resonance frequency characteristics

Per CISPR 17; 50 Ω/50 Ω asym

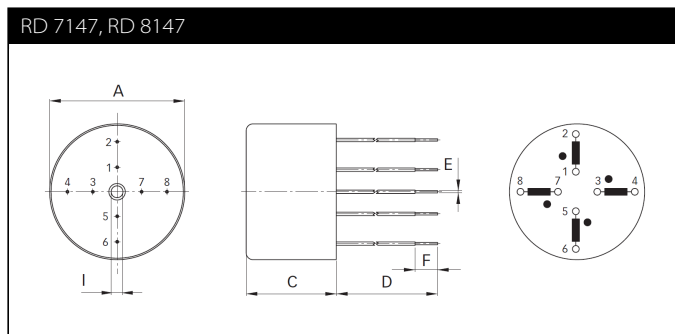
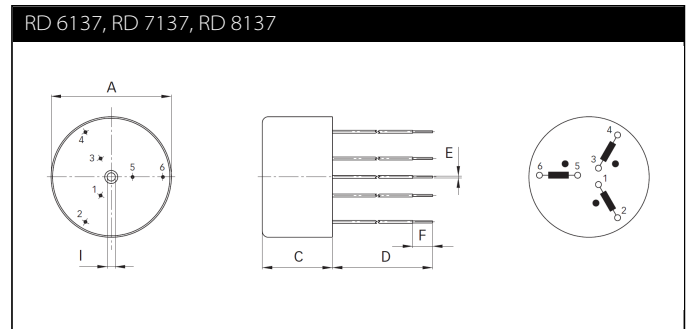
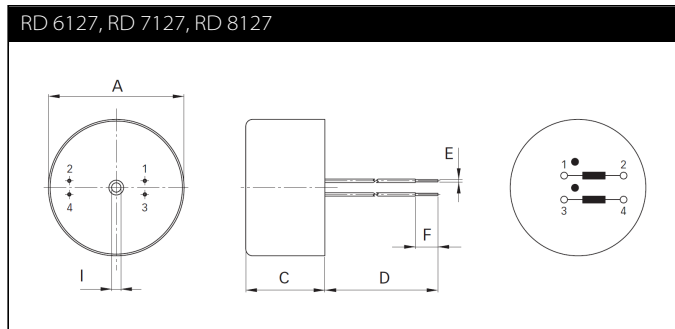
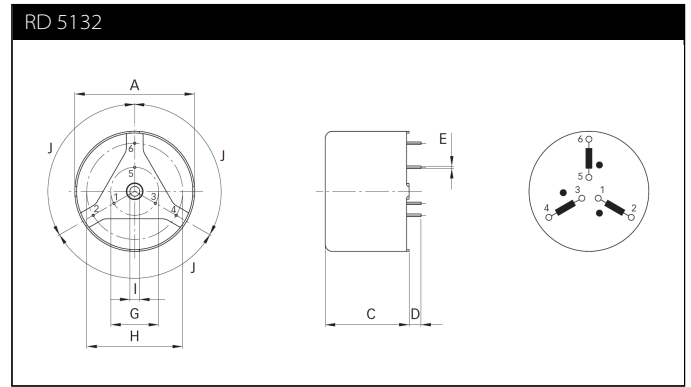
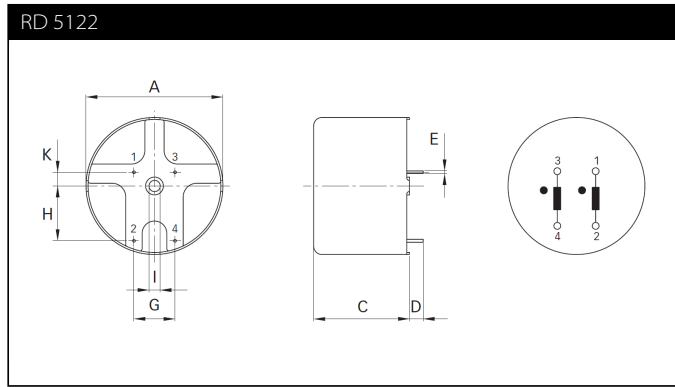


Typical saturation characteristics

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 to: ISO 2768-m/EN 22768-m

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



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