

# 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

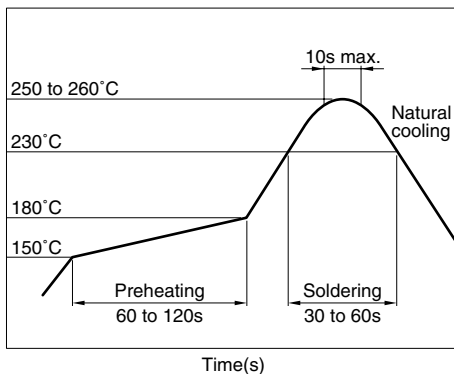
USB, cellular phones, HDDs, CD-ROMs, DVDs, DSCs, LCD panels, etc.

### 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)

### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING

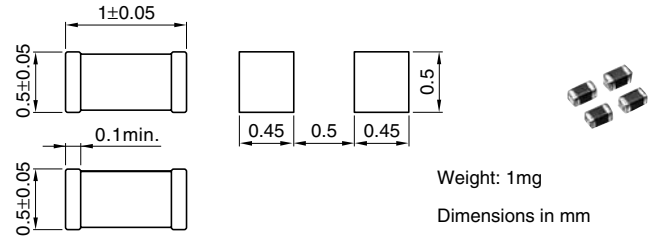


### ELECTRICAL CHARACTERISTICS

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

\* Test equipment: E4991A or equivalent  
 Test tool: 16192A or equivalent

### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 1mg

Dimensions in mm

### TEMPERATURE RANGES

Operating/storage	-40 to +85°C
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### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 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.

• 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.

