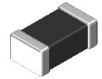


## Multilayer Chip Ferrite Beads---FBG Series



### Feature

- Wide range of frequency to suppress EMI.
- Wide range of impedance values for various applications.
- Internal silver printed layers and magnetic shielded structure.
- RoHS compliant.
- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise).

### Application

- High frequency EMI prevention of computers, printers, VCRs TVs and portable telephone.

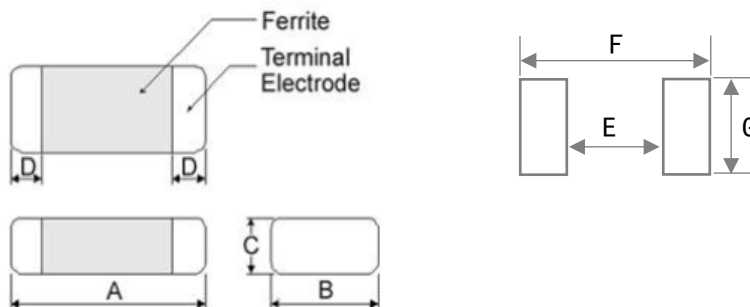
### Production identification

FBG
1005
-
121
Y

①
②
③
④

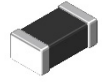
- ① Series name: General Ferrite Bead
- ② Size:  $1.0 \times 0.5 \times 0.5\text{mm}$
- ③ Impedance:  $120\Omega$
- ④ Tolerance:  $\pm 25\%$

### Series Shape and Dimensions (Unit:mm)



| Series  | A              | B              | C              | D              | $E_{Typ}$ | $F_{Typ}$ | $G_{Typ}$ | SPQ   |
|---------|----------------|----------------|----------------|----------------|-----------|-----------|-----------|-------|
| FBG1005 | $1.0 \pm 0.15$ | $0.5 \pm 0.15$ | $0.5 \pm 0.15$ | $0.25 \pm 0.1$ | 0.4       | 1.3       | 0.5       | 10000 |
| FBG1608 | $1.6 \pm 0.15$ | $0.8 \pm 0.15$ | $0.8 \pm 0.15$ | $0.3 \pm 0.2$  | 0.7       | 1.8       | 0.8       | 4000  |
| FBG2012 | $2.0 \pm 0.2$  | $1.25 \pm 0.2$ | $0.85 \pm 0.2$ | $0.5 \pm 0.3$  | 1.0       | 2.6       | 1.2       | 4000  |
| FBG3216 | $3.2 \pm 0.2$  | $1.6 \pm 0.2$  | $1.1 \pm 0.2$  | $0.5 \pm 0.3$  | 2.0       | 4.2       | 1.6       | 3000  |

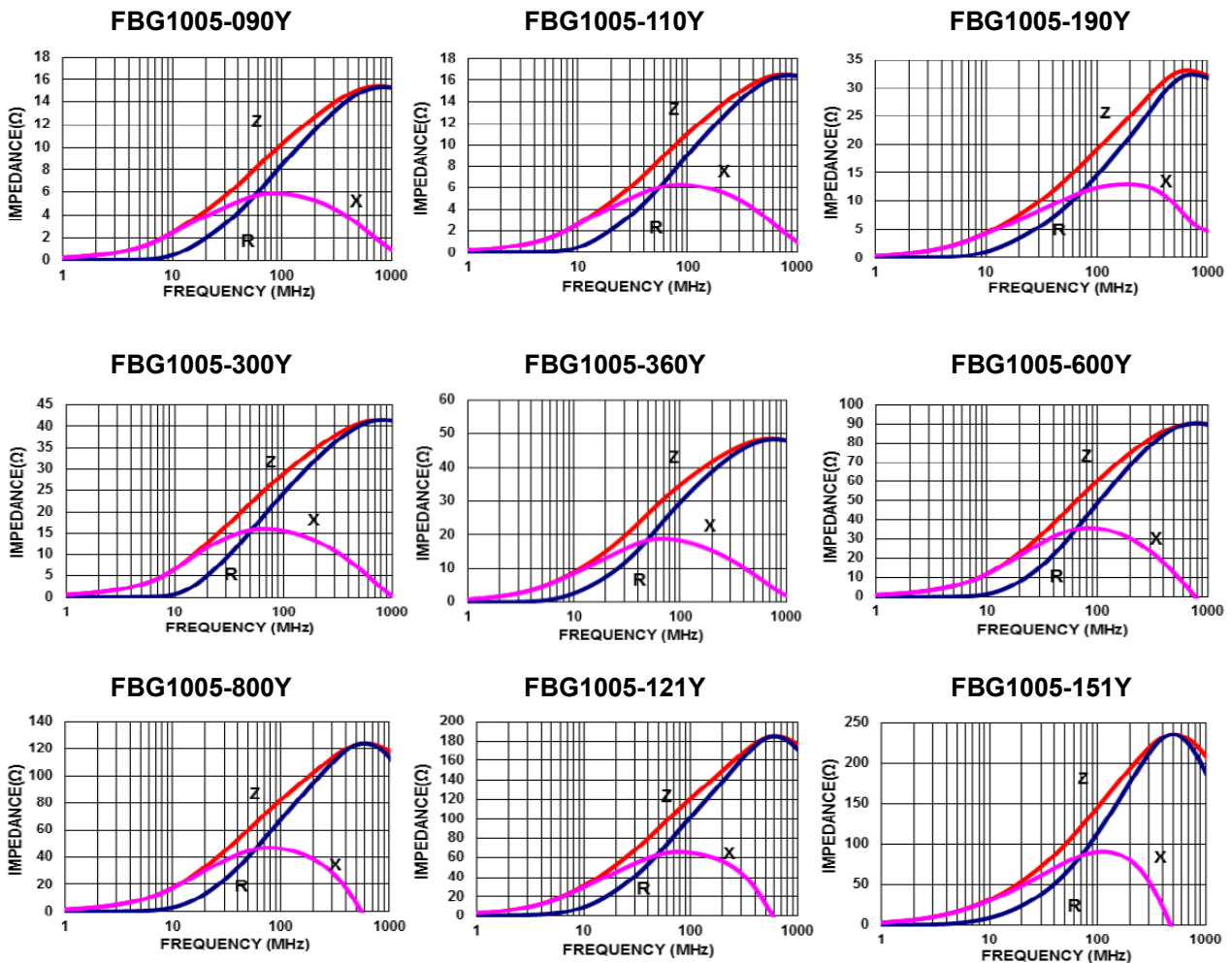
# Multilayer Chip Ferrite Beads---FBG Series



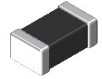
## FBG1005 Electrical Characteristics

| Part Number  | Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DCR Max ( $\Omega$ ) | Current Max (A) |
|--------------|------------------------|-----------------------|------------------|----------------------|-----------------|
| FBG1005-090Y | 9                      | 25                    | 100              | 0.10                 | 0.30            |
| FBG1005-110Y | 11                     | 25                    | 100              | 0.10                 | 0.30            |
| FBG1005-190Y | 19                     | 25                    | 100              | 0.10                 | 0.30            |
| FBG1005-300Y | 30                     | 25                    | 100              | 0.20                 | 0.30            |
| FBG1005-360Y | 36                     | 25                    | 100              | 0.20                 | 0.30            |
| FBG1005-600Y | 60                     | 25                    | 100              | 0.35                 | 0.20            |
| FBG1005-800Y | 80                     | 25                    | 100              | 0.40                 | 0.15            |
| FBG1005-121Y | 120                    | 25                    | 100              | 0.50                 | 0.15            |
| FBG1005-151Y | 150                    | 25                    | 100              | 0.55                 | 0.15            |
| FBG1005-181Y | 180                    | 25                    | 100              | 0.60                 | 0.15            |
| FBG1005-221Y | 220                    | 25                    | 100              | 0.70                 | 0.10            |
| FBG1005-301Y | 300                    | 25                    | 100              | 0.80                 | 0.10            |
| FBG1005-501Y | 500                    | 25                    | 100              | 1.10                 | 0.10            |
| FBG1005-601Y | 600                    | 25                    | 100              | 1.30                 | 0.10            |
| FBG1005-102Y | 1000                   | 25                    | 100              | 1.60                 | 0.02            |

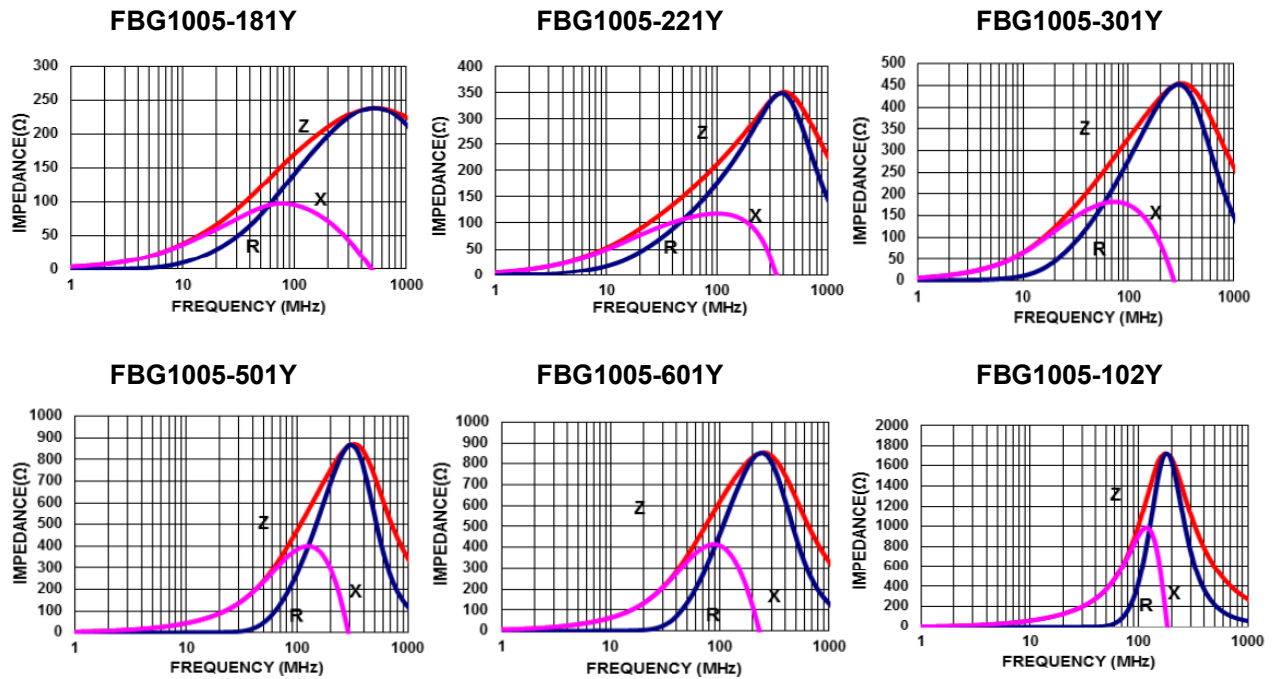
## Typical Impedance vs. Frequency Curves



## Multilayer Chip Ferrite Beads---FBG Series



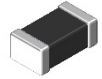
### Typical Impedance vs. Frequency Curves



#### Notes:

1. Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
2. Measuring Equipment:  
 Z: HP4291A      RDC: HP4338B or CHEN HWA 502

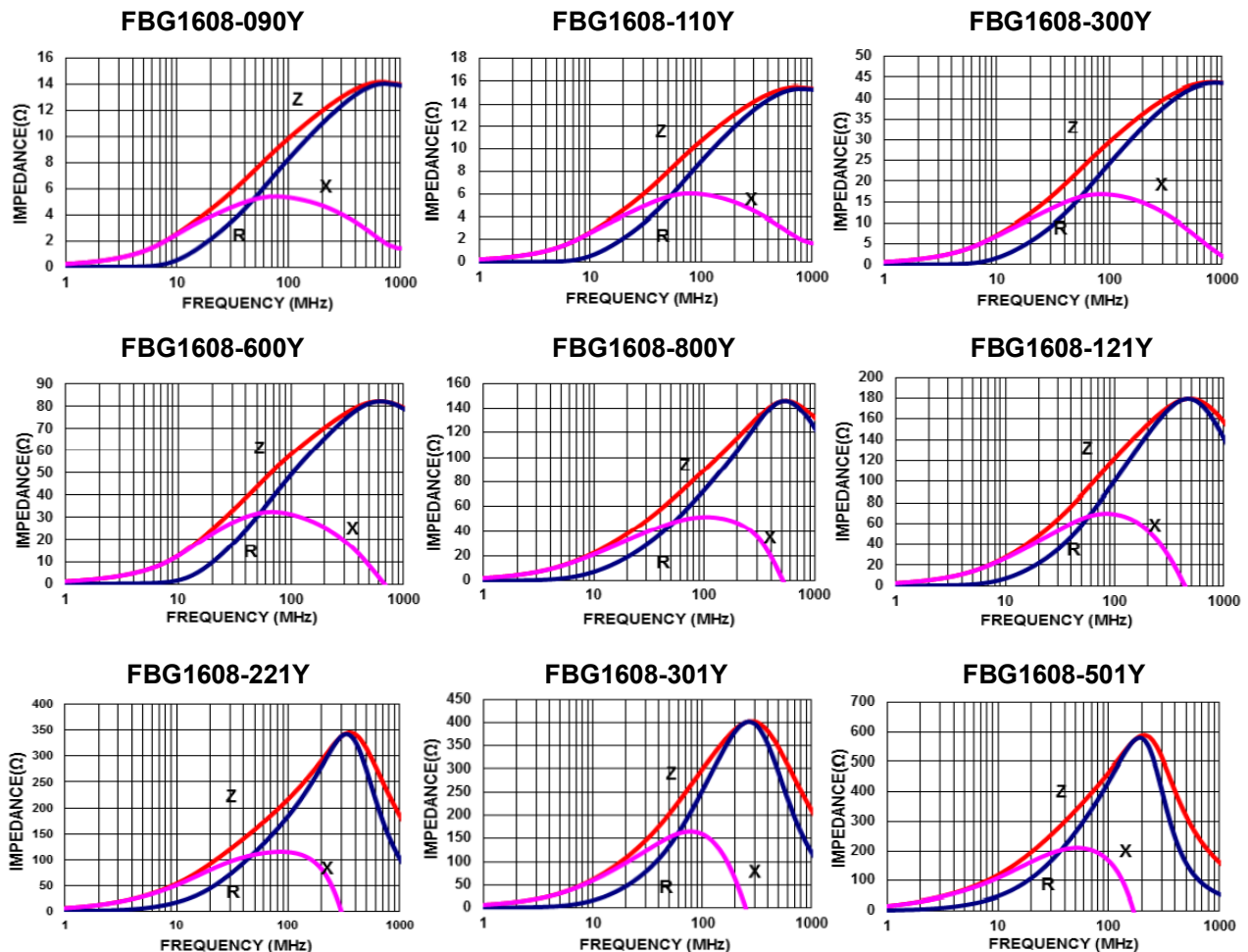
# Multilayer Chip Ferrite Beads---FBG Series



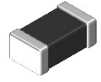
## FBG1608 Electrical Characteristics

| Part Number  | Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DCR Max ( $\Omega$ ) | Current Max (A) |
|--------------|------------------------|-----------------------|------------------|----------------------|-----------------|
| FBG1608-090Y | 9                      | 25                    | 100              | 0.10                 | 0.80            |
| FBG1608-110Y | 11                     | 25                    | 100              | 0.10                 | 0.80            |
| FBG1608-300Y | 30                     | 25                    | 100              | 0.10                 | 0.50            |
| FBG1608-600Y | 60                     | 25                    | 100              | 0.20                 | 0.30            |
| FBG1608-800Y | 80                     | 25                    | 100              | 0.20                 | 0.30            |
| FBG1608-121Y | 120                    | 25                    | 100              | 0.30                 | 0.20            |
| FBG1608-221Y | 220                    | 25                    | 100              | 0.45                 | 0.20            |
| FBG1608-301Y | 300                    | 25                    | 100              | 0.50                 | 0.15            |
| FBG1608-501Y | 500                    | 25                    | 100              | 0.60                 | 0.15            |
| FBG1608-601Y | 600                    | 25                    | 100              | 0.60                 | 0.10            |
| FBG1608-102Y | 1000                   | 25                    | 100              | 0.80                 | 0.10            |
| FBG1608-152Y | 1500                   | 25                    | 100              | 0.85                 | 0.05            |
| FBG1608-182Y | 1800                   | 25                    | 100              | 1.10                 | 0.05            |
| FBG1608-202Y | 2000                   | 25                    | 100              | 1.15                 | 0.05            |
| FBG1608-222Y | 2200                   | 25                    | 100              | 1.20                 | 0.05            |
| FBG1608-252Y | 2500                   | 25                    | 100              | 1.30                 | 0.05            |

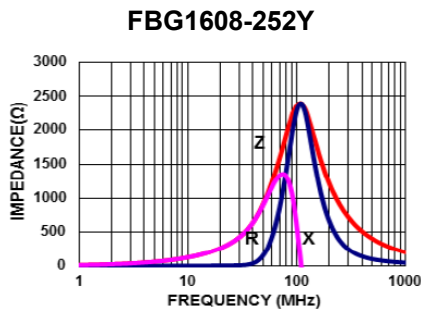
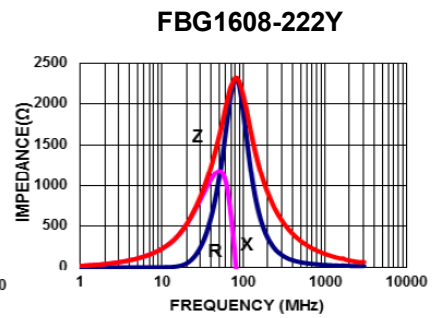
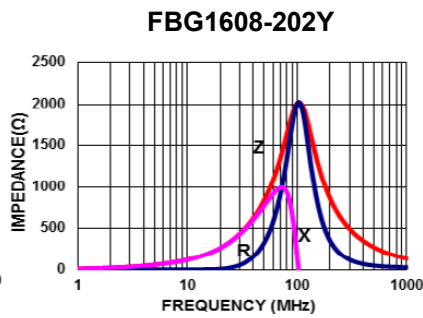
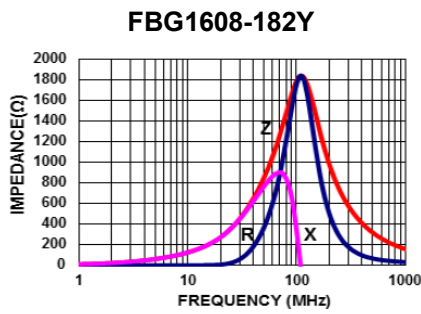
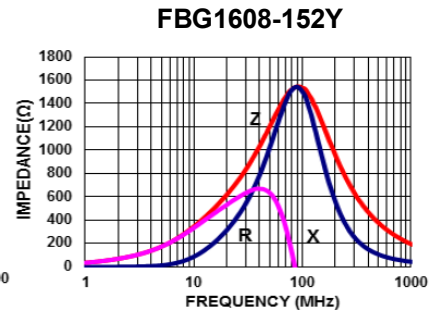
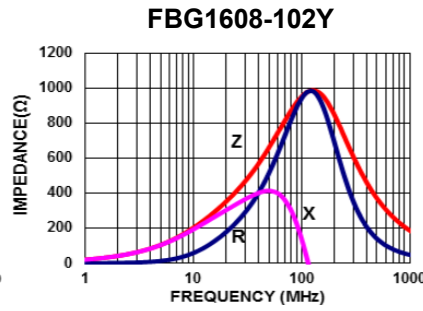
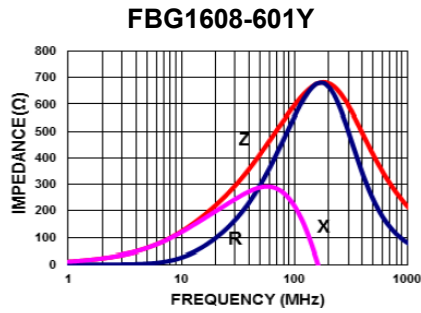
## Typical Impedance vs. Frequency Curves



## Multilayer Chip Ferrite Beads---FBG Series



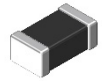
### Typical Impedance vs. Frequency Curves



#### Notes:

1. Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
2. Measuring Equipment:  
 Z: HP4291A      RDC: HP4338B or CHEN HWA 502

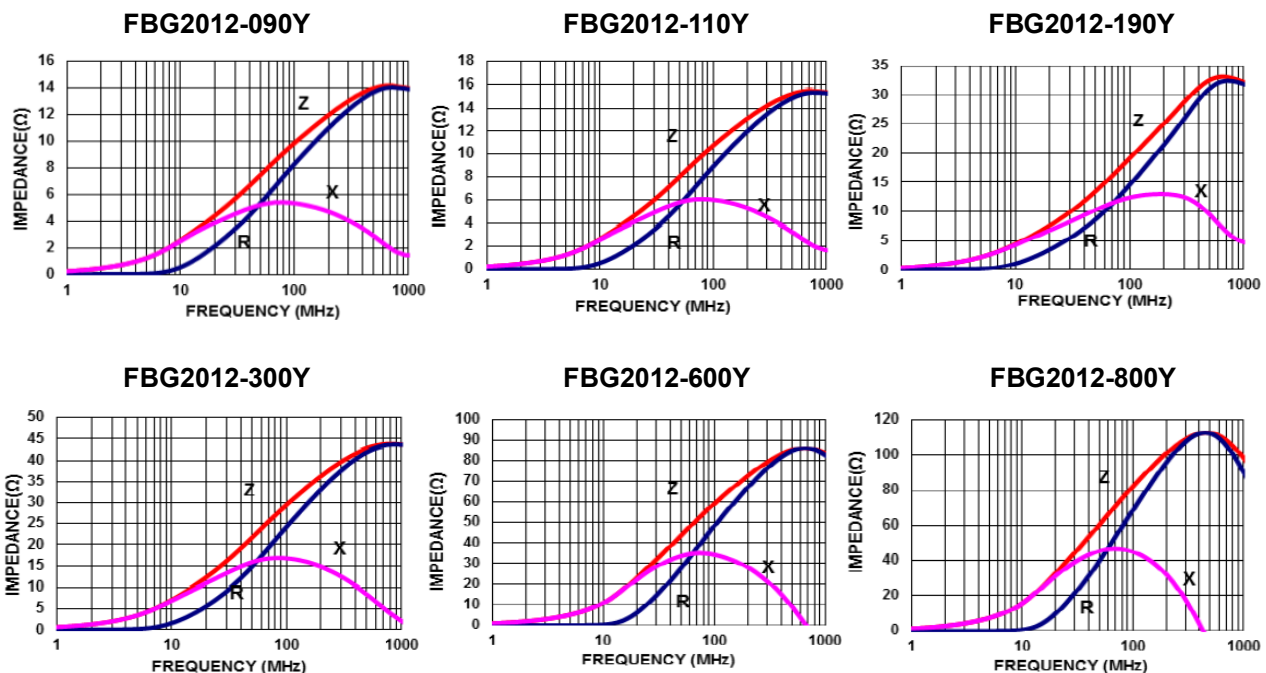
## Multilayer Chip Ferrite Beads---FBG Series



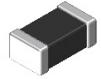
### FBG2012 Electrical Characteristics

| Part Number  | Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DCR Max ( $\Omega$ ) | Current Max (A) |
|--------------|------------------------|-----------------------|------------------|----------------------|-----------------|
| FBG2012-090Y | 9                      | 25                    | 100              | 0.10                 | 0.90            |
| FBG2012-110Y | 11                     | 25                    | 100              | 0.10                 | 0.90            |
| FBG2012-190Y | 19                     | 25                    | 100              | 0.10                 | 0.90            |
| FBG2012-300Y | 30                     | 25                    | 100              | 0.10                 | 0.90            |
| FBG2012-600Y | 60                     | 25                    | 100              | 0.15                 | 0.90            |
| FBG2012-800Y | 80                     | 25                    | 100              | 0.18                 | 0.50            |
| FBG2012-121Y | 120                    | 25                    | 100              | 0.20                 | 0.40            |
| FBG2012-221Y | 220                    | 25                    | 100              | 0.20                 | 0.30            |
| FBG2012-301Y | 300                    | 25                    | 100              | 0.35                 | 0.30            |
| FBG2012-501Y | 500                    | 25                    | 100              | 0.40                 | 0.30            |
| FBG2012-601Y | 600                    | 25                    | 100              | 0.40                 | 0.30            |
| FBG2012-102Y | 1000                   | 25                    | 100              | 0.45                 | 0.20            |
| FBG2012-122Y | 1200                   | 25                    | 100              | 0.60                 | 0.10            |
| FBG2012-152Y | 1500                   | 25                    | 100              | 0.70                 | 0.10            |
| FBG2012-202Y | 2000                   | 25                    | 100              | 0.90                 | 0.05            |
| FBG2012-222Y | 2200                   | 25                    | 100              | 1.00                 | 0.05            |
| FBG2012-252Y | 2500                   | 25                    | 100              | 1.20                 | 0.05            |
| FBG2012-272Y | 2700                   | 25                    | 100              | 1.40                 | 0.03            |

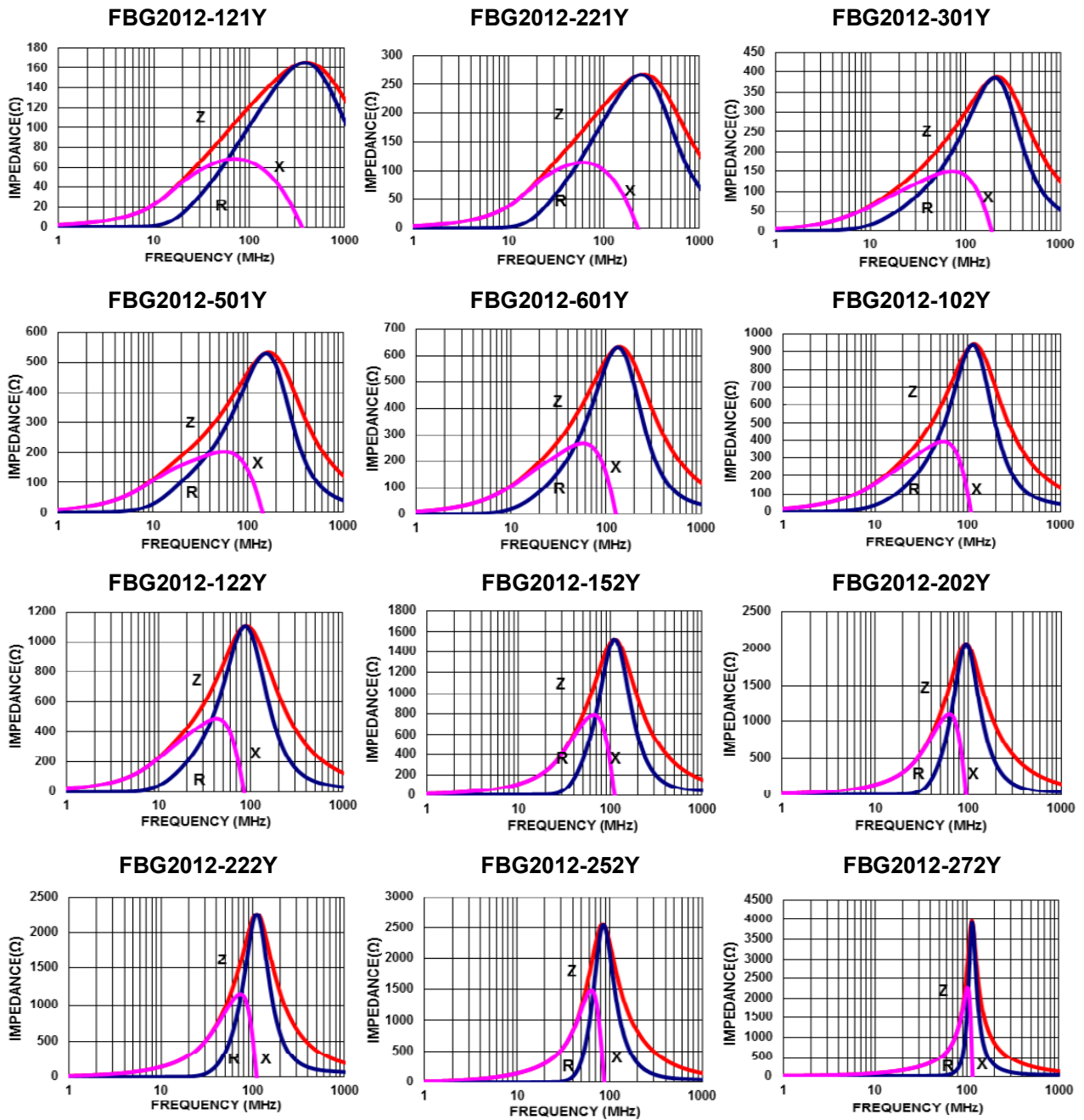
### Typical Impedance vs. Frequency Curves



# Multilayer Chip Ferrite Beads---FBG Series



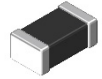
## Typical Impedance vs. Frequency Curves



### Notes:

1. Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
2. Measuring Equipment:  
 Z: HP4291A      RDC: HP4338B or CHEN HWA 502

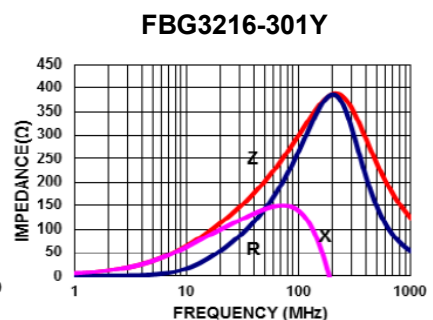
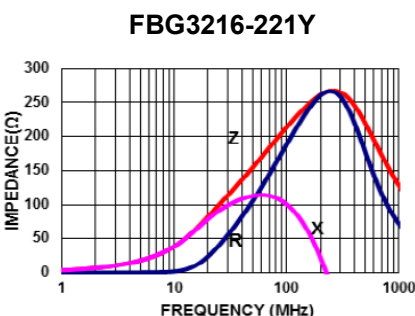
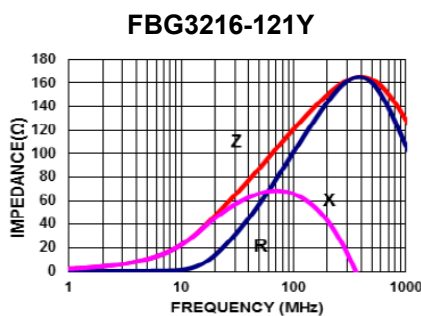
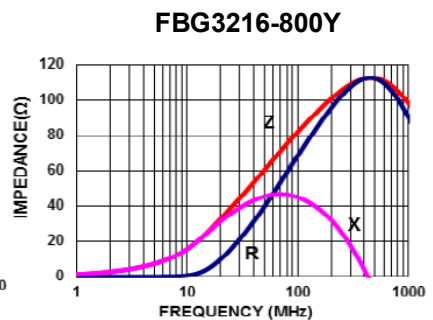
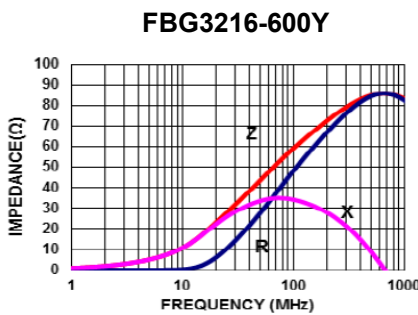
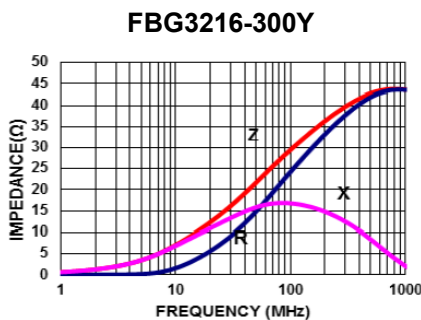
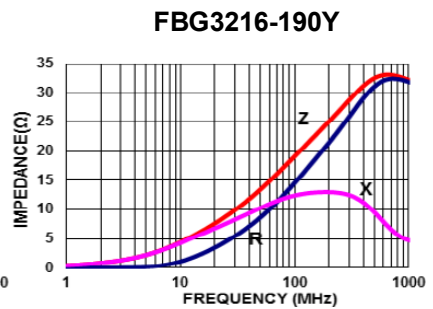
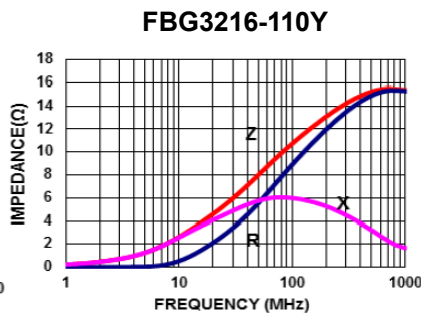
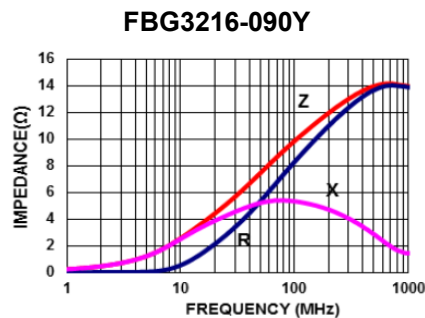
# Multilayer Chip Ferrite Beads---FBG Series



## FBG3216 Electrical Characteristics

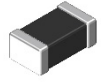
| Part Number  | Impedance (Ω) | Tolerance (±%) | Test Freq. (MHz) | DCR Max (Ω) | Current Max (A) |
|--------------|---------------|----------------|------------------|-------------|-----------------|
| FBG3216-090Y | 9             | 25             | 100              | 0.10        | 1.00            |
| FBG3216-110Y | 11            | 25             | 100              | 0.10        | 1.00            |
| FBG3216-190Y | 19            | 25             | 100              | 0.10        | 1.00            |
| FBG3216-300Y | 30            | 25             | 100              | 0.10        | 1.00            |
| FBG3216-600Y | 60            | 25             | 100              | 0.15        | 1.00            |
| FBG3216-800Y | 80            | 25             | 100              | 0.15        | 1.00            |
| FBG3216-121Y | 120           | 25             | 100              | 0.25        | 1.00            |
| FBG3216-221Y | 220           | 25             | 100              | 0.35        | 0.40            |
| FBG3216-301Y | 300           | 25             | 100              | 0.40        | 0.40            |
| FBG3216-501Y | 500           | 25             | 100              | 0.45        | 0.30            |
| FBG3216-601Y | 600           | 25             | 100              | 0.45        | 0.30            |
| FBG3216-102Y | 1000          | 25             | 100              | 0.55        | 0.30            |
| FBG3216-122Y | 1200          | 25             | 100              | 0.60        | 0.10            |
| FBG3216-202Y | 2000          | 25             | 100              | 1.00        | 0.05            |

## Typical Impedance vs. Frequency Curves

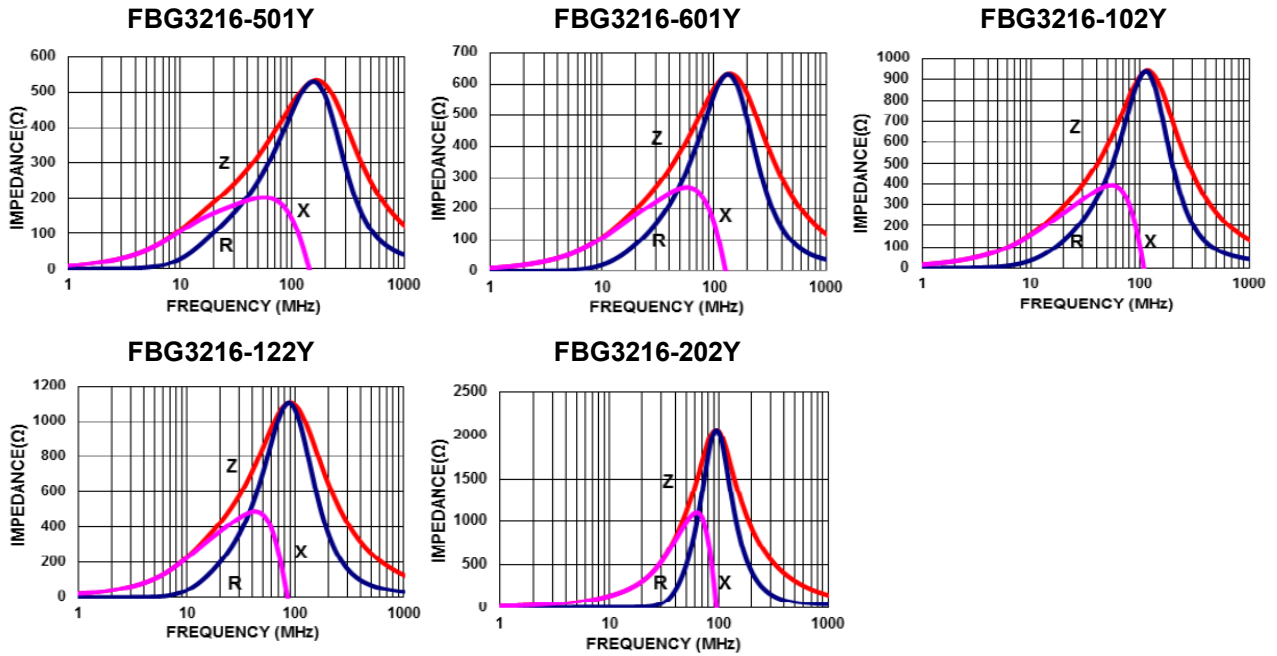




## Multilayer Chip Ferrite Beads---FBG Series



### Typical Impedance vs. Frequency Curves



#### Notes:

1. Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
2. Measuring Equipment:  
Z: HP4291A      RDC: HP4338B or CHEN HWA 502

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Ferrite Beads](#) category:*

*Click to view products by [Linekey](#) manufacturer:*

Other Similar products are found below :

[CZB1EGTTP700P](#) [CZB1JGTTD152P](#) [CZB1JGTTD601P](#) [CZB2AFTTD800P](#) [CZB2AGTTD121P](#) [CZB2AGTTD601P](#) [CZB2BFTTE600P](#)  
[PE-0402FB121ST](#) [NCB0603R301TR050F](#) [NCB0805A320TR050F](#) [NCB-H1206B680TR300F](#) [SMB2.5-1TR](#) [SMB2.5R-2](#) [CZB1EGTTP121P](#)  
[CZB1JGTTD102P](#) [CZB1JGTTD121P](#) [CZB1JGTTD221P](#) [CZB2AGTTD301P](#) [CZB2BFTTE301P](#) [CZB2BFTTE601P](#) [4221R-1](#) [4221R-2](#)  
[432703041971](#) [EMI0805R-2000](#) [EMI0805R-600](#) [SBY100505T-100Y-N](#) [NCB-GH0402D121TR060F](#) [NCB-H1812D125TR150F](#)  
[CZB2AGTTD102P](#) [NCB0402P301TR005F](#) [NCB0603R152TR030F](#) [NCB0805A121TR050F](#) [NCB3312K900TR500F](#) [NCB-](#)  
[H0805A102TR150F](#) [NCB-H0805A221TR300F](#) [NCB-H1806E181TR300F](#) [NCB0402P300TR030F](#) [NCB0805A102TR040F](#)  
[NCB1806E151TR020F](#) [NCB-H0603R121TR300F](#) [NCB-H0805A220TR600F](#) [NCB-H0805A390TR400F](#) [NCB-H1206B121TR300F](#) [NCB-](#)  
[H1206B601TR200F](#) [CIM21J252NE](#) [EMI0805R-220](#) [74279250](#) [7427924](#) [CZB1JGTTD202P](#) [ABUPDE160808121Y00](#)