# **RSHN** SERIES

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



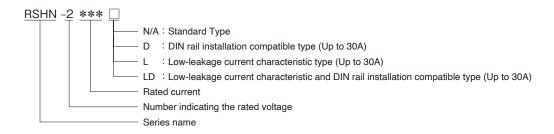
#### **■** FEATURES

- 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

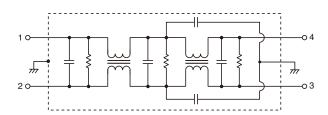
UL1283 (Up to 60A) CSA C22.2 No.8 (Up to 30A) EN60939 (Up to 60A)

# **■ PRODUCT IDENTIFICATION**



# **■ CONFORMITY TO RoHS Directive**

#### **■ CIRCUIT DIAGRAMS**



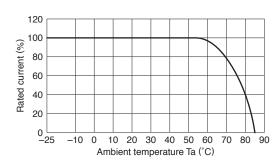
# **■ ELECTRICAL CHARACTERISTICS**

Part No.	Rated voltage (AC/DC)	Rated current (AC/DC)	Withstand voltage	Insulation resistance	Leakage current	Operating temperature range	With derating over	DC resistance (mΩ)	Attenuation frequency range (MHz)			Weight
									Common mode		Differential mode	
									at 25dB	at 10dB	at 25dB	(kg)
RSHN-2003		ЗА	AC.2500V 60s [Between line	100MΩ min. [DC.500V/ 1min]	1.0mA max. [250V/60Hz]	-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						22 max.	0.2 to 30	-	0.4 to 30	0.35
RSHN-2030		30A						12 max.	0.3 to 30	-	0.6 to 30	0.35
RSHN-2040		40A						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						6 max.	0.3 to 30	-	0.3 to 30	1.40
RSHN-2080		80A	to ground]				50°C	7 max.	0.2 to 8	-	0.1 to 30	5.50
RSHN-2100		100A						6 max.	0.2 to 8	-	0.1 to 30	6.00
RSHN-2150		150A						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

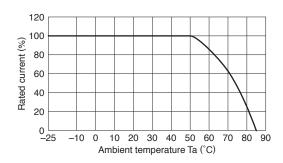
	Rated	Rated				Operating	With	DC	Attenuation frequ	uency range (MHz)	Weight
Part No.	voltage	current	Withstand voltage	Insulation resistance	Leakage current	temperature	derating	resistance	Common mode	Differential mode	
	(AC/DC)	(AC/DC)	ronago		04.1011	range	over	(mΩ)	at 25dB	at 25dB	(kg)
RSHN-2003L		ЗА						350 max.	0.2 to 10	0.2 to 30	0.19
RSHN-2006L		6A	AC.2500V	100ΜΩ	100 4			140 max.	0.2 to 10	0.2 to 30	0.24
RSHN-2010L	0507	10A	60s	min.	100 μ Α	05 to 105°0	55°C	60 max.	0.3 to 10	0.3 to 30	0.24
RSHN-2016L	250V	16A	[Between line	[DC.500V/	max.	-25 to +85°C	55 C	35 max.	0.3 to 30	0.3 to 30	0.35
RSHN-2020L		20A	to ground]	1min]	[250V/60Hz]			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

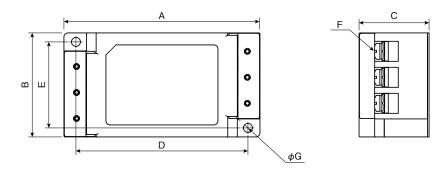


RSHN-2080/2100/2150/2200/2250/2300

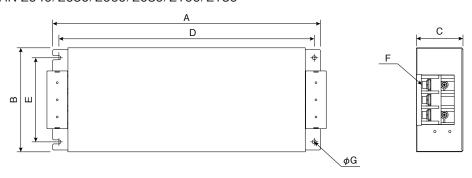


# **■ MECHANICAL**

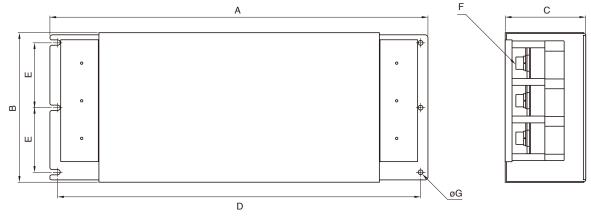
RSHN-2003/2006/2010/2016/2020/2030



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



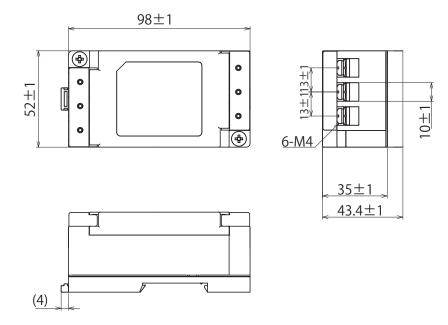
#### RSHN-2200/2250/2300



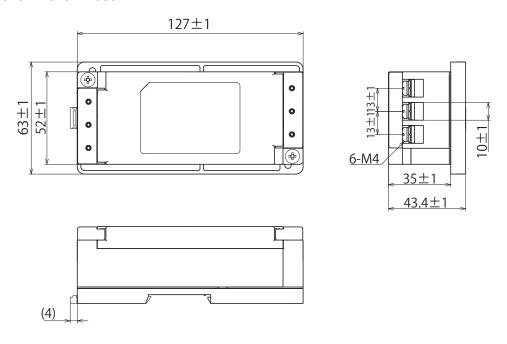
Dimensions in mm

Part No.	Α	В	С	D	Е	F	φG	Recommended clamping torque	
RSHN-2003									
RSHN-2006	98	52	35	86	43	M4			
RSHN-2010							4.5	1.27N ⋅ m	
RSHN-2016							4.5		
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	400	101	0.5	440	405	140			
RSHN-2100	430	161	85	410	135	M8		7.64N · m	
RSHN-2150	473	190	88	453	164	M8	0.5		
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

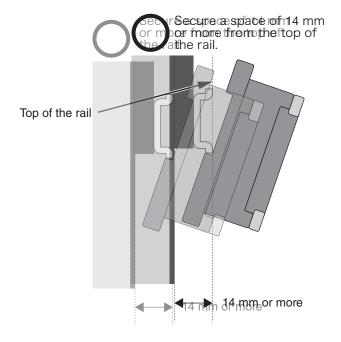


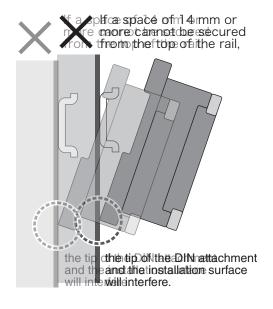
Dimensions in mm

\*Please see the next page: "Precautions of DIN rail mounting".

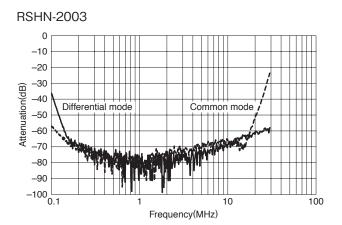
# Precations sof DDM rail mounting

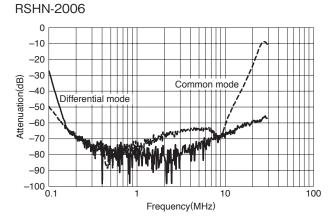
When installing on a DIN rail, secure a space with a depth of 14 mm or more from the top of the rail. If there is no depth space, the tip of the DIN attachment and the installation surface may interfere and it may not be possible to install it.

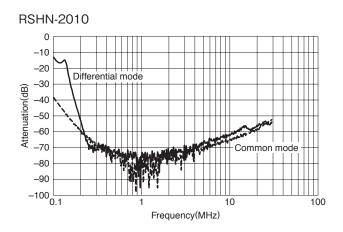


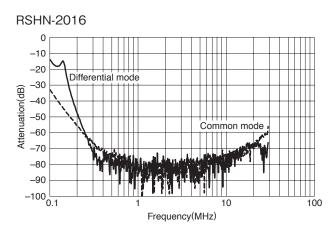


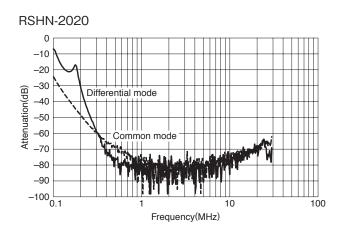
#### ■ ATTENUATION vs. FREQUENCY CHARACTERISTICS

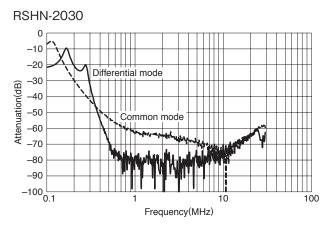


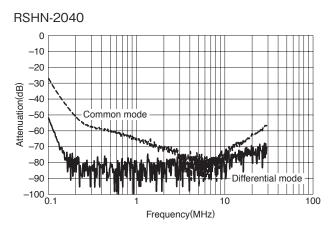


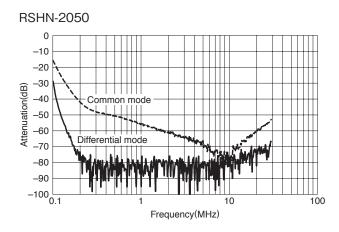




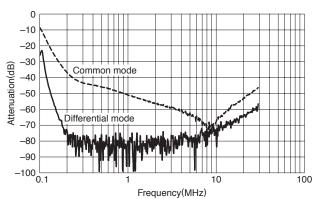




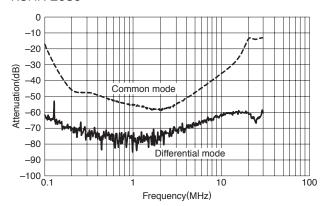




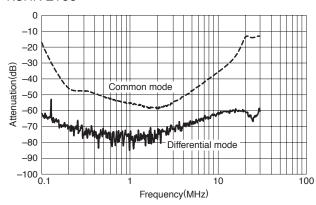
### RSHN-2060



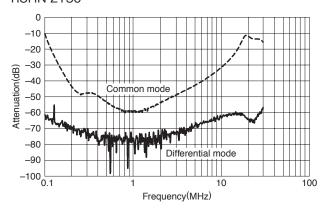
#### RSHN-2080



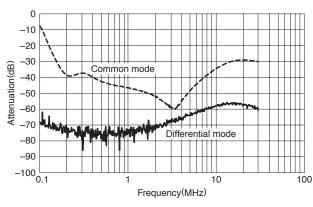
#### RSHN-2100



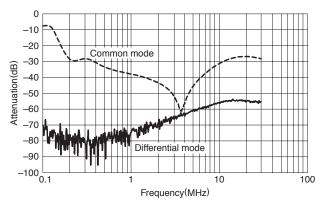
#### RSHN-2150



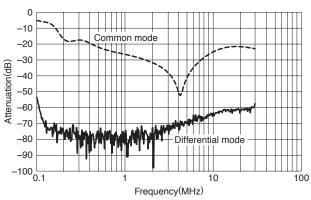
#### RSHN-2200



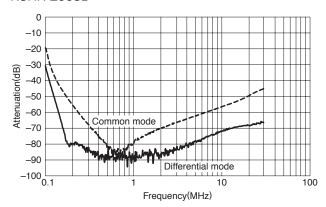
#### RSHN-2250



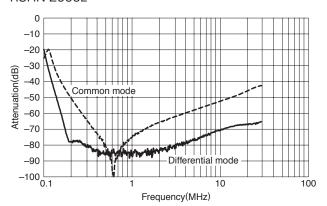
# RSHN-2300



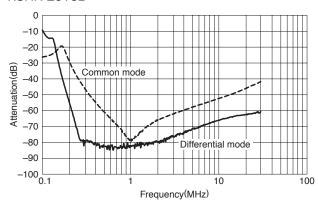
#### RSHN-2003L



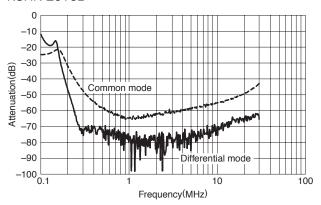
#### RSHN-2006L



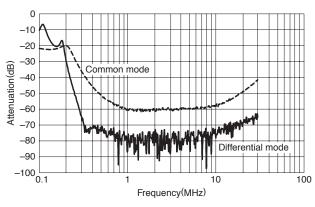
#### RSHN-2010L



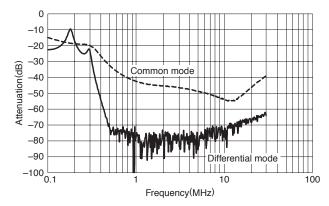
#### RSHN-2016L



#### RSHN-2020L



#### RSHN-2030L



# **Mouser Electronics**

**Authorized Distributor** 

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

# TDK-Lambda:

RSHN-2003D RSHN-2003L RSHN-2003LD RSHN-2006D RSHN-2006L RSHN-2006LD RSHN-2010 RSHN-2010D RSHN-2010D RSHN-2016L RSHN-2016LD RSHN-2020D RSHN-2020L RSHN-2020LD RSHN-2030D RSHN-2030D RSHN-2030LD RSHN-2050 RSHN-2060 RSHN-2080 RSHN-2150 RSHN-2200 RSHN-2250 RSHN-2003 RSHN-2040 RSHN-2030L RSHN-2030L RSHN-2100 RSHN-2016D RSHN-2020 RSHN-2020 RSHN-2006 RSHN-2300