

# 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.
- Accomplished low profile 0.6mm for under 100Ω products.
- Five products are lined up.
- The products contain no lead and also support lead-free soldering.

### 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)

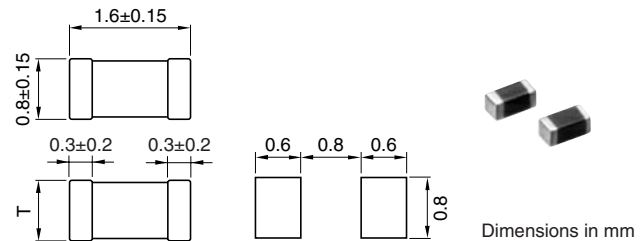
- (1) Series name
- (2) Dimensions L×W
- (3) Material code
- (4) Nominal impedance  
221: 220Ω at 100MHz
- (5) Characteristic type
- (6) Packaging style  
T: Taping

### ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)[100MHz]		DC resistance (Ω)max.	Rated current* (A)max.
	min.	typ.		
MPZ1608S300A	20	30	0.01	5
MPZ1608S600A	45	60	0.02	3.5
MPZ1608S101A	75	100	0.03	3
MPZ1608S221A	165	220	0.05	2
MPZ1608R391A	300	390	0.12	1.2
MPZ1608S601A	450	600	0.15	1
MPZ1608Y600B	45	60	0.03	2.3
MPZ1608Y101B	75	100	0.05	2.0
MPZ1608Y151B	110	150	0.07	1.8
MPZ1608D300B	20	30	0.07	1.8
MPZ1608D600B	45	60	0.12	1.2
MPZ1608D101B	75	100	0.15	1.0

\* 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



### THICKNESS AND WEIGHT

Impedance (Ω)	Thickness(T)	Weight
30, 60, 100	0.6±0.15mm	3mg
220, 600	0.8±0.15mm	4mg

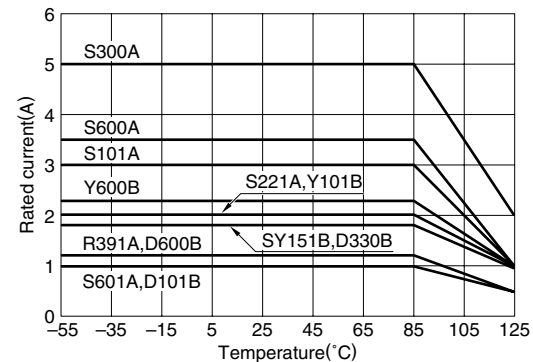
### TEMPERATURE RANGE

Operating/storage	-55 to +125°C
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### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

### RATED CURRENT vs. TEMPERATURE CHARACTERISTICS (DERATING)



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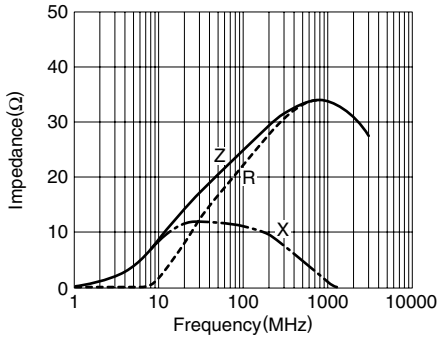
SMD

# MPZ Series MPZ1608 Type

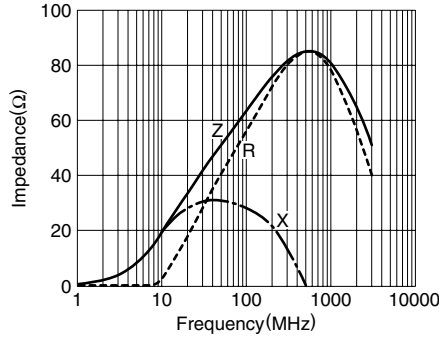
Size: JIS/IEC 1608, EIA 0603

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

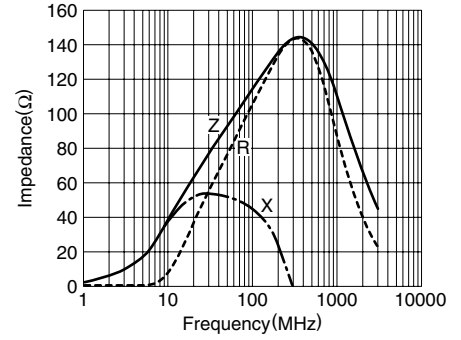
**MPZ1608S300A**



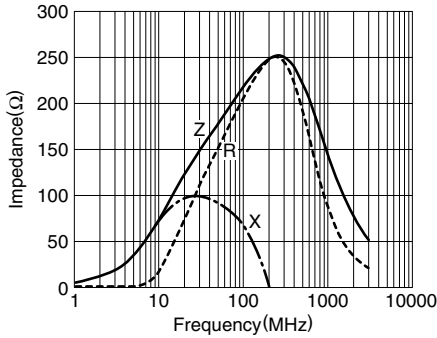
**MPZ1608S600A**



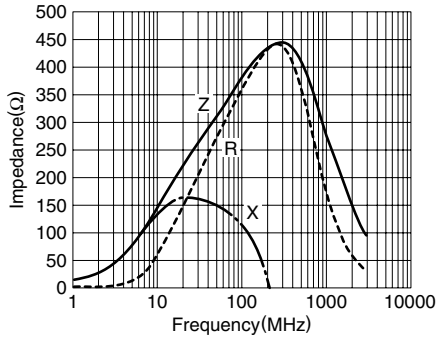
**MPZ1608S101A**



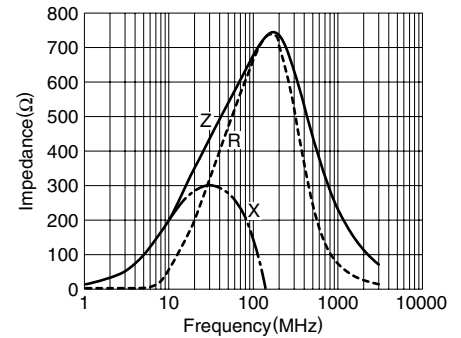
**MPZ1608S221A**



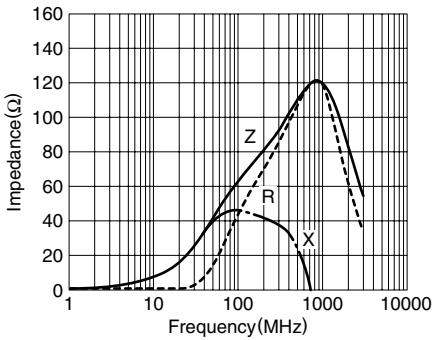
**MPZ1608R391A**



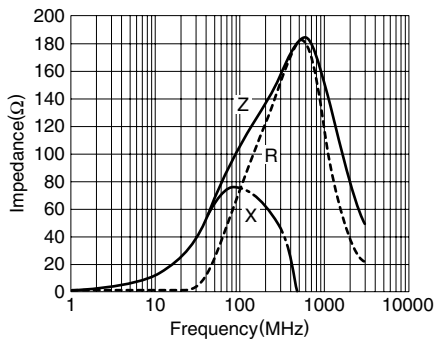
**MPZ1608S601A**



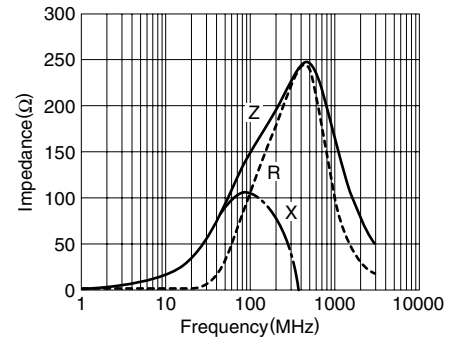
**MPZ1608Y600B**



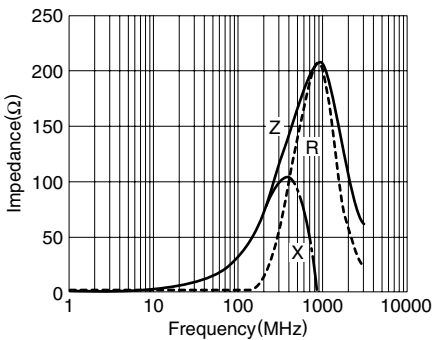
**MPZ1608Y101B**



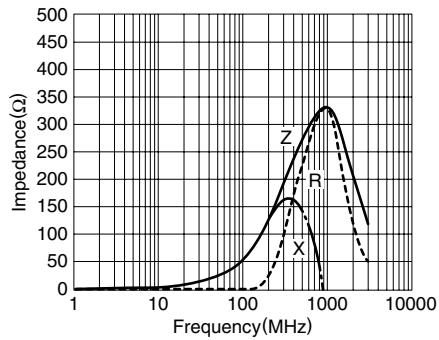
**MPZ1608Y151B**



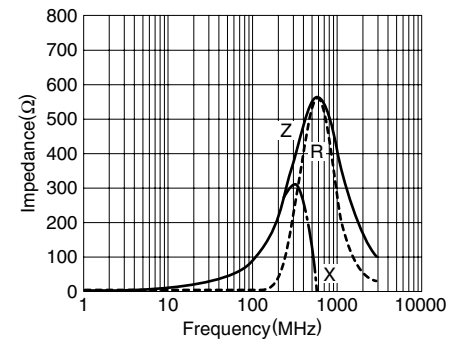
**MPZ1608D300B**



**MPZ1608D600B**



**MPZ1608D101B**



• All specifications are subject to change without notice.