

# Chip Beads(SMD) For Power Line

Conformity to RoHS Directive

## MPZ Series MPZ1005 Type

### FEATURES

- TDK has manufactured MPZ1005 type as EMI countermeasure product for power line.
- This type is the best for energy-saving in the low DC resistance.
- No cross talk with closed magnetic circuit structural design.
- It is a product conforming to RoHS directive.

### APPLICATIONS

Removal of power line noises of cellular phones, PCs, note PCs, TVs, TV tuners, STBs, audio players, DVDs, DSCs, DVCs, game machines, digital photo frames, car navigation system, PNDs, etc.

### PRODUCT IDENTIFICATION

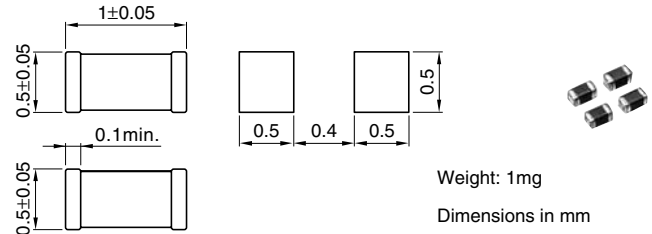
MPZ	1005	S	121	C	T
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
- (2) Dimensions L×W
- (3) Material code
- (4) Nominal impedance [at 100MHz]
- (5) Characteristic type
- (6) Packaging style  
T:Taping(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.

### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



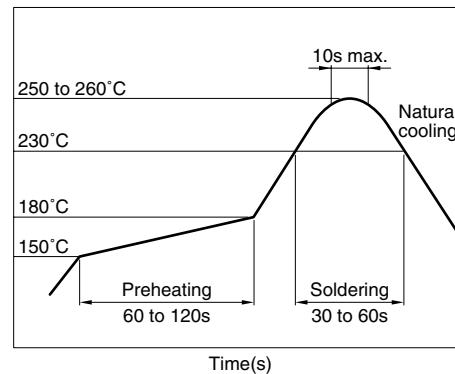
### TEMPERATURE RANGES

Operating/storage	-40 to +85°C
-------------------	--------------

### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 pieces/reel

### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



### ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)[100MHz]*	DC resistance (Ω)max.	Rated current (A)max.
MPZ1005S100C	10±5Ω	0.045	2.0
MPZ1005S300C	30±10Ω	0.050	1.7
MPZ1005S600C	60±25%	0.075	1.5
MPZ1005S121C	120±25%	0.090	1.2
MPZ1005Y900C	90±25%	0.100	1.2

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

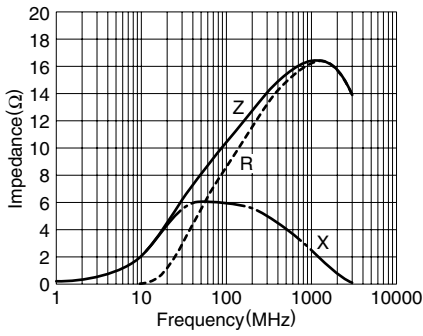
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• 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.)

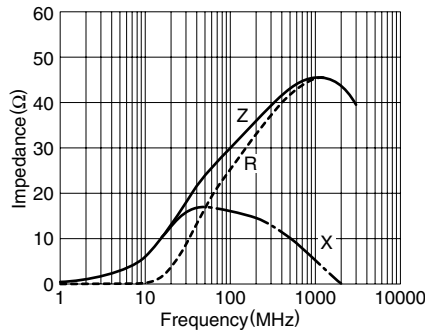
• All specifications are subject to change without notice.

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

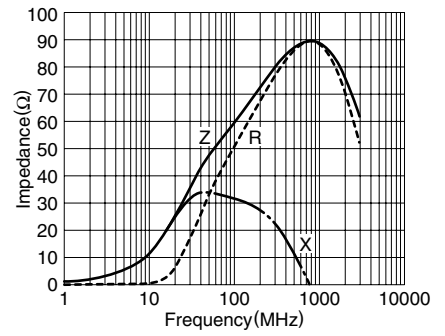
MPZ1005S100C



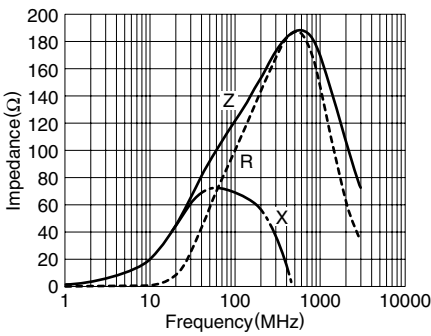
MPZ1005S300C



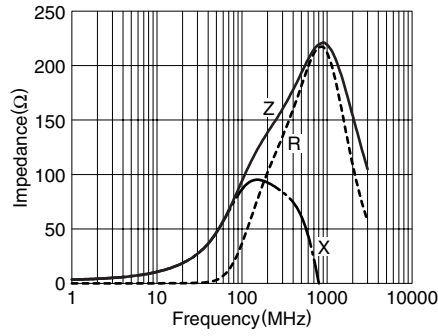
MPZ1005S600C



MPZ1005S121C

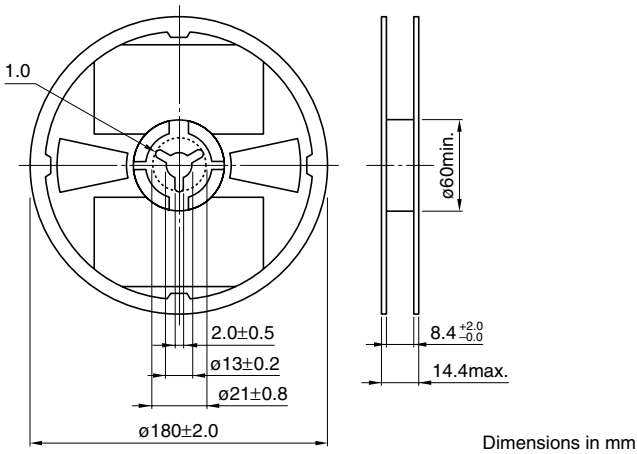


MPZ1005Y900C



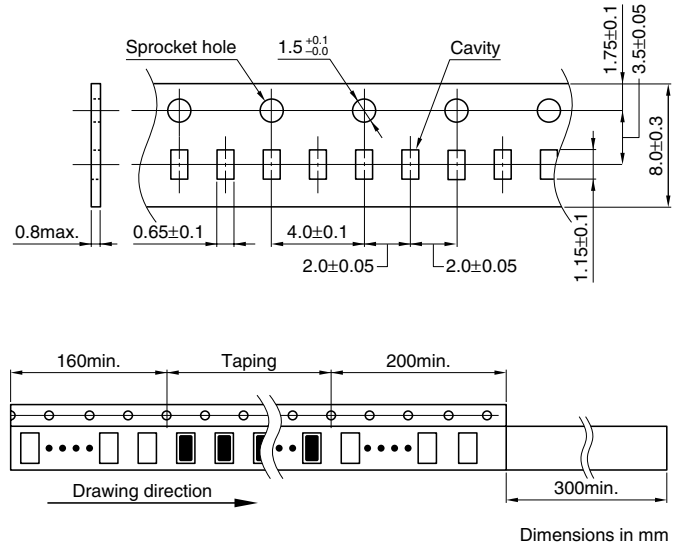
### PACKAGING STYLES

#### REEL DIMENSIONS



Dimensions in mm

#### TAPE DIMENSIONS



Dimensions in mm

• All specifications are subject to change without notice.