

EMC Filters for AC Power Line

Inlet-socket Type ZUG-11S, ZUG-11AS Series

Conformity to RoHS Directive

FEATURES

- This inlet-socket type EMC filter prevent microcomputer operational errors by use of a common mode choke coil featuring an amorphous core with exceptional magnetic characteristics.
- Sharply attenuates high voltage pulses entering from the power supply line. For example, the ZUG2203-11S achieves over 20dB of attenuation for a 700V, 400ns input pulse.
- These IEC-type inlet sockets incorporate small, high-performance EMC filters with outstanding attenuation characteristics for both common-mode and differential mode noise components.
- Two types of connection terminals are offered: Faston® #250 (ZUG-11S series, t: 0.8mm) or lug terminal (ZUG-11AS series).
- It is a product conforming to RoHS directive.

APPLICATIONS

Personal computers, computer terminals, office automation equipment, digital applied devices (ECRs, electronic calculators, electronic scales, etc.), measurement devices, medical equipment, etc. Particularly appropriate for various types of electronic devices that require miniaturization.

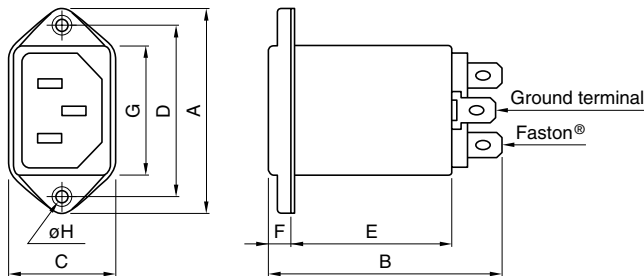
SAFETY STANDARDS

Part No.	Standard and standard No.		
	U.S.A.	Canada	Europe
	UL	CSA	NEMKO
ZUG2203-11S	UL1283	CSA C22.2 No.8	EN60939
ZUG2203-11AS	E62388	LR76849C	P08208996
ZUG2206-11S	E62388	LR76849C	P08208996
ZUG2206-11AS	E62388	LR76849C	P08208996

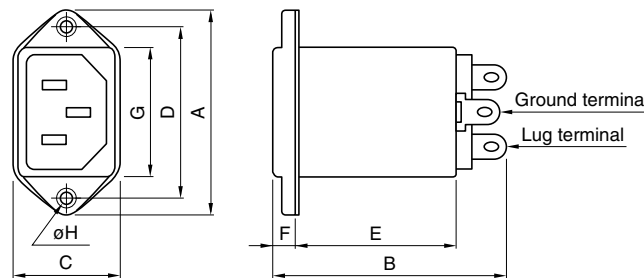


SHAPES AND DIMENSIONS

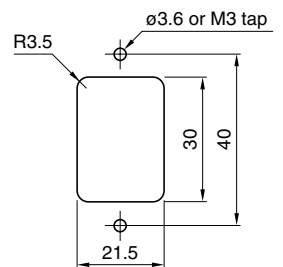
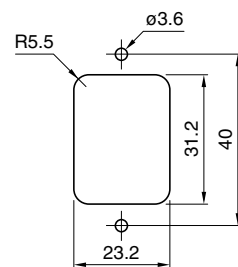
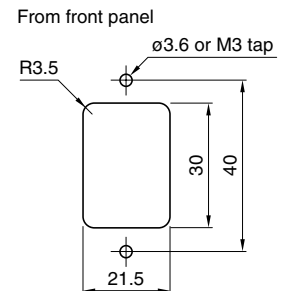
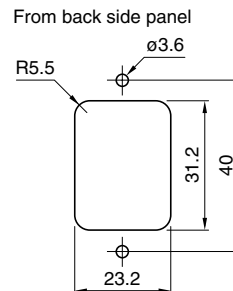
ZUG-11S



ZUG-11AS



Typical dimensions for installation



- Tighten the panel mounting M3 dia. bolt with the torque under $5.88 \times 10^{-1} \text{ N}\cdot\text{m}$.

Part No.	Dimensions in mm							
	A	B	C	D	E	F	G	øH
ZUG2203-11S, 2206-11S	48	55.3	25	40	38.1	5.2	30.5	3.3
ZUG2203-11AS, 2206-11AS	48	53.3	25	40	38.1	5.2	30.5	3.3

- Case: metal, input terminal: inlet-socket (EN60320), output terminal: Faston® #250(t:0.8mm/-11S series), lug terminal(-11AS series)

- Faston® is a registered trademark of Tyco Electronics AMP Corp. Incorporated.

- 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

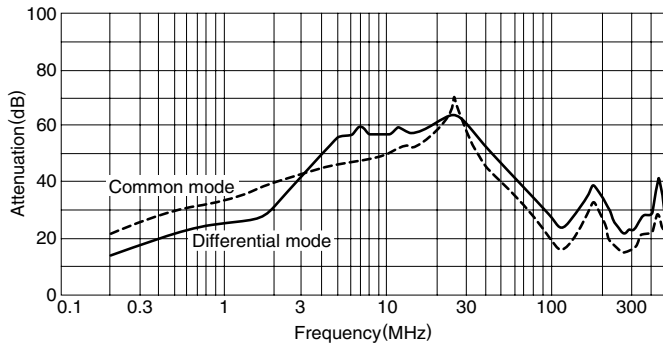
Part No.	ZUG2203-11S	ZUG2203-11AS	ZUG2206-11S	ZUG2206-11AS
Rated voltage Eac(V)	250	250	250	250
Rated current(A)	3	3	6	6
Test voltage Eac(V)[Between terminal and ground terminal]	1500	1500	1500	1500
Insulation resistance(MΩ)	100min.	100min.	100min.	100min.
[DC: 500V, 1min/between terminal and ground terminal]				
Leakage current(mA)[250V • 60Hz]	0.5max.	0.5max.	0.5max.	0.5max.
DC resistance(mΩ)	150max.	150max.	100max.	100max.
Operating temperature range(°C)[Including self-temperature rise]	-25 to +85	-25 to +85	-25 to +85	-25 to +85
With derating over(°C)	55	55	55	55
Temperature rise(°C)	30max.	30max.	30max.	30max.
Attenuation frequency range	Differential mode at 30dB	3 to 30	3 to 30	5 to 30
(MHz)[+5 to +35°C]	Common mode at 30dB	3 to 30	5 to 30	5 to 30
Pulse attenuation characteristics	Differential mode at 20dB	0.4	0.4	0.4[10dB]
Input pulse voltage(kV)*	Common mode at 20dB	0.7	0.7	0.4[10dB]
Weight(g)	46	46	46	46

* Input pulse width: 0.4μs

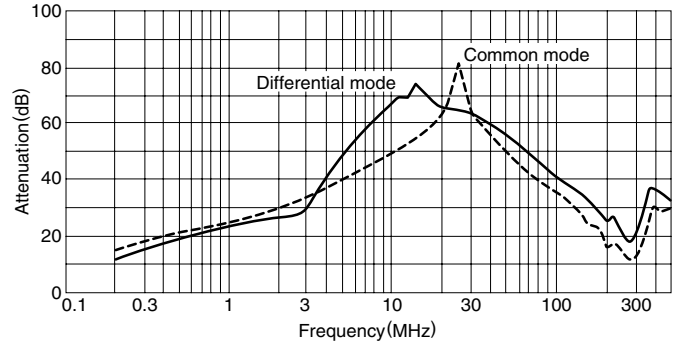
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

ZUG2203-11S/-11AS

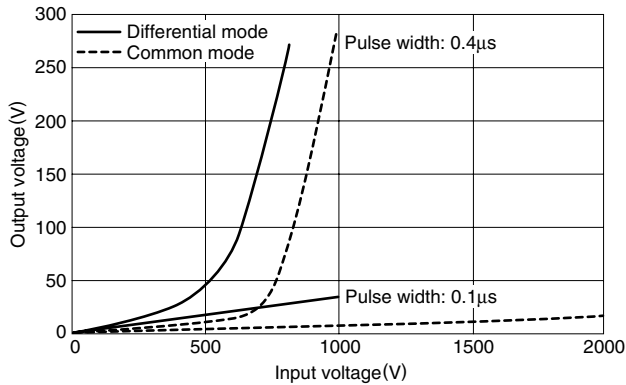


ZUG2206-11S/-11AS

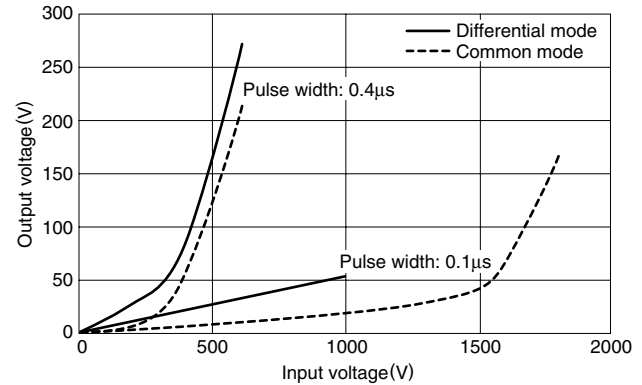


PULSE ATTENUATION CHARACTERISTICS

ZUG2203-11S/-11AS



ZUG2206-11S/-11AS



CIRCUIT DIAGRAM

