

EMC Filters for AC Power Line

For Single-phase, Mid-size Box Cased ZRCS-00S Series

Conformity to RoHS Directive

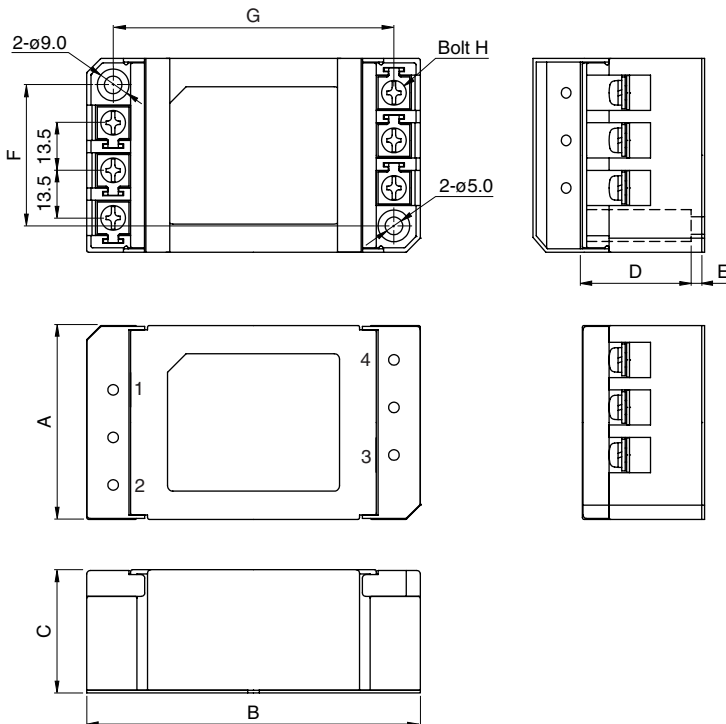
FEATURES

- This is an EMC filter for preventing operation errors in devices that use common mode choke coils with magnetic characteristics of amorphous magnetic substances.
- Has sharp attenuation characteristics for high-voltage pulses that can invade from power lines (attenuation efficiency is over 20dB for a pulse input of 2kV and 1 μ s).
- Excellent noise attenuation in the low range making it perfect EMC prevention equipment for inverters.
- Screw terminal has a spring which moves the washer up and has a safe design to prevent the screw from falling.
- It is a product conforming to RoHS directive.

APPLICATIONS

- Power line noise prevention
- Machine tools and NC control devices
- Medical equipment such as MRIs
- Other industrial equipment

SHAPES AND DIMENSIONS



SAFETY STANDARDS

Part No.	Standard and standard No.		
	U.S.A	Canada	Europe
	UL	CSA	NEMKO
	UL1283	CSA C22.2 No.8	EN60939
ZRCS2003-00S	E62388	LR76849C	P08209002
ZRCS2006-00S	E62388	LR76849C	P08209002
ZRCS2010-00S	E62388	LR76849C	P08209002
ZRCS2020-00S	E62388	LR76849C	P08209002
ZRCS2030-00S	E62388	LR76849C	P08209002



Part No.	Dimensions in mm							
	A	B	C	D	E	F	G	H
ZRCS2003-00S	55	80	35	29.8	3	40	65	M4
ZRCS2006-00S	55	100	40	34.8	3	40	85	M4
ZRCS2010-00S	55	100	40	34.8	3	40	85	M4
ZRCS2020-00S	55	135	40	34.8	3	40	120	M4
ZRCS2030-00S	55	135	40	34.8	3	40	120	M4

- Case:plastic, block terminal: phillips head screw terminals, base: metal

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

- All specifications are subject to change without notice.

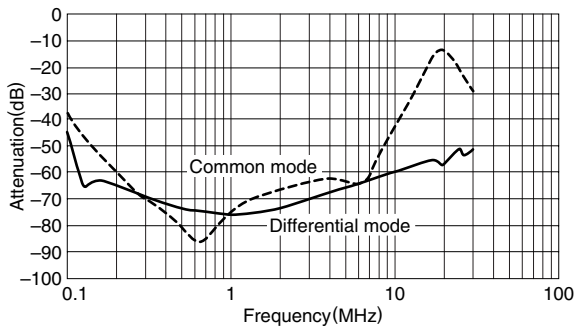
ELECTRICAL CHARACTERISTICS

Part No.	ZRCS2003-00S	ZRCS2006-00S	ZRCS2010-00S	ZRCS2020-00S	ZRCS2030-00S
Rated voltage Eac(V)	250	250	250	250	250
Rated current(A)	3	6	10	20	30
Test voltage Eac (V) [Between terminal and ground terminal]	2500	2500	2500	2500	2500
Insulation resistance (M Ω) [DC.500V,1min / between terminal and ground terminal]	100min.	100min.	100min.	100min.	100min.
Leakage current (mA)[250V • 60Hz]	1.0max.	1.0max.	1.0max.	1.0max.	1.0max.
DC resistance (m Ω)	380max.	135max.	70max.	24max.	12max.
Operating temperature range (°C) [Including self-temperature rise]	-25 to +85	-25 to +85	-25 to +85	-25 to +85	-25 to +85
With derating over(°C)	55	55	55	55	55
Temperature rise (°C)	30max.	30max.	30max.	30max.	30max.
Attenuation frequency range (MHz)[+5 to +35°C]	Differential mode at 40dB 0.2 to 30	Differential mode at 40dB 0.3 to 30	Differential mode at 40dB 0.3 to 30	Differential mode at 40dB 0.5 to 30	Differential mode at 40dB 0.5 to 30
	Common mode at 30dB 0.2 to 10	Common mode at 30dB 0.2 to 10	Common mode at 30dB 0.2 to 10	Common mode at 30dB 0.5 to 30	Common mode at 30dB 1.0 to 30
Pulse attenuation characteristics input pulse voltage (kV)	Differential mode at 20dB 0.7	Differential mode at 20dB 1.0	Differential mode at 20dB 1.0	Differential mode at 20dB 1.0 [10dB]	Differential mode at 20dB 1.0 [10dB]
	Common mode at 20dB 0.7	Common mode at 20dB 1.5	Common mode at 20dB 1.3	Common mode at 20dB 1.0 [10dB]	Common mode at 20dB 1.0 [10dB]
Weight (g)	200	325	345	440	450

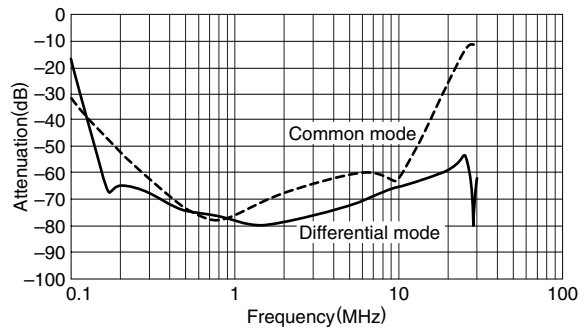
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

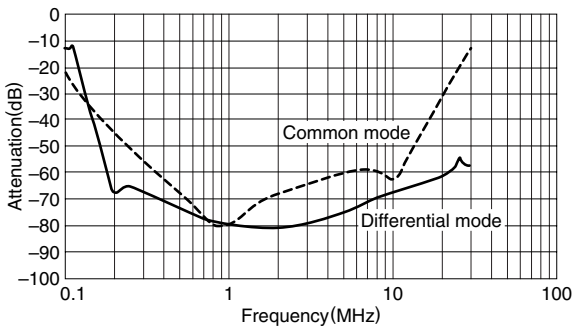
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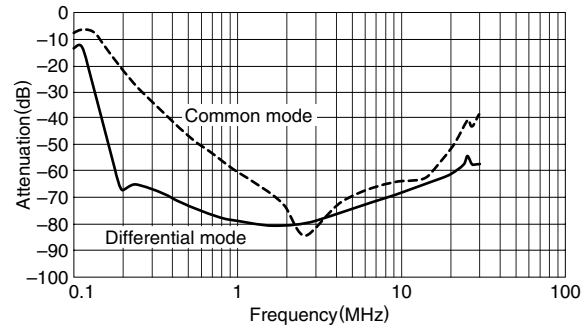
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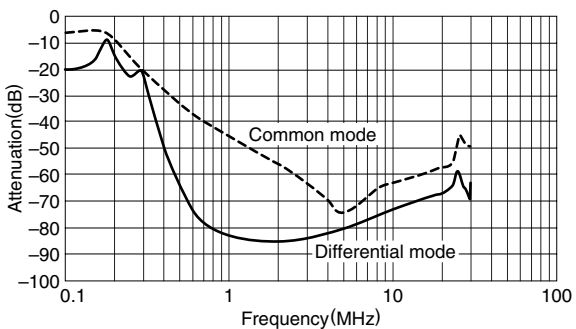
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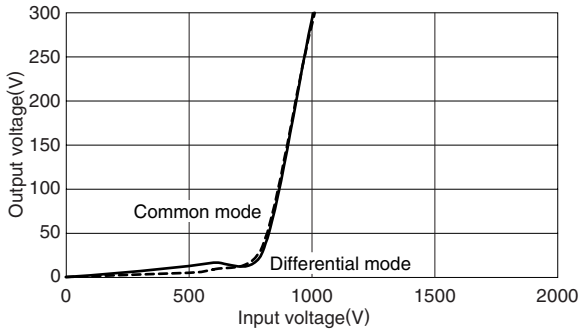
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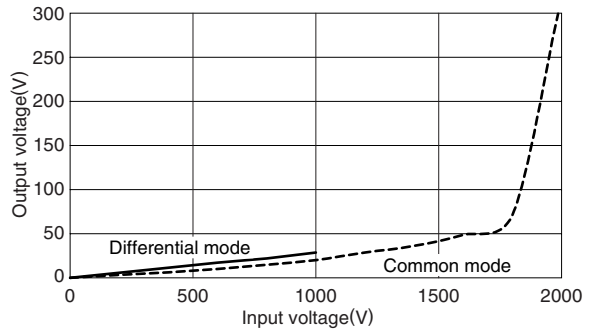
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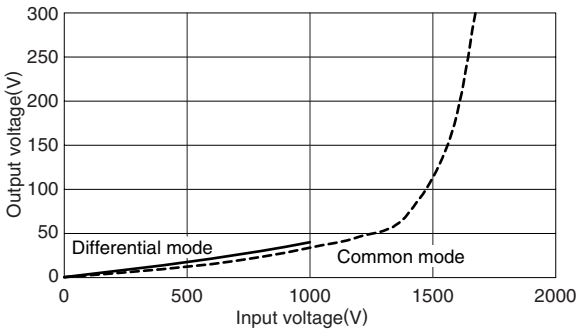
TYPICAL ELECTRICAL CHARACTERISTICS
PULSE ATTENUATION CHARACTERISTICS
ZRCS2003-00S



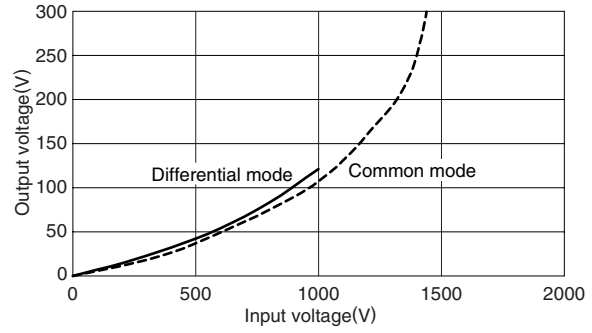
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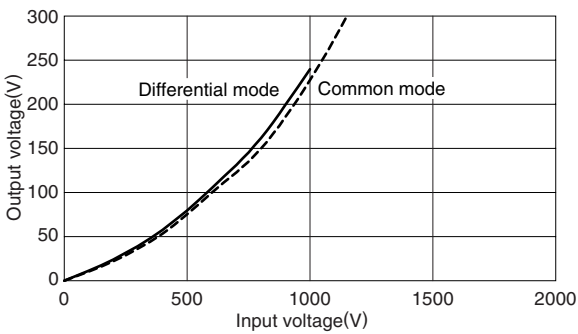
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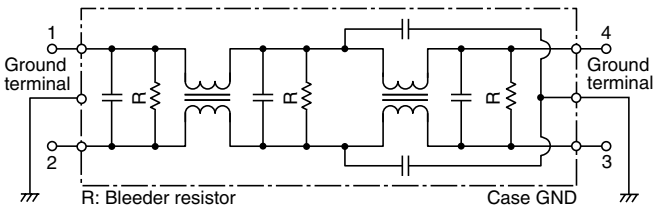
ZRCS2020-00S



ZRCS2030-00S



CIRCUIT DIAGRAM



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