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 2011

- All specifications are subject to change without notice.
- 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.

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.

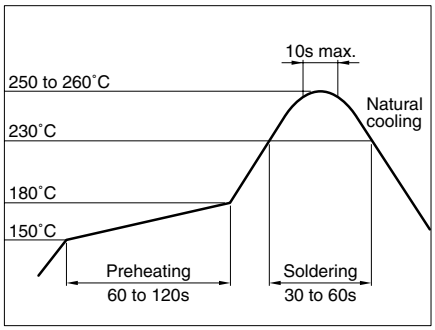
APPLICATIONS
- High speed interface(LVDS and USB2.0) in electronics devices.
- Digital cellular phones, PCs, DSCs, portable game machines, etc.

PRODUCT IDENTIFICATION

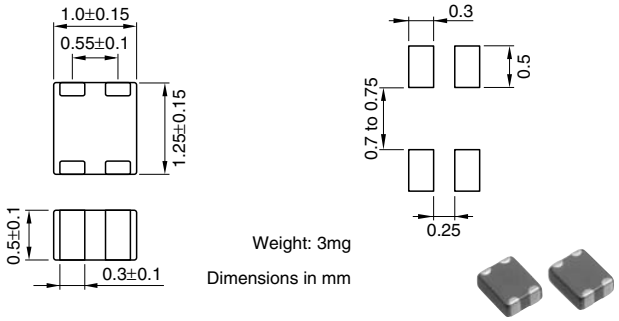
MCZ	1210	AH	360	L2	T
(1)	(2)	(3)	(4)	(5)	(6)

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

RECOMMENDED SOLDERING CONDITION
REFLOW SOLDERING



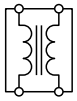
SHAPES AND DIMENSIONS/
RECOMMENDED PC BOARD PATTERNS



Weight: 3mg

Dimensions in mm

CIRCUIT DIAGRAMS



・No polarity

TEMPERATURE RANGE

Operating	–25 to +85°C
Storage(After mount)	–25 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.

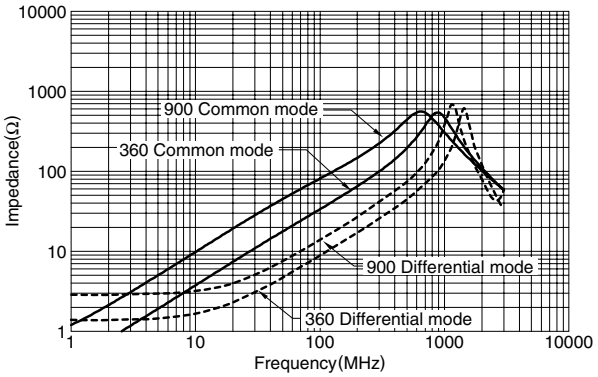
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

ELECTRICAL CHARACTERISTICS

Part No.	Common mode impedance (Ω) [100MHz]	DC resistance (Ω)max.[1 line]	Rated current Idc(mA)max.	Rated voltage Edc(V)max.	Insulation resistance (MΩ)min.
MCZ1210AH360L2T	36±25%	1.00	200	5	10
MCZ1210AH900L2T	90±25%	1.75	100	5	10

TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS



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.

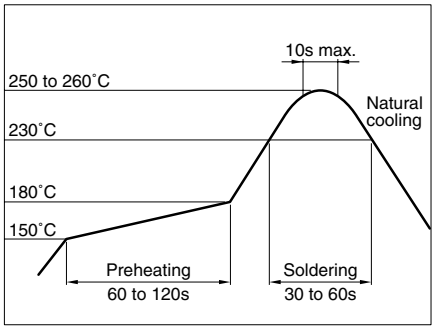
APPLICATIONS
- High speed interface(LVDS and USB2.0) in electronics devices.
- PDP/LCD/DLP/PJ TVs, DVD players, notebook PCs, DVCs, DSCs, amusement machines, portable audio, digital cellular phones, etc.

PRODUCT IDENTIFICATION

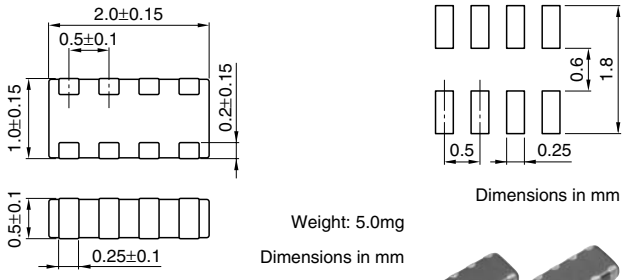
MCZ	2010	AH	900	L4	T
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name
(2) Dimensions L×W
(3) Product identification number
(4) Impedance[at 100MHz]
900: 90Ω
(5) Number of line
L4: 4line
(6) Packaging style
T: Taping

RECOMMENDED SOLDERING CONDITION
REFLOW SOLDERING



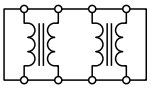
SHAPES AND DIMENSIONS/ RECOMMENDED PC BOARD PATTERNS



Weight: 5.0mg
Dimensions in mm

Dimensions in mm

CIRCUIT DIAGRAMS



・No polarity

TEMPERATURE RANGE

Operating	–25 to +85°C
Storage(After mount)	–25 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.
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ELECTRICAL CHARACTERISTICS

Part No.	Common mode impedance (Ω) [100MHz]	DC resistance (Ω)max.[1 line]	Rated current Idc(A)max.	Rated voltage Edc(V)max.	Insulation resistance (MΩ)min.
MCZ2010AH900L4T	90±25%	1.5	0.1	5	10
MCZ2010AH121L4T	120±25%	2.0	0.1	5	10

TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS