# **RSHN** SERIES

High-Attenuation Type Single-Phase Filter with Various Variations and Functions



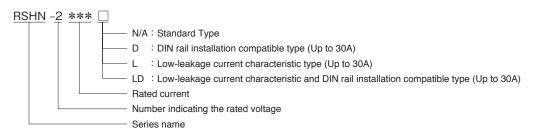
### FEATURES

- Self-tightening screws and an open/close type cover make wiring work easier.
- 3 to 300A wide range lineup.
- Optional low-leakage current characteristic type and DIN rail installation compatible type are also available.

#### SAFETY STANDARDS

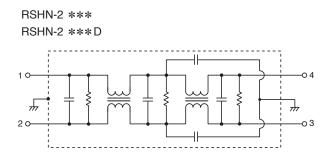
UL1283	UL File No. E62388 (Up to 60A)
CSA C22.2 No.8	CSA File No. LR76849 (Up to 30A)
EN60939	Licence Ref. No. SE/07115-3 (Up to 60A)

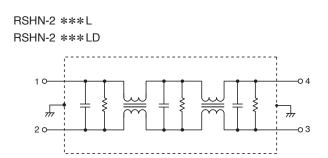
### PRODUCT IDENTIFICATION



# CONFORMITY TO RoHS Directive

### CIRCUIT DIAGRAMS





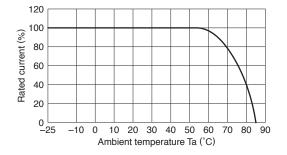
# ELECTRICAL CHARACTERISTICS

Part No. Rated (AC/DC)	Bated	Rated				Operating	With	DC	Attenuation frequency range (MHz)			Weight
	current	Withstand voltage	Insulation resistance	Leakage current	temperature	derating	resistance	Common mode		Differential mode	ode	
	(AC/DC)	DC) (AC/DC)	Voltago	Tosistance	current	range	over	(mΩ)	at 25dB	at 10dB	at 25dB	(kg)
RSHN-2003		ЗA		10010		-25 to +85°C	55°C	350 max.	0.1 to 10	-	0.2 to 30	0.19
RSHN-2006		6A						140 max.	0.1 to 10	-	0.2 to 30	0.24
RSHN-2010		10A						60 max.	0.1 to 30	-	0.3 to 30	0.24
RSHN-2016		16A						35 max.	0.2 to 30	-	0.3 to 30	0.35
RSHN-2020		20A 30A			00MΩ min. IC.500V/ [250V/60Hz]			22 max.	0.2 to 30	-	0.4 to 30	0.35
RSHN-2030			AC.2500V					12 max.	0.3 to 30	-	0.6 to 30	0.35
RSHN-2040		40A	60s					10 max.	0.2 to 30	-	0.1 to 30	1.50
RSHN-2050	250V	50A						8 max.	0.3 to 30	-	0.2 to 30	1.40
RSHN-2060		60A	Between line					6 max.	0.3 to 30	-	0.3 to 30	1.40
RSHN-2080		80A 100A 150A	to ground]	Iminj			50°C	7 max.	0.2 to 8	-	0.1 to 30	5.50
RSHN-2100								6 max.	0.2 to 8	-	0.1 to 30	6.00
RSHN-2150								4 max.	0.2 to 7	-	0.1 to 30	9.00
RSHN-2200	]	200A	]					3 max.	0.4 to 7	-	0.1 to 30	13.00
RSHN-2250		250A						2 max.	-	0.4 to 10	0.1 to 30	13.00
RSHN-2300		300A						1.5 max.	-	1 to 7	0.1 to 30	13.00

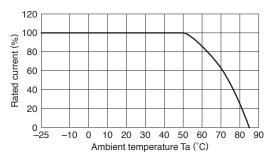
	Rated	Rated				Operating	With	DC	Attenuation frequ	Weight	
Part No.	voltage	current	Withstand voltage	Insulation resistance	Leakage current	temperature	derating	resistance	Common mode	Differential mode	(kg)
(AC/DC)	(AC/DC)	(AC/DC)	, onde	100101010100	ounon	range	over	(mΩ)	at 25dB	at 25dB	
RSHN-2003L		ЗA						350 max.	0.2 to 10	0.2 to 30	0.19
RSHN-2006L		6A	AC.2500V	100MΩ	100 1			140 max.	0.2 to 10	0.2 to 30	0.24
RSHN-2010L	250V	10A	60s	min.	100 µ A	-25 to +85°C	55°C	60 max.	0.3 to 10	0.3 to 30	0.24
RSHN-2016L	2500	16A	[Between line	[DC.500V/	max.	-25 10 +85 C	550	35 max.	0.3 to 30	0.3 to 30	0.35
RSHN-2020L		20A	to ground]	1 min]	[2500/60H2]			22 max.	0.4 to 30	0.4 to 30	0.35
RSHN-2030L		30A						12 max.	0.6 to 30	0.6 to 30	0.35

### DERATING GRAPHS

RSHN-2003/2006/2010/2016/2020/2030/ 2040/2050/2060

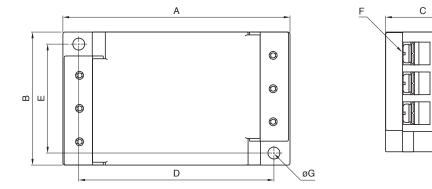


#### RSHN-2080/2100/2150/2200/2250/2300

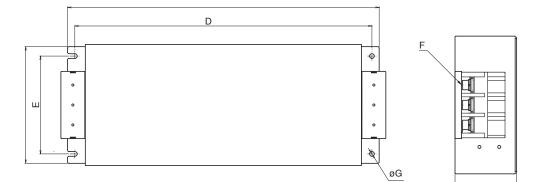


# **MECHANICAL**

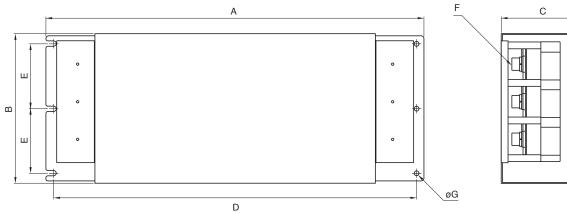
RSHN-2003/2006/2010/2016/2020/2030



#### RSHN-2040/2050/2060/2080/2100/2150



RSHN-2200/2250/2300

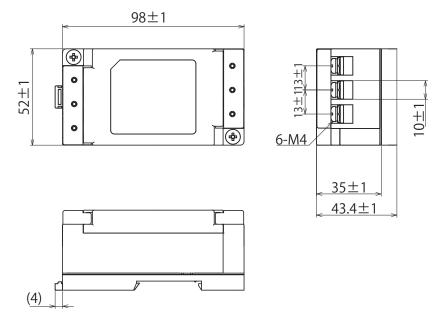


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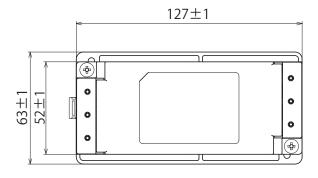
С

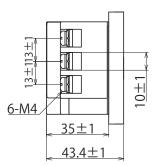
								Dimensions in mm		
Part No.	A	В	С	D	E	F	φG	Recommended clamping torque		
RSHN-2003										
RSHN-2006	98	52	35	86	43	M4				
RSHN-2010							4.5	1.27N ⋅ m		
RSHN-2016								1.2711 * 111		
RSHN-2020	127	52	35	115	43	M4				
RSHN-2030										
RSHN-2040										
RSHN-2050	272	100	60	254	82	M5	5.5	2.5N ⋅ m		
RSHN-2060										
RSHN-2080	430	161	85	410	135	M8				
RSHN-2100	430	101	85	410	135	IVIO		7.64N ⋅ m		
RSHN-2150	473	190	88	453	164	M8	6.5			
RSHN-2200							6.5			
RSHN-2250	593	195	103	573	84.5	M10		11.8N • m		
RSHN-2300										

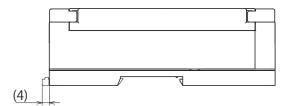
#### RSHN-2003D/2006D/2010D



#### RSHN-2016D/2020D/2030D

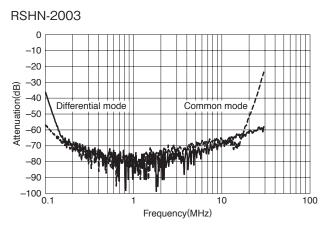


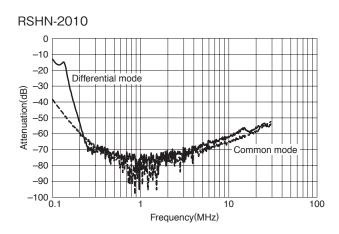




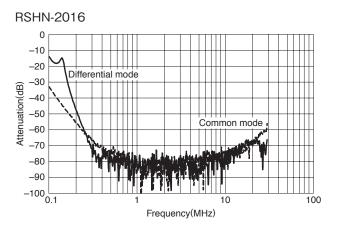
Dimensions in mm

# ATTENUATION vs. FREQUENCY CHARACTERISTICS

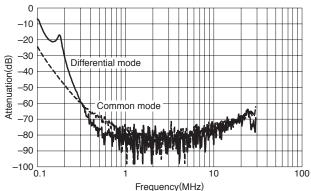


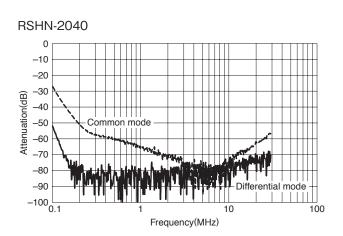


**RSHN-2006** 0 -10 -20 -30 Attenuation(dB) Common mode -40 Differential mode -50 -60 -70 -80 -90 -100 L 10 100 Frequency(MHz)

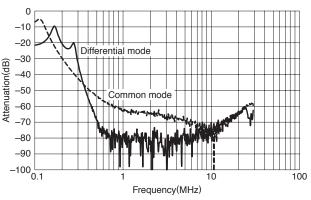


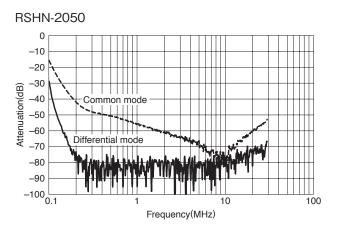
RSHN-2020

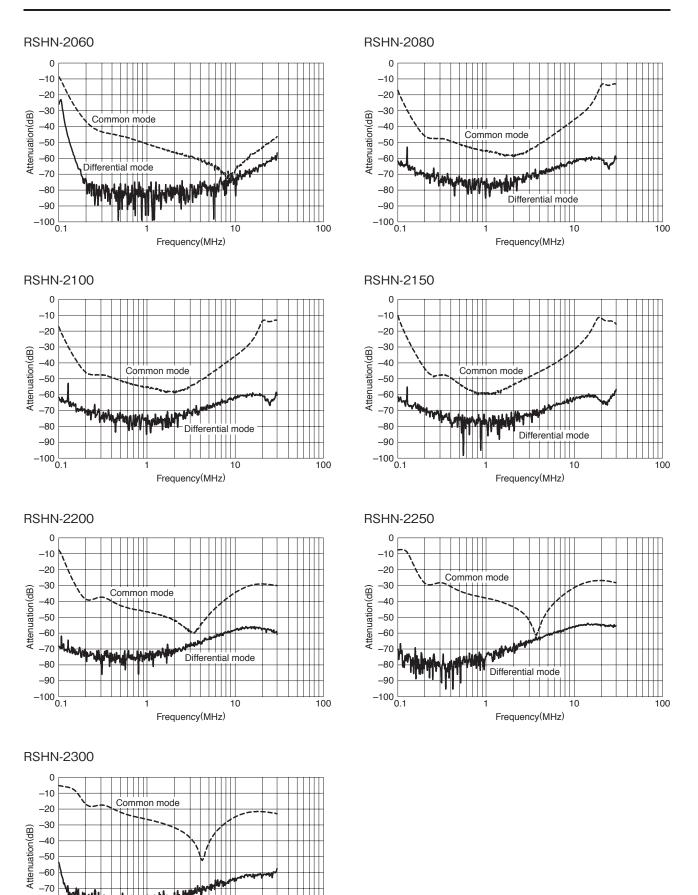




RSHN-2030







-80

-90 -100 0.1 Differential mode

10

Frequency(MHz)

100

