TDK

EMC Filters for AC Power Line
Inlet-socket Type ZUG-13AS 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 ZUG2203-13AS achieves over 20dB of attenuation for a 600V, 400ns input pulse.
- Lug type output terminals for soldering.
- Compact and low-cost due to use of an insulating plastic case.
- It is a product conforming to RoHS directive.

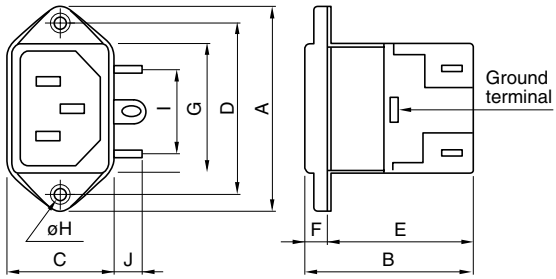
APPLICATIONS

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

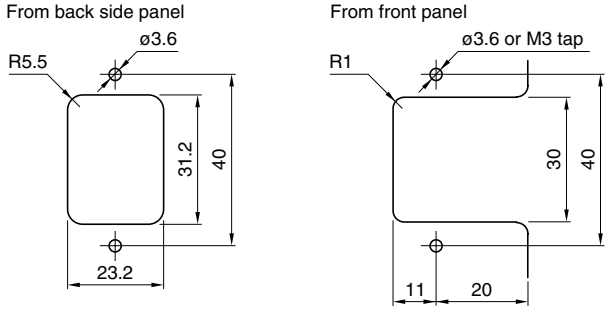
SAFETY STANDARDS

Part No.	Standard and standard No.		
	U.S.A.	Canada	Europe
	UL	CSA	NEMKO
	UL1283	CSA C22.2 No.8	EN60939
ZUG2203-13AS	E62388	LR76849C	P08208996
ZUG2206-13AS	E62388	LR76849C	P08208996

SHAPES AND DIMENSIONS



Typical dimensions for installation



• Tighten the panel mounting M3 dia. bolt with the torque under 5.88×10^{-1}N • m.

Dimensions in mm

Part No.	A	B	C	D	E	F	G	øH	I	J
ZUG2203-13AS, 2206-13AS	50	40.2	22.5	40	35	5.2	30.5	3.3	20	8

• Case:plastic, input terminal:inlet-socket(EN60320), output terminal: lug terminal

ELECTRICAL CHARACTERISTICS

Part No.		ZUG2203-13AS	ZUG2206-13AS
Rated voltage Eac (V)		250	250
Rated current (A)		3	6
Test voltage Eac (V)[Between terminal and ground terminal]		1500	1500
Insulation resistance (MΩ)[DC.500V,1min/between terminal and ground terminal]		100min.	100min.
Leakage current (mA) [250V • 60Hz]		0.5max.	0.5max.
DC resistance(mΩ)		150max.	100max.
Operating temperature range(°C)[Including self-temperature rise]		–25 to +85	–25 to +85
With derating over(°C)		55	55
Temperature rise(°C)		30max.	30max.
Attenuation frequency range (MHz)[+5 to +35°C]	Differential mode 30dB	4 to 30	5 to 30
	Common mode 30dB	3 to 30	5 to 30
Pulse attenuation characteristics Input pulse voltage (kV)*	Differential mode	0.6[10dB]	0.3[10dB]
	Common mode	0.6[20dB]	0.4[10dB]
Weight (g)		33	33

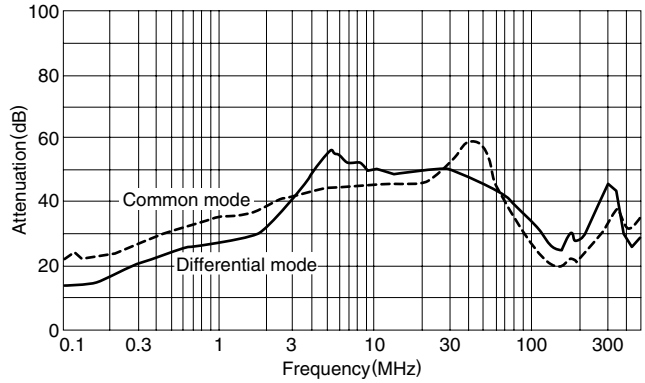
*Input pulse width:0.4μs

• 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.

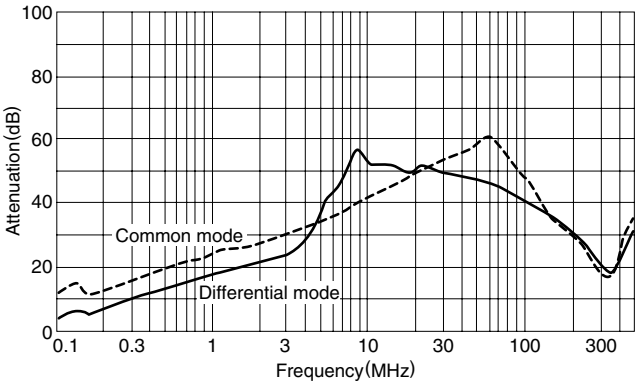
TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

ZUG2203-13AS

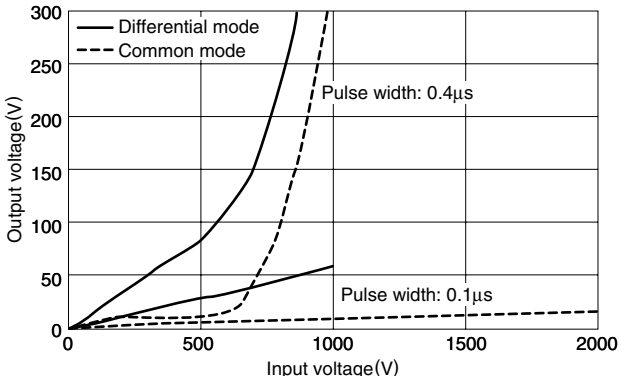


ZUG2206-13AS

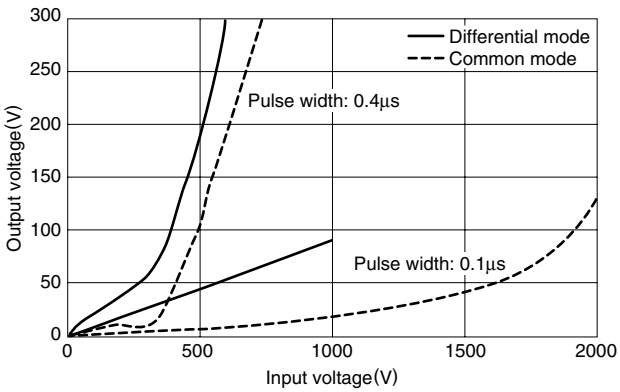


PULSE ATTENUATION CHARACTERISTICS

ZUG2203-13AS



ZUG2206-13AS



CIRCUIT DIAGRAM