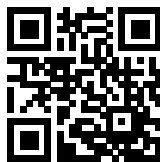


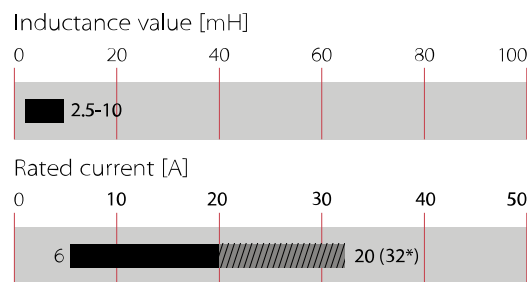
Current-compensated Chokes



- Rated currents from 6 to 20 A
- Up to 600 VAC and VDC
- 2- and 3-wire configurations
- Horizontal and vertical PCB mounting types
- Ruggedized saturation and thermal behavior
- Open construction for forced and convection cooling
- Straightforward pin-out for easy PCB design



Performance indicators



Technical Specifications

Maximum continuous operating voltage	600 VAC (3-line) and 300 VAC/425 VDC (2-line)
Operating frequency	DC to 400 Hz
Temperature range (operation and storage)	-40°C to +100°C (40/100/56)
Flammability corresponding to	UL 94 V-0
Cooling	convection/forced cooling
Rated currents	6 to 63 A

Approvals & Compliances

RoHS

RT common-mode chokes are mainly used to filter EMI noise on AC power lines up to 600 VAC. EMI noise of electronic equipment can go to the power lines and disturb the proper function of other devices like communication devices or control logic of robotics. Thus noise generated by the equipment from switched power electronics or by high slew rates of controllers needs to be filtered. RT common-mode chokes are used to suppress EMI noise in PCB integrated filter designs with line bypass capacitors or in combination with single phase filters for extra low leakage filter designs.

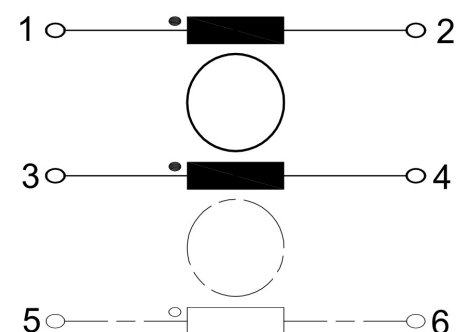
Features and Benefits

- Cost-effective PCB designs for up to 32 A with forced cooling *
- Compact size and light weight
- Low magnetic leakage flux
- Excellent winding insulation
- Standardized foot print
- Broad range of inductance ratings
- Custom-specific versions on request

Typical Applications

- AC and DC filtering for midsize power range drives, photovoltaic inverters, fast chargers, charging stations, UPS and switch mode power supplies
- Filter with low leakage current noise or improved immunity against grid disturbances
- Electronic devices, automation and (industrial) LED lighting
- Communication devices
- Medical and laboratory Equipment
- Converters

Typical electrical schematic



RT Series

Selection table	Buy	convection cooling nominal current @ 60°C [A]	*forced cooling 3 m/s nominal current @ 60°C [A]	Inductance Ln @ 25°C 100kHz [mH/path]	**typ. Inductance Ls @ 25°C 100kHz [µH/path]	Resistance R @ 25°C [mΩ/path]	Choke [size]	***Ø Pin ±0.1 ØP [mm]	Weight [g]
RT8122-6-10M0		6	9.5	10	30	33	1	1.1	80
RT8122-8-8M0		8	12.5	8	24.8	21	1	1.3	80
RT8122-10-6M0		10	16	6	19.2	16	1	1.4	80
RT8122-12-5M0		12	19	5	20.5	14	2	1.5	100
RT8122-16-4M0		16	27	4	17.6	10	2	1.8	110
RT8122-20-3M0		20	32	3	13.5	7	3	2	160
RT8522-6-10M0		6	9.5	10	31.5	33	4	1.1	70
RT8522-8-8M0		8	12.5	8	24	21	4	1.3	80
RT8522-10-6M0		10	16	6	19.2	16	4	1.4	80
RT8522-12-5M0		12	19	5	23	14	5	1.5	90
RT8522-16-4M0		16	27	4	18.8	10	5	1.8	110
RT8522-20-3M0		20	32	3	13.5	7	6	2.0	150
RT8132-6-6M0		6	9.5	6	18	27	7	1.1	80
RT8132-8-4M8		8	12.5	4.8	14.9	17	7	1.3	90
RT8132-10-4M0		10	16	4	16	15	8	1.5	110
RT8132-12-3M6		12	19	3.6	14.4	12	8	1.6	120
RT8132-16-3M0		16	27	3	12	8	9	1.8	170
RT8132-20-2M5		20	32	2.5	10	7	9	2.1	190
RT8532-6-6M0		6	9.5	6	18	27	10	1.1	90
RT8532-8-4M8		8	12.5	4.8	13.9	17	10	1.3	90
RT8532-10-4M0		10	16	4	16	15	11	1.5	110
RT8532-12-3M6		12	19	3.6	15.1	12	11	1.6	120
RT8532-16-3M0		16	27	3	13.8	8	12	1.8	160
RT8532-20-2M5		20	32	2.5	10.8	7	12	2.1	190

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

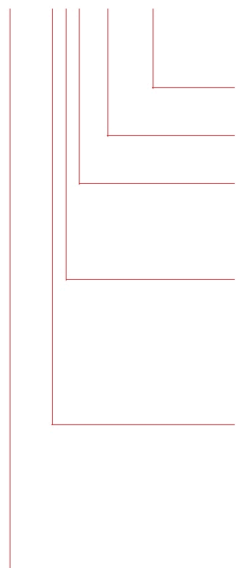
* typical current for forced cooling with 3 m/s. Due to the possible turbulences and degradation of the air stream within an equipment please consider thermal validation.

** typical stray inductance, max is 0.1% of Ln

*** Length of pin (Dimension P) is always 5.5 mm ± 1

Product selector

RT 8xxx-xx-xmx



Inductance value (e.g. 9M6 = 9.6 mH)
 Nominal input current [A] (convection cooling)
 Terminal type (2 for PCB pin)

2 = 2-line choke
 3 = 3-line choke

1 = Horizontal
 5 = Vertical

Schaffner standard ring-core choke series RT

Examples: RT8532-16-3M0: Vertical 3-line choke for 16 A, with 3 mH ; RT8122-20-3M0: Horizontal 2-line choke for 20 A, with 3 mH

Distribution Inventory

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

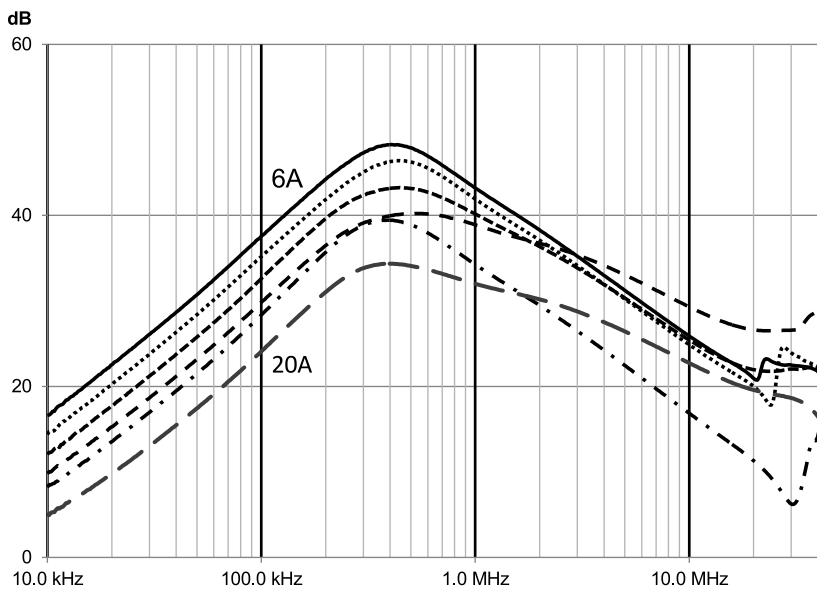
<https://products.schaffner.com/stock>



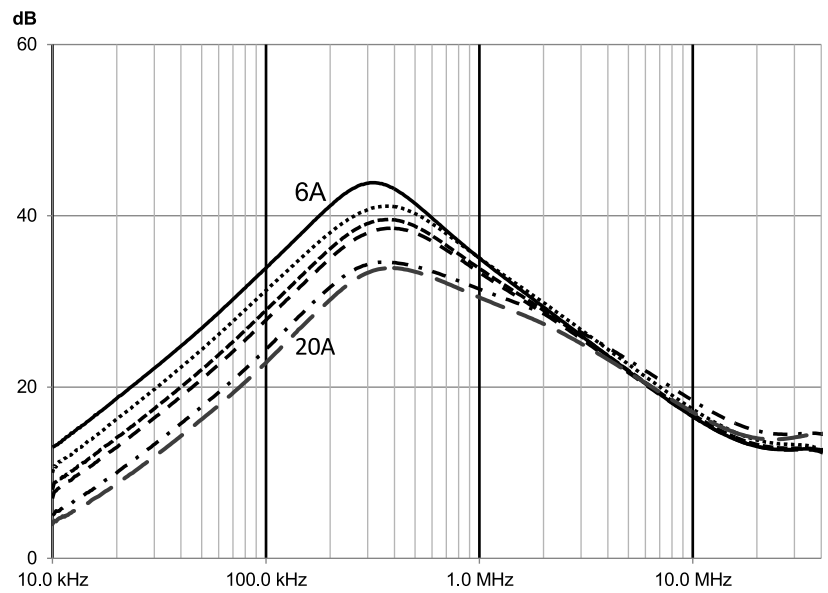
Typical Choke Attenuation/Resonance Frequency Characteristics

Per CISPR 17; 50 Ω/50 Ω asym

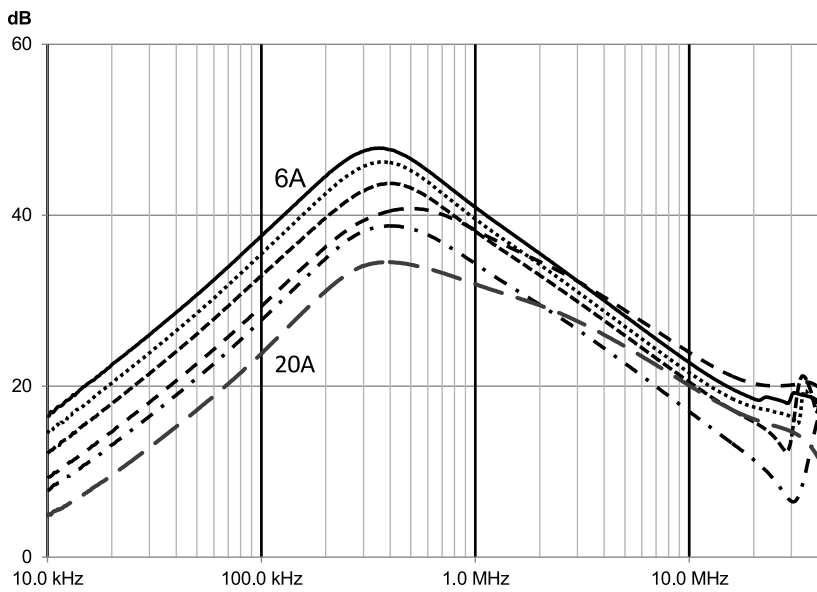
RT 8122



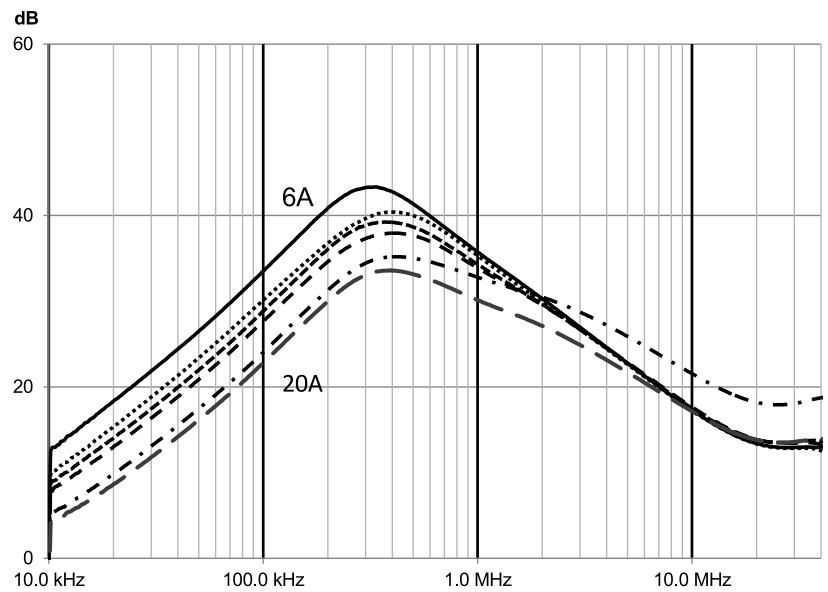
RT 8132



RT 8522

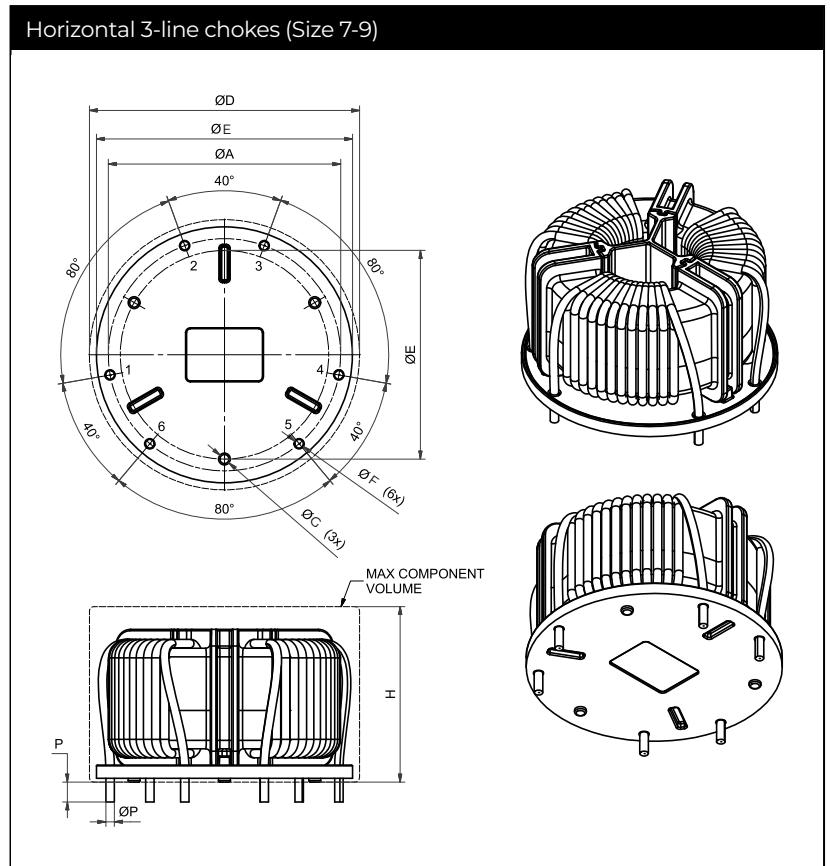
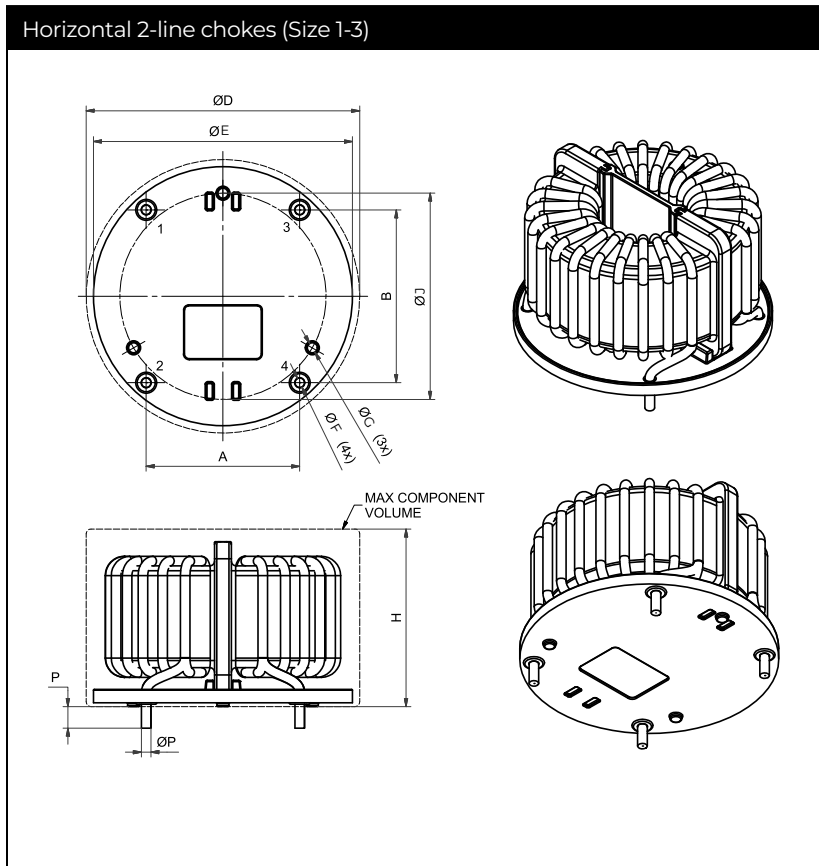


RT 8532



Mechanical Data: Horizontal Chokes (2-line And 3-line)

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



Dimensions

	A	B	ØD (max)	H (max)	ØE	ØF	ØG	ØJ
	(±0.5)	(±0.5)			(±0.5)			
Size1 (RT8122-6-10M0, RT8122-8-8M0, RT8122-10-6M0)	21	25	45	34	42	1.5	2.5	36
Size2 (RT8122-12-5M0, RT8122-16-4M0)	26	30	51	33	48	1.9	2.5	40
Size3 (RT8122-20-3M0)	32	36	57	37	54	2.1	2.5	43
	ØA		ØD (max)	H (max)	ØD1	ØD2		
	(±0.5)				(±0.5)			
Size 7 (RT8132-6-6M0, RT8132-8-4M8)	38	-	46	34	43	1.4	2.5	35
Size 8 (RT8132-10-4M0, RT8132-12-3M6)	44	-	51	33	48	1.7	2.5	40
Size 9 (RT8132-16-3M0, RT8132-20-2M5)	49	-	57	37	54	2.3	2.5	44

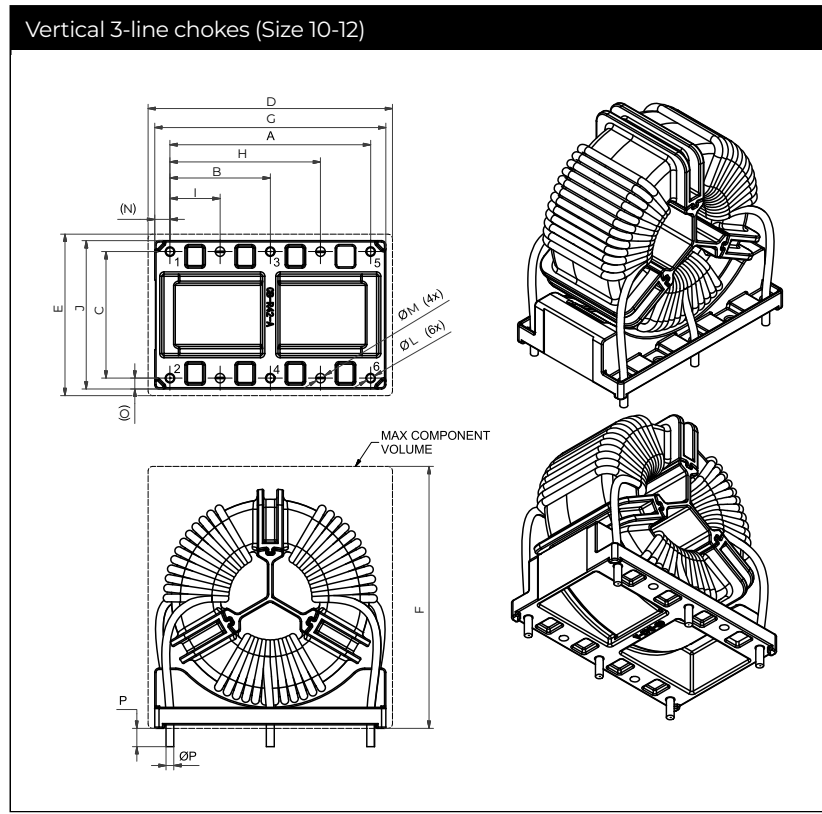
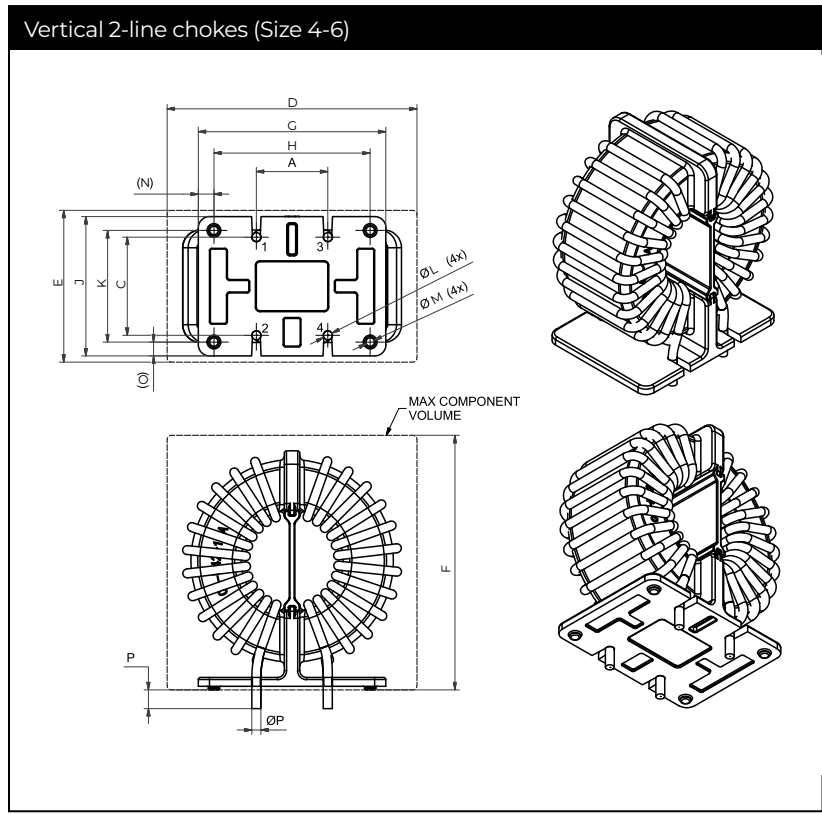
Pin material: Copper (base), Sn (final plating typical thickness 0.15 mm; composition: Sn-1.2Ag-4Cu or SN-3Cu-0.25Ni)

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

Mechanical Data: Vertical Chokes (2-line And 3-line)

All dimensions in mm; 1 inch = 25.4 mm

Tolerances according: ISO 2768-m/EN 22768-m



Dimensions

	A	B	C	D	E	H	G	H	I	J	K	ØL	ØM	N	O
	(±0.5)	(±0.5)	(±0.5)	(max)	(max)	(max)	(±0.5)	(±0.5)		(±0.5)	(±0.5)				
Size 4 (RT8522-6-10M0, RT8522-8-8M0, RT8522-10-6M0)	16	-	20	43	32	44	32	26	-	27.8	22	1.5	2.5	3	2.9
Size 5 (RT8522-12-5M0, RT8522-16-4M0)	16	-	22	50	32	52	39	33	-	27	23	1.9	2.5	3	2
Size 6 (RT8522-20-3M0)	16	-	22	56	32	57	42	35	-	31.2	25	2.1	2.5	3.5	3.1
Size 10 (RT8532-6-6M0, RT8532-8-4M8)	36	18	24	44	32	47	41	27	9	29	-	1.4	1.4	2.5	2.5
Size 11 (RT8532-10-4M0, RT8532-12-3M6)	38	19	24	49	34	53	46	28.5	9.5	31	-	1.7	1.7	4	3.5
Size 12 (RT8532-16-3M0, RT8532-20-2M5)	46	23	29	56	37	60	53	34.5	11.5	34	-	2.2	2.2	3.5	2.5

Pin material: Copper (base), Sn (final plating typical thickness 0.15 mm; composition: Sn-1.2Ag-4Cu or SN-3Cu-0.25Ni)

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

Headquarters, Global Innovation and Development

Switzerland

Schaffner Group

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

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.

Suite 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

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
Mallechwaram (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 Kamiyama 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

To find your local partner within Schaffner's global network schaffner.com

© 2023 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 specifications 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 downloaded from the Schaffner website. All trademarks recognized.

Mouser Electronics

Authorized Distributor

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

Schaffner:

[RT8122-16-4M0](#) [RT8532-12-3M6](#) [RT8532-6-6M0](#) [RT8522-6-10M0](#) [RT8132-6-6M0](#) [RT8522-16-4M0](#) [RT8132-12-3M6](#) [RT8532-20-2M5](#) [RT8122-6-10M0](#) [RT8522-20-3M0](#) [RT8122-8-8M0](#) [RT8522-10-6M0](#) [RT8532-8-4M8](#) [RT8522-12-5M0](#) [RT8132-20-2M5](#) [RT8122-20-3M0](#) [RT8132-10-4M0](#) [RT8532-16-3M0](#) [RT8122-12-5M0](#) [RT8122-10-6M0](#) [RT8532-10-4M0](#) [RT8132-16-3M0](#) [RT8522-8-8M0](#) [RT8132-8-4M8](#)