EMC Components

Ferrite Beads
SMD

MPZ Series MPZ1608 Type

Size: JIS/IEC 1608, EIA 0603

TDK has manufactured MPZ2012 type as EMI countermeasure product for power line, and now maximizes impedance to 600Ω (at 100MHz) and rated current to 1A, while minimizes Rdc under 150mΩ as 1608 type.

FEATURES

- This type is the best for energy-saving in the low DC resistance.
- The products contain no lead and also support lead-free soldering.
- It is a product conforming to RoHS directive.

APPLICATIONS

Noise suppression of personal computers, USB/IEEE1394 interfaces, HDDs, CD-ROMs, DVDs, DSCs, LCD panels, cellular phones, etc.

PRODUCT IDENTIFICATION

MPZ	1608	S	221	A	T
(1)	(2)	(3)	(4)	(5)	(6)

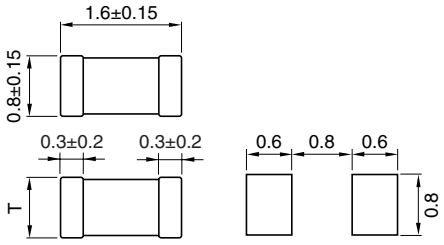
(1) Series name
(2) Dimensions L×W
(3) Material code
(4) Nominal impedance
221: 220Ω at 100MHz
(5) Characteristic type
(6) Packaging style
T: Taping

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)[100MHz]	DC resistance (Ω)max.	Rated current* (A)max.	Thickness (T)mm
MPZ1608S300A	30±10Ω	0.01	5	0.6
MPZ1608S600A	60±25%	0.02	3.5	0.6
MPZ1608S101A	100±25%	0.03	3	0.6
MPZ1608S221A	220±25%	0.05	2	0.8
MPZ1608R391A	390±25%	0.12	1.2	0.8
MPZ1608S601A	600±25%	0.15	1	0.8
MPZ1608Y600B	60±25%	0.03	2.3	0.8
MPZ1608Y101B	100±25%	0.05	2.0	0.8
MPZ1608Y151B	150±25%	0.07	1.8	0.8
MPZ1608D300B	30±10Ω	0.07	1.8	0.8
MPZ1608D600B	60±25%	0.12	1.2	0.8
MPZ1608D101B	100±25%	0.15	1.0	0.8

* Please refer to the graph of RATED CURRENT vs. TEMPERATURE CHARACTERISTICS(DERATING) about the rating current at 85°C or more in temperature of the product.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN





Dimensions in mm

Thickness(T)	Weight
0.6±0.15mm	3mg
0.8±0.15mm	4mg

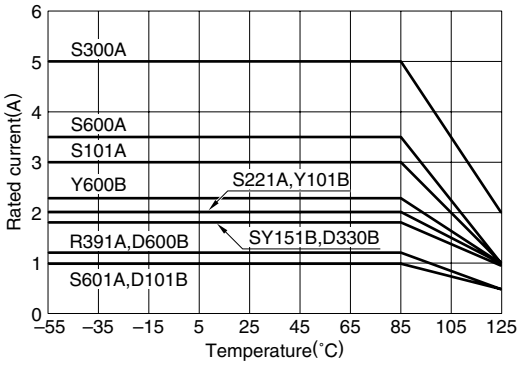
TEMPERATURE RANGES

Operating/storage	–55 to +125°C

PACKAGING STYLE AND QUANTITIES

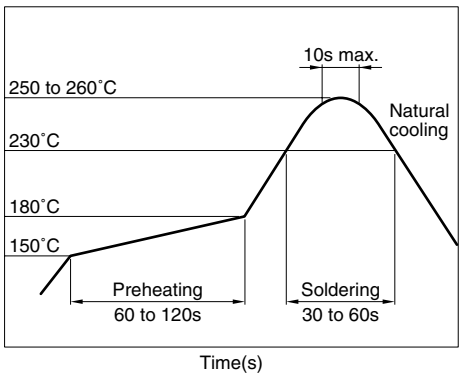
Packaging style	Quantity
Taping	4000 pieces/reel

RATED CURRENT vs. TEMEPERATURE CHARACTERISTICS (DERATING)



RECOMMENDED SOLDERING CONDITION

REFLOW SOLDERING



- 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.)

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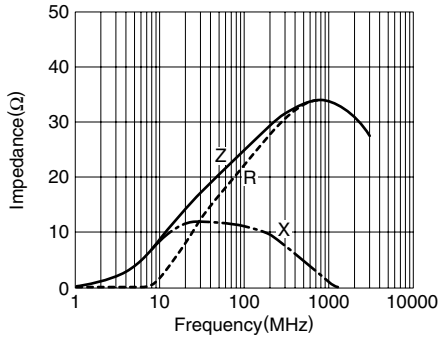
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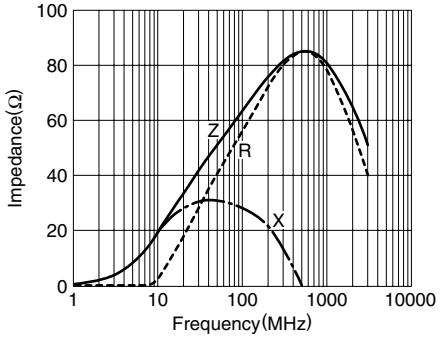
TYPICAL ELECTRICAL CHARACTERISTICS

Z, X, R vs. FREQUENCY CHARACTERISTICS

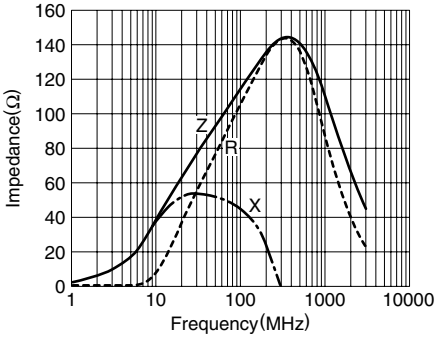
MPZ1608S300A



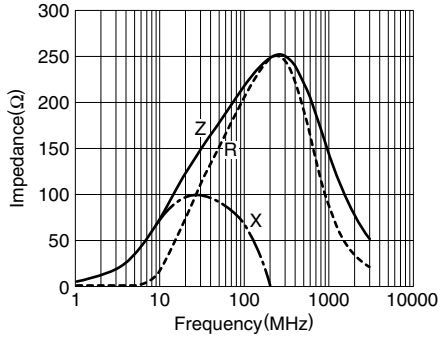
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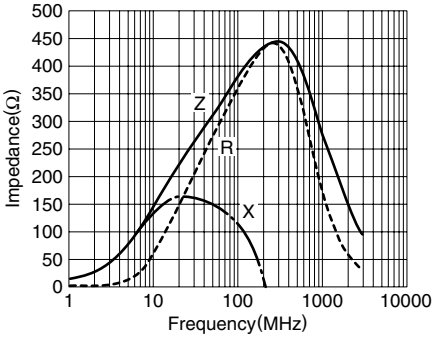
MPZ1608S101A



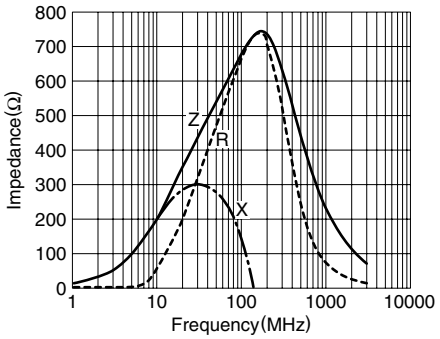
MPZ1608S221A



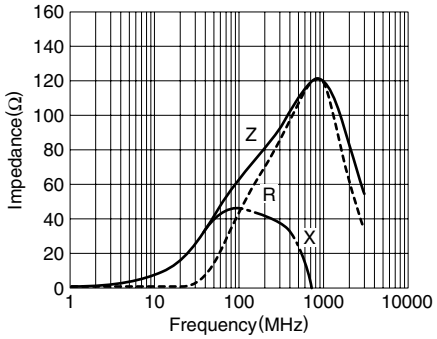
MPZ1608R391A



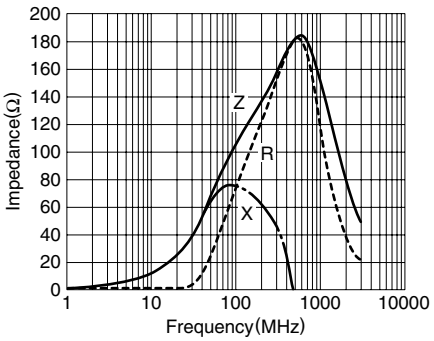
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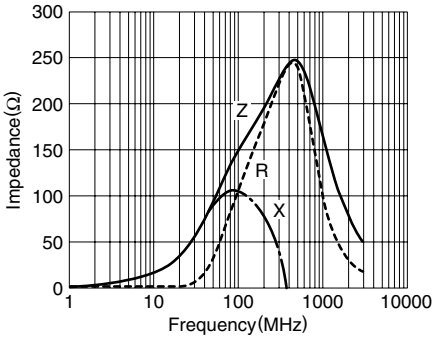
MPZ1608Y600B



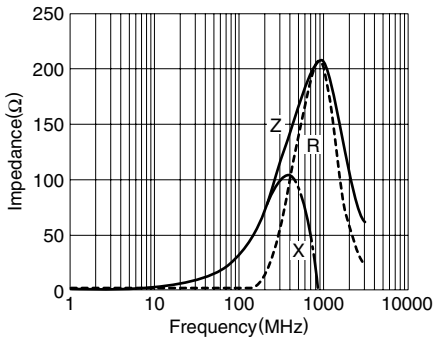
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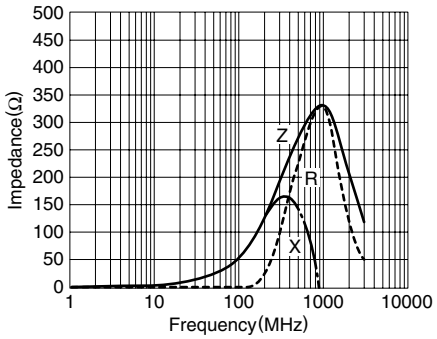
MPZ1608Y151B



MPZ1608D300B



MPZ1608D600B



MPZ1608D101B

