# Multilayer Chip Ferrite Beads-KBF Series

## Features

- Wide range of frequency to suppress EMI.
- Wide range of impedance values for various applications.
- Internal silver printed layers and magnetic shielded structure.
- Operating temperature range -55℃～125℃(Including self - temperature rise).

## Application

- Perfect as data line filter and for uncoupling of distribution voltage.

## Product Identification

KGBF ① 1005 ② - 300 ③ Y ④

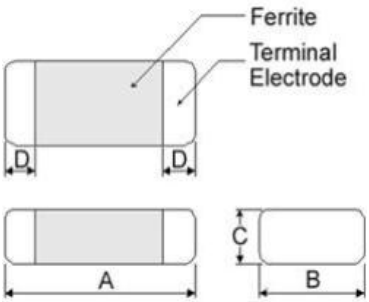
| ① | Type |
|---|---|
| KGBF | General Ferrite Bead |

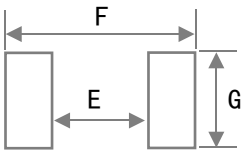
| ② | E*ternal Dimensions (L*W*H) [mm] |
|---|---|
| KGBF1005 | 1.0*0.5*0.5 |
| KGBF1608 | 1.6*0.8*0.8 |
| KGBF2012 | 2.0*1.25*0.9 |
| KGBF3216 | 3.2*1.6*1.1 |

| ③ | Nominal Impedance |
|---|---|
| example | Nominal Value |
| 300 | 30 Ω |

| ④ | ImpedanceTolerance |
|---|---|
| example | Nominal Value |
| Y | ±25% |

## SHAPE AND DIMENSIONS




Unite:mm

| Series | A | B | C | D | $E_{Typ}$ | $F_{Typ}$ | $G_{Typ}$ | SPQ |
|---|---|---|---|---|---|---|---|---|
| KGBF1005 | 1.0±0.1 | 0.5±0.1 | 0.5±0.1 | 0.25±0.1 | 0.4 | 1.3 | 0.5 | 10000 |
| KGBF1608 | 1.6±0.15 | 0.8±0.15 | 0.8±0.15 | 0.3±0.2 | 0.7 | 1.8 | 0.8 | 4000 |
| KGBF2012 | 2.0±0.2 | 1.25±0.2 | 0.9±0.2 | 0.5±0.3 | 1.0 | 2.6 | 1.2 | 4000 |
| KGBF3216 | 3.2±0.2 | 1.6±0.2 | 1.1±0.2 | 0.5±0.3 | 2.0 | 4.2 | 1.6 | 3000 |

## SPECIFICATIONS

### KGBF1005 Series

| Part Number | Impedance (Ω) | Tolerance (±%) | Test Freq. (MHz) | DCR Max (Ω) | Current Max (A) |
|---|---|---|---|---|---|
| KGBF1005-100Y | 10 | 25 | 100 | 0.06 | 0.70 |
| KGBF1005-300Y | 30 | 25 | 100 | 0.08 | 0.70 |
| KGBF1005-700Y | 70 | 25 | 100 | 0.20 | 0.45 |
| KGBF1005-121Y | 120 | 25 | 100 | 0.25 | 0.45 |
| KGBF1005-221Y | 220 | 25 | 100 | 0.40 | 0.30 |
| KGBF1005-601Y | 600 | 25 | 100 | 0.90 | 0.20 |
| KGBF1005-102Y | 1000 | 25 | 100 | 1.00 | 0.20 |

### KGBF1608 Series

| Part Number | Impedance (Ω) | Tolerance (±%) | Test Freq. (MHz) | DCR Max (Ω) | Current Max (A) |
|---|---|---|---|---|---|
| KGBF1608-300Y | 30 | 25 | 100 | 0.08 | 1.0 |
| KGBF1608-600Y | 60 | 25 | 100 | 0.12 | 1.0 |
| KGBF1608-121Y | 120 | 25 | 100 | 0.15 | 1.0 |
| KGBF1608-221Y | 220 | 25 | 100 | 0.20 | 1.0 |
| KGBF1608-301Y | 300 | 25 | 100 | 0.25 | 1.0 |
| KGBF1608-471Y | 470 | 25 | 100 | 0.30 | 1.0 |
| KGBF1608-601Y | 600 | 25 | 100 | 0.30 | 1.0 |

### KGBF2012 Series

| Part Number | Impedance (Ω) | Tolerance (±%) | Test Freq. (MHz) | DCR Max (Ω) | Current Max (A) |
|---|---|---|---|---|---|
| KGBF2012-300Y | 30 | 25 | 100 | 0.05 | 3.0 |
| KGBF2012-600Y | 60 | 25 | 100 | 0.06 | 3.0 |
| KGBF2012-121Y | 120 | 25 | 100 | 0.10 | 2.0 |
| KGBF2012-221Y | 220 | 25 | 100 | 0.15 | 2.0 |
| KGBF2012-301Y | 300 | 25 | 100 | 0.20 | 2.0 |
| KGBF2012-421Y | 420 | 25 | 100 | 0.25 | 1.5 |
| KGBF2012-601Y | 600 | 25 | 100 | 0.25 | 1.5 |
| KGBF2012-102Y | 1000 | 25 | 100 | 0.30 | 0.8 |

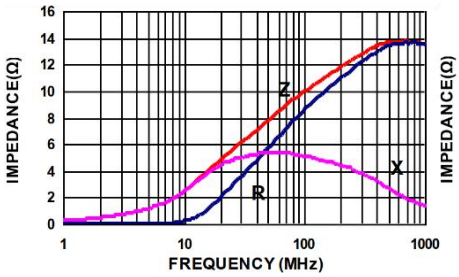
KGBF3216 Series

| Part Number | Impedance (Ω) | Tolerance (±%) | Test Freq. (MHz) | DCR Max (Ω) | Current Max (A) |
|---|---|---|---|---|---|
| KGBF3216-300Y | 30 | 25 | 100 | 0.07 | 3.0 |
| KGBF3216-600Y | 60 | 25 | 100 | 0.07 | 3.0 |
| KGBF3216-121Y | 120 | 25 | 100 | 0.07 | 3.0 |
| KGBF3216-221Y | 220 | 25 | 100 | 0.12 | 2.5 |
| KGBF3216-301Y | 300 | 25 | 100 | 0.15 | 2.0 |
| KGBF3216-601Y | 600 | 25 | 100 | 0.20 | 2.0 |
| KGBF3216-102Y | 1000 | 25 | 100 | 0.25 | 2.0 |

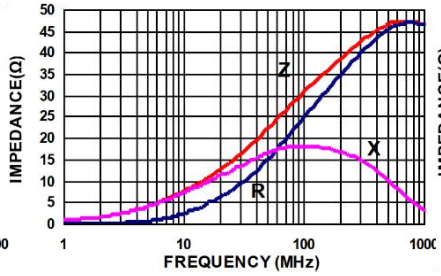
## TYPICAL ELECTRICAL CHARACTERISTICS

KGBF1005 Series

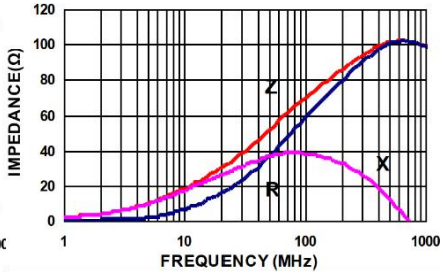
**KGBF1005-100Y**



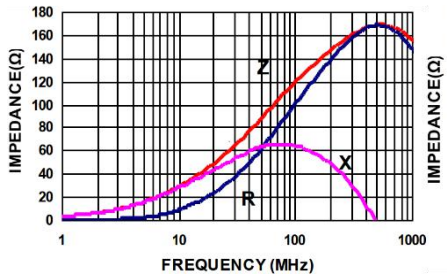

**KGBF1005-300Y**



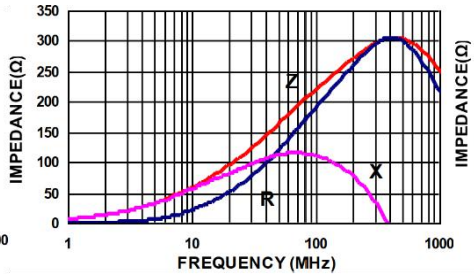

**KGBF1005-700Y**



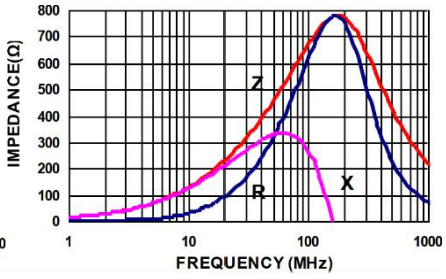

**KGBF1005-121Y**



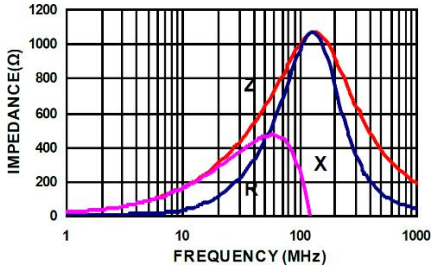

**KGBF1005-221Y**




**KGBF1005-601Y**

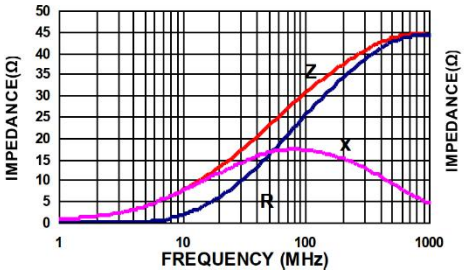



**KGBF1005-102Y**

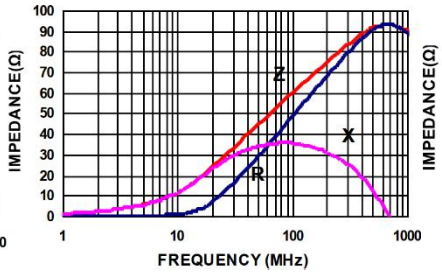


## KGBF1608 Series

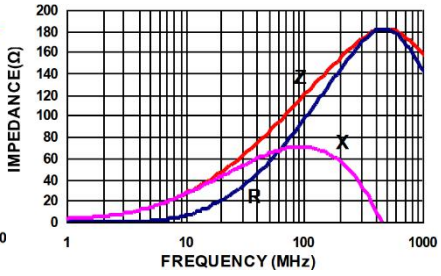
**KGBF1608-300Y**



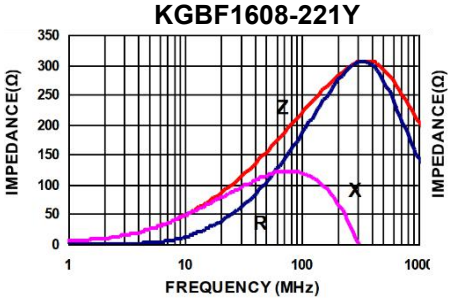

**KGBF1608-600Y**



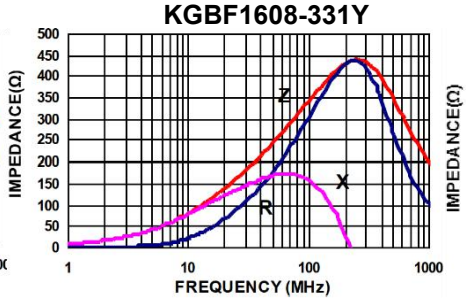

**KGBF1608-121Y**



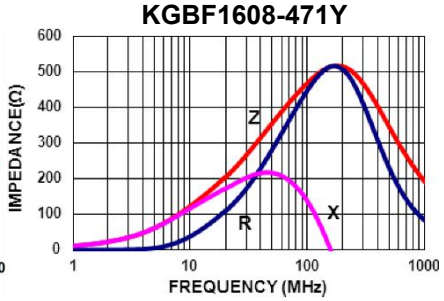

**KGBF1608-221Y**



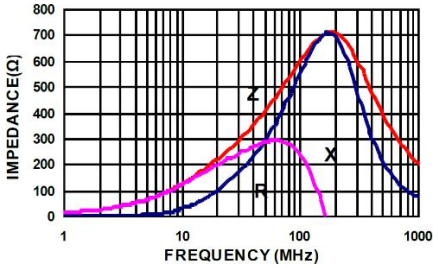

**KGBF1608-331Y**




**KGBF1608-471Y**

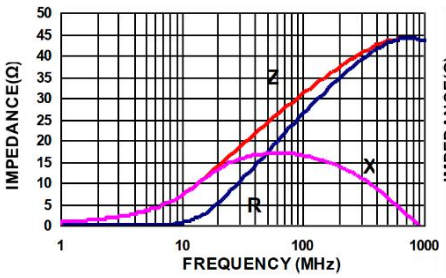



**KGBF1608-601Y**

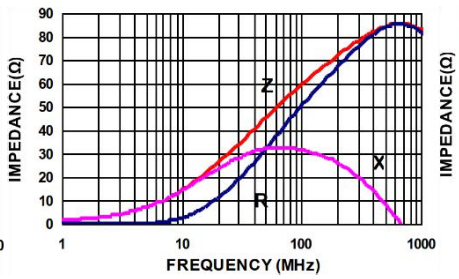



## KGBF2012 Series

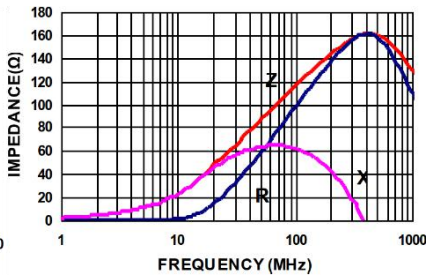
**KGBF2012-221Y**



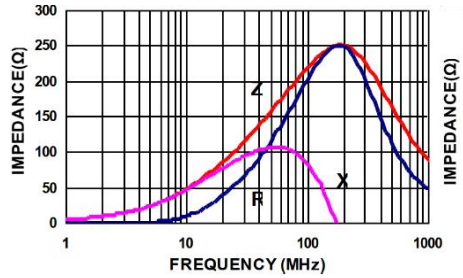

**KGBF2012-301Y**



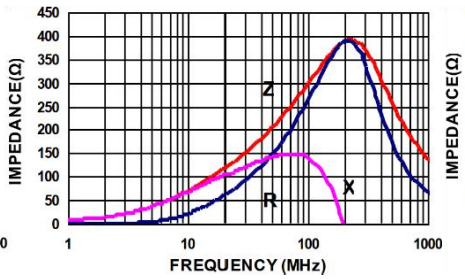

**KGBF2012-421Y**



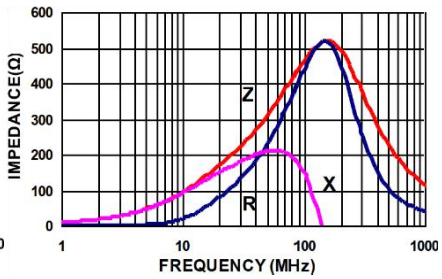

**KGBF2012-300Y**




**KGBF2012-600Y**

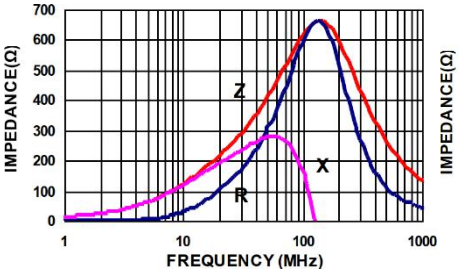



**KGBF2012-121Y**

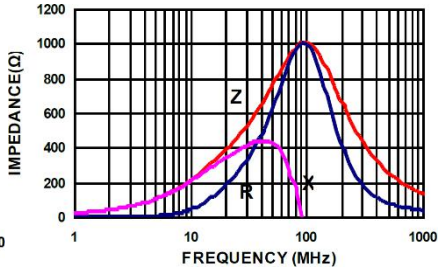


## Multilayer Chip Ferrite Beads-KBF Series

**KGBF2012-601Y**

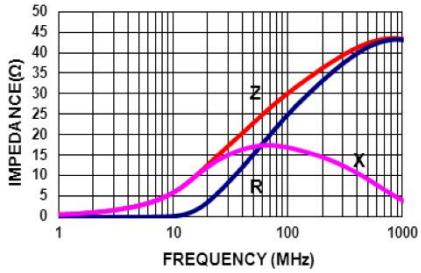



**KGBF2012-102Y**

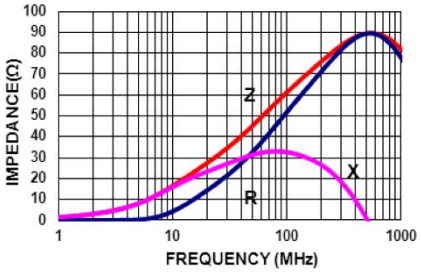



KGBF3216 Series

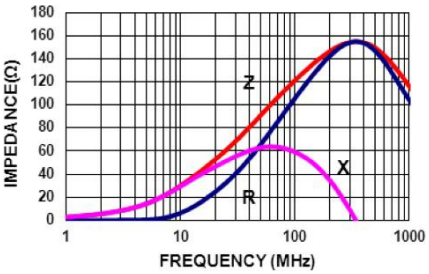
**KGBF3216-300Y**



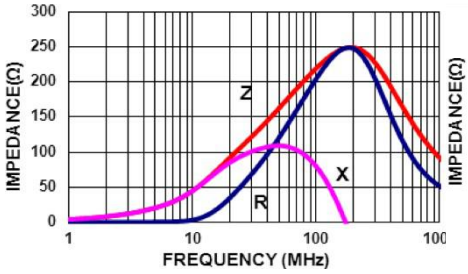

**KGBF3216-600Y**



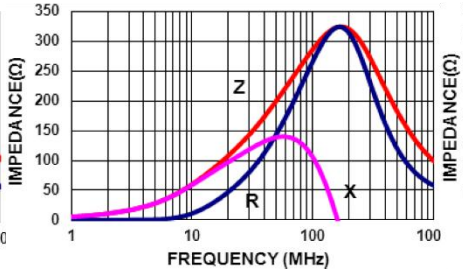

**KGBF3216-121Y**



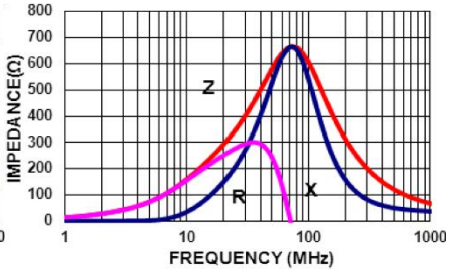

**KGBF3216-221**



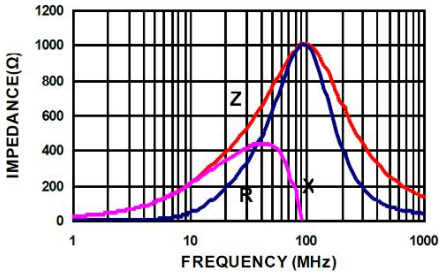

**KGBF3216-301Y**




**KGBF3216-601Y**




**KGBF3216-102Y**




## Notes:

- Rate Current: Applied the current to chip bead, the temperature rise shall not be more than 30℃.
- Measure Equipment: Z: HP4291A  RDC: HP4338B or CHEN HWA502