

# 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	С	Т
(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



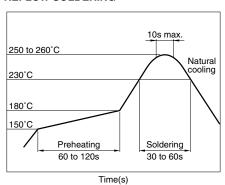
#### **TEMPERATURE RANGES**

Operating/storage —40 to 400 O	Operating/storage	−40 to +85°C
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### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity			
Taping	10000 pieces/reel			

## RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



### **ELECTRICAL CHARACTERISTICS**

Part No.	Impedance	DC resistance	Rated current
arrivo.	$(\Omega)[100MHz]^*$	$(\Omega)$ max.	(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.)

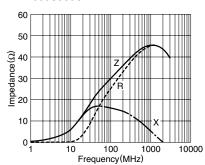
<sup>•</sup> All specifications are subject to change without notice.



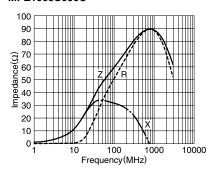
### TYPICAL ELECTRICAL CHARACTERISTICS Z, X, R vs. FREQUENCY CHARACTERISTICS

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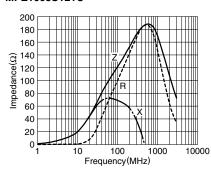
### MPZ1005S300C



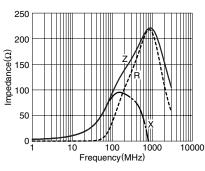
### MPZ1005S600C



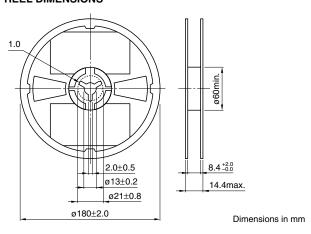
### MPZ1005S121C



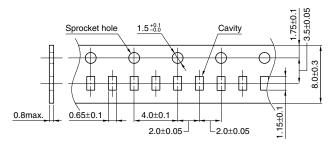
### MPZ1005Y900C

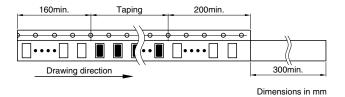


# PACKAGING STYLES REEL DIMENSIONS



### **TAPE DIMENSIONS**





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