&TDK

Chip Beads(SMD Array) For General Signal Line

Conformity to RoHS Directive

MZA Series MZA1210 Type

FEATURES

- A single MZA series chip provides noise attenuation for two lines, making it ideal for use with I/O lines of various highly miniaturized.
- Electronic equipment, such as portable products, which comprise high density circuitry.
- · Low crosstalk between adjacent circuits.
- Internal electrodes feature low DC resistance, minimizing wasteful power consumption.
- Electroplated terminal electrodes accommodate reflow soldering.
- · Monolithic structure ensures high reliability.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

APPLICATIONS

High-frequency noise countermeasure in computers, printers, VCRs, televisions, portable telephones, and other equipment.

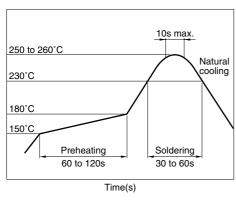
PRODUCT IDENTIFICATION

 $\frac{\text{MZA}}{(1)} \frac{1210}{(2)} \frac{\text{D}}{(3)} \frac{121}{(4)} \frac{\text{C}}{(5)} \frac{\text{T}}{(6)}$

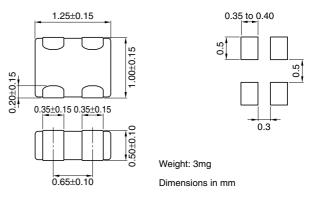
- (1) Series name
- (2) Dimensions L×W
- (3) Material code
- (4) Nominal impedance121:120Ω at 100MHz
- (5) Characteristic type
- (6) Packaging style

T:Taping

RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM





TEMPERATURE RANGES

| Operating/storage | −55 to +125°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.
- The inductance value may change due to magnetic saturation if the current exceeds the rated maximum.
- 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.
- Please contact our Sales office when your application are considered the following:
 The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)



ELECTRICAL CHARACTERISTICS

| Part No. | Impedance(Ω) ±25%[100MHz]* | DC resistance (Ω) max. | Rated current (mA)max. | Rated voltage (V)max. |
|--------------|-------------------------------|-------------------------------|------------------------|-----------------------|
| MZA1210D330C | 33 | 0.3 | 50 | 5 |
| MZA1210D680C | 68 | 0.5 | 50 | 5 |
| MZA1210D121C | 120 | 0.8 | 50 | 5 |
| MZA1210D241C | 240 | 1.2 | 50 | 5 |

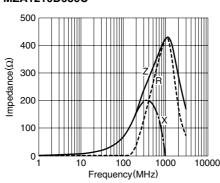
* Test equipment: E4991A or equivalent Test tool: 16192A or equivalent Test temperature: 25±10°C

TYPICAL ELECTRICAL CHARACTERISTICS Z, X, R vs. FREQUENCY CHARACTERISTICS

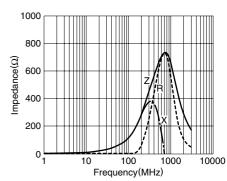
MZA1210D330C

500 400 300 100 100 1000 1000 1000 Frequency(MHz)

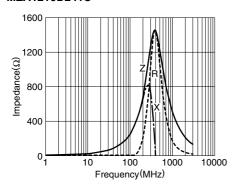
MZA1210D680C



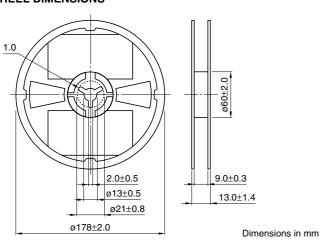
MZA1210D121C



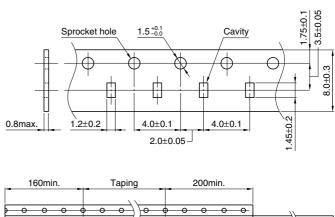
MZA1210D241C



PACKAGING STYLES REEL DIMENSIONS



TAPE DIMENSIONS



Drawing direction 300min.

Dimensions in mm

[•] All specifications are subject to change without notice.