&TDK

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

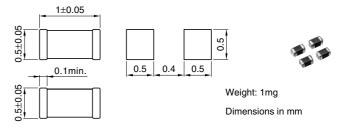
MPZ	1005	S	121	С	Τ
(1)	(2)	(3)	(4)	(5)	(6)

- (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



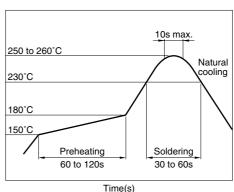
TEMPERATURE RANGES

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	DC resistance	Rated current
i ait ivo.	$(\Omega)[100MHz]^*$	(Ω) 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

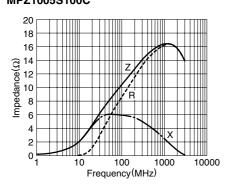
* Test equipment: E4991A or equivalent Test tool: 16192A or equivalent Test temperature: 25±10°C

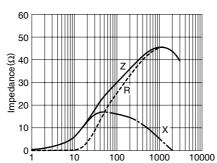
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- Please contact our Sales office when your application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



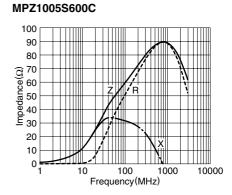
TYPICAL ELECTRICAL CHARACTERISTICS Z, X, R vs. FREQUENCY CHARACTERISTICS MPZ1005S300C

MPZ1005S100C

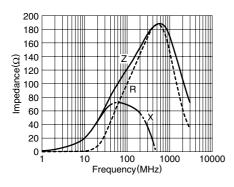




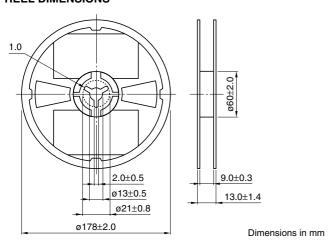
Frequency(MHz)



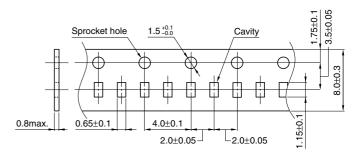
MPZ1005S121C

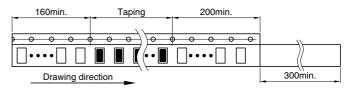


PACKAGING STYLES REEL DIMENSIONS



TAPE DIMENSIONS





Dimensions in mm

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