

## **Common Mode Filters**

For high-speed differential signal line (USB2.0, LVDS, etc.)

### MCZ series

Type: MCZ1210AH [0504 inch]\*

MCZ2010AH [0804 inch]

\* Dimensions Code [EIA]

Issue date: September 2012

<sup>•</sup> All specifications are subject to change without notice.

<sup>•</sup> 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.

#### **公TDK**

## Common Mode Filters For High-speed Differential Signal Line (USB2.0, LVDS, etc.)

**Conformity to RoHS Directive** 

#### MCZ Series MCZ1210AH

#### **FEATURES**

- Compact sized multilayer common mode filter.
- By providing wide bandwidth for differential mode, this product has almost no effect for high-speed differential signals and can suppress the radiated emission.

#### **APPLICATIONS**

- High speed interface(LVDS and USB2.0) in electronics devices.
- Digital cellular phones, PCs, DSCs, portable game machines, etc.

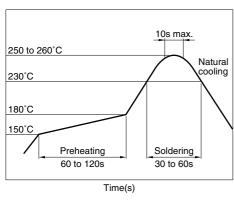
#### PRODUCT IDENTIFICATION

MCZ	1210	АН	360	L2	Т
(1)	(2)	(3)	(4)	(5)	(6)

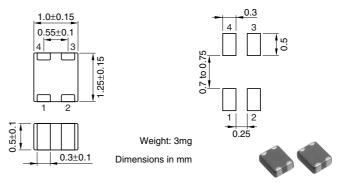
- (1) Series name
- (2) Dimensions L×W
- (3) Product identification number
- (4) Impedance[at 100MHz] 360:  $36\Omega$
- (5) Number of line
- L2: 2-line
  (6) Packaging style

T: Taping

# RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



## SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERNS



#### **CIRCUIT DIAGRAMS**



· No polarity

#### **TEMPERATURE RANGE**

Operating	-40 to +85°C	
Storage(After mount)	-40 to +85°C	

#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	4000 pieces/reel

#### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- · Do not expose the inductors to stray magnetic fields.
- · Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.
- This product does not apply to flow soldering construction method.

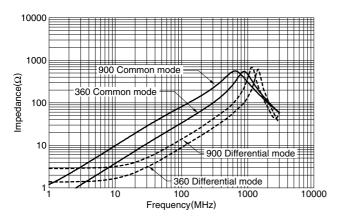
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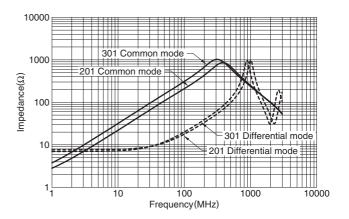


#### **ELECTRICAL CHARACTERISTICS**

Part No.	Common mode impedance $(\Omega)$ [100MHz]	DC resistance $(\Omega)$ max.[1 line]	Rated current ldc(mA)max.	Rated voltage Edc(V)max.	Insulation resistance $(M\Omega)$ min.
MCZ1210AH360L2T	36±25%	1.00	200	5	10
MCZ1210AH900L2T	90±25%	1.75	100	5	10
MCZ1210AH201L2T	200±25%	4.00	100	5	10
MCZ1210AH301L2T	300±25%	4.50	100	5	10

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS





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# Common Mode Filters For High-speed Differential Signal Line (USB2.0, LVDS, etc.)

Conformity to RoHS Directive

#### MCZ Series MCZ2010AH

#### **FEATURES**

- Compact sized multilayer common mode filter.
- By providing wide bandwidth for differential mode, this product has almost no effect for high-speed differential signals and can suppress the radiated emission.

#### **APPLICATIONS**

- High speed interface(LVDS and USB2.0) in electronics devices.
- PDP/LCD/DLP/PJ TVs, DVD players, notebook PCs, DVCs, DSCs, amusement machines, portable audio, digital cellular phones, etc.

#### PRODUCT IDENTIFICATION

MCZ	2010	ΑH	900	L4	Т
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
- (2) Dimensions L×W
- (3) Product identification number
- (4) Impedance[at 100MHz] 900:  $90\Omega$

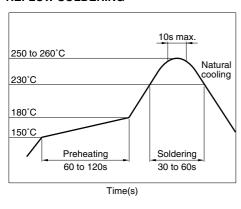
(5) Number of line

L4: 4line

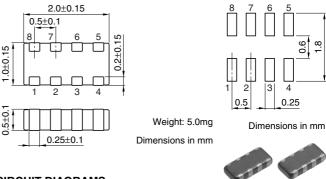
(6) Packaging style

T: Taping

## RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



## SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERNS



#### **CIRCUIT DIAGRAMS**



· No polarity

#### **TEMPERATURE RANGE**

Operating	–40 to +85°C
Storage(After mount)	–40 to +85°C

#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	5000 pieces/reel

#### HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
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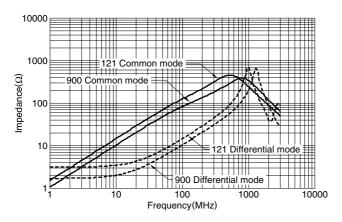
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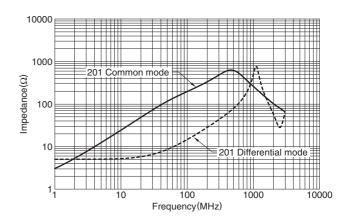


#### **ELECTRICAL CHARACTERISTICS**

Part No.	Common mode impedance (Ω) [100MHz]	DC resistance $(\Omega)$ max.[1 line]	Rated current Idc(mA)max.	Rated voltage Edc(V)max.	Insulation resistance $(M\Omega)$ min.
MCZ2010AH900L4T	90±25%	1.50	100	5	10
MCZ2010AH121L4T	120±25%	2.00	100	5	10
MCZ2010AH201L4T	200±25%	3.50	100	5	10

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS





#### **ПОСТАВКА** ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

многоканальный

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

## Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

#### http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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