

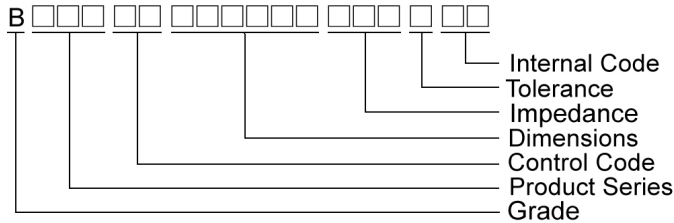
SMD Multi-layer Ferrite Chip Beads

BBPY Series

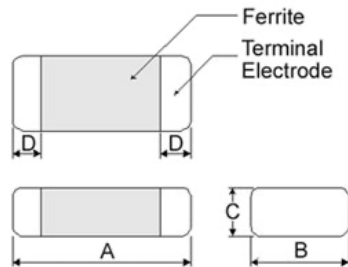


Chilisin offers a wide range of multi-layered ferrite chip beads with various sizes, frequency characteristics, and impedance values for EMI solutions. These ferrite formulas are used to compose seven types of EMI suppression chip beads: BBSY, BBBK, BBSJ, BBGK, BBPY, BBUP, BBNQ, BBFY, BBFJ and BBHV series.

Product Identification



Shape and Dimensions

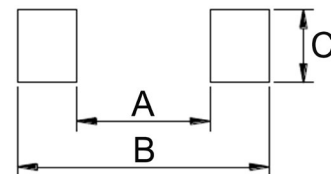


Dimensions in mm

| TYPE | A | B | C | D |
|---------|----------|-----------|----------|-----------|
| ①060303 | 0.6±0.03 | 0.30±0.03 | 0.3±0.03 | 0.15±0.05 |
| ②100505 | 1.0±0.10 | 0.50±0.10 | 0.5±0.10 | 0.25±0.10 |
| ③160805 | 1.6±0.15 | 0.80±0.15 | 0.5±0.15 | 0.3±0.2 |
| ④160808 | 1.6±0.15 | 0.80±0.15 | 0.8±0.15 | 0.3±0.2 |
| ⑤201209 | 2.0±0.20 | 1.25±0.20 | 0.9±0.20 | 0.5±0.3 |
| ⑥321611 | 3.2±0.20 | 1.60±0.20 | 1.1±0.20 | 0.5±0.3 |
| ⑦453215 | 4.5±0.25 | 3.20±0.20 | 1.5±0.20 | 0.5±0.3 |

- ① : BBSY / BBSJ / BBNQ / BBPY
- ② : BBSY / BBSJ / BBNQ / BBPY / BBUP / BBFY / BBFJ
- ③ : BBUP ④ : BBBK / BBSJ / BBGK / BBPY / BBNQ / BBUP / BBHV
- ⑤ : BBBK / BBGK / BBPY / BBUP ⑥ : BBSY / BBBK / BBPY / BBUP
- ⑦ : BBPY / BBUP

Recommended Pattern



Dimensions in mm

| TYPE | A | B | C |
|---------|-----------|-------------|-----------|
| ①060303 | 0.2 ~ 0.3 | 0.75 ~ 1.05 | 0.3 |
| ②100505 | 0.4 | 1.2 ~ 1.4 | 0.5 |
| ③160805 | 0.7 ~ 0.8 | 1.8 ~ 2.0 | 0.6 ~ 0.8 |
| ④160808 | 0.7 ~ 0.8 | 1.8 ~ 2.0 | 0.6 ~ 0.8 |
| ⑤201209 | 1.0 ~ 1.2 | 2.6 ~ 4.0 | 1.0 ~ 1.4 |
| ⑥321611 | 2.0 ~ 2.4 | 4.2 ~ 5.2 | 1.3 ~ 1.9 |
| ⑦453215 | 3.0 | 5.5 ~ 6.5 | 2.4 |

* Don't apply narrower pattern than listed above to BBPY and BBUP
Narrow pattern might cause excessive heat or open circuit.

Dimension Conversion

| Code | Dimension in mm (AxBxC) | EIA |
|--------|----------------------------|------|
| 060303 | 0.6X0.3X0.3 | 0201 |
| 100505 | 1.0X0.5X0.5 | 0402 |
| 160805 | 1.6x0.8x0.5 | 0603 |
| 160808 | 1.6x0.8x0.8 | 0603 |
| 201209 | 2.0x1.2x0.9 | 0805 |
| 321611 | 3.2x1.6x1.1 | 1206 |
| 453215 | 4.5x3.2x1.5 | 1812 |

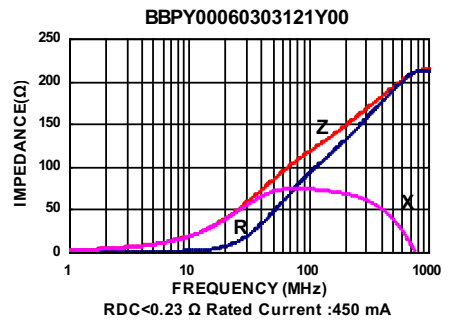
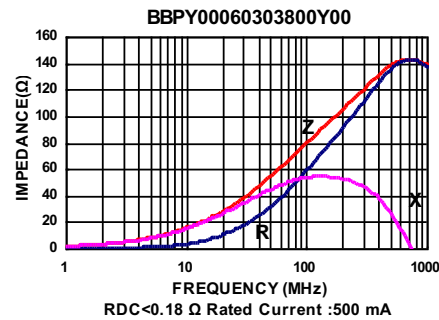
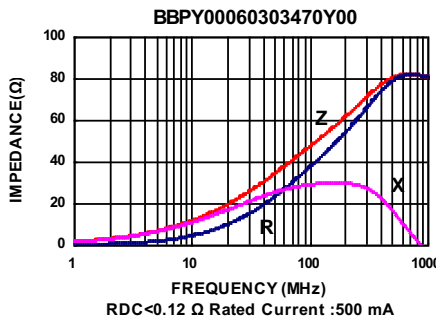
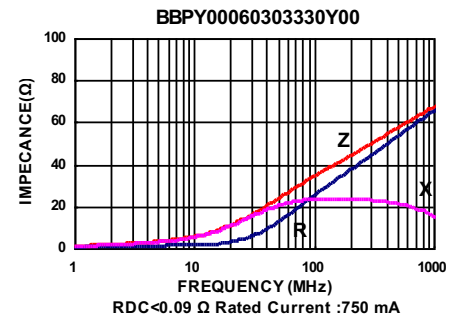
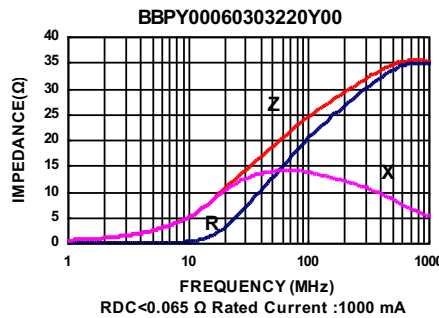
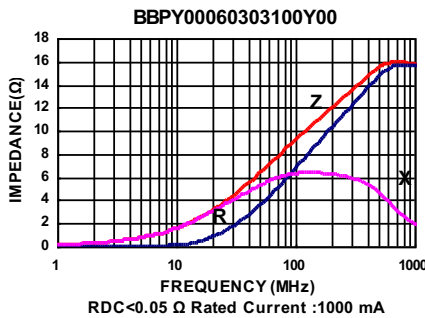
Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| BBPY00060303100Y00 | 10 | 100 | 0.050 | 1000 |
| BBPY00060303220Y00 | 22 | 100 | 0.065 | 1000 |
| BBPY00060303330Y00 | 33 | 100 | 0.090 | 750 |
| BBPY00060303470Y00 | 47 | 100 | 0.120 | 500 |
| BBPY00060303800Y00 | 80 | 100 | 0.180 | 500 |
| BBPY00060303121Y00 | 120 | 100 | 0.230 | 450 |
| BBPY00060303241Y00 | 240 | 100 | 0.400 | 350 |
| BBPY00060303331Y00 | 330 | 100 | 0.500 | 300 |

Note: When ordering, please specify tolerance code. Tolerance : $Y = \pm 25\%$

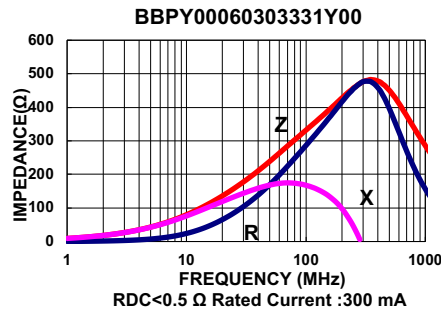
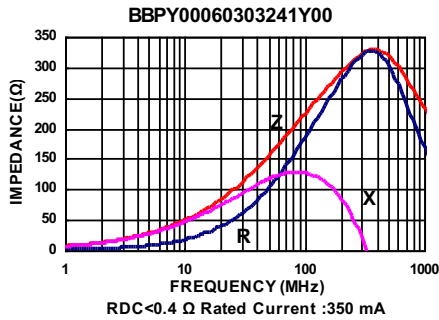
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer



SMD Multi-layer Ferrite Chip Beads

BBPY Series



Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| BBPY00100505100Y00 | 10 | 100 | 0.03 | 2000 |
| BBPY00100505250Y00 | 25 | 100 | 0.05 | 1700 |
| BBPY00100505300Y00 | 30 | 100 | 0.05 | 1700 |
| BBPY00100505320Y00 | 32 | 100 | 0.05 | 1700 |
| BBPY00100505400Y00 | 40 | 100 | 0.075 | 1500 |
| BBPY00100505500Y00 | 50 | 100 | 0.075 | 1500 |
| BBPY00100505600Y00 | 60 | 100 | 0.075 | 1500 |
| BBPY00100505680Y00 | 68 | 100 | 0.09 | 1200 |
| BBPY00100505700Y00 | 70 | 100 | 0.09 | 1200 |
| BBPY00100505800Y00 | 80 | 100 | 0.09 | 1200 |
| BBPY00100505101Y00 | 100 | 100 | 0.09 | 1200 |
| BBPY00100505121Y00 | 120 | 100 | 0.09 | 1400 |
| BBPY00100505151Y00 | 150 | 100 | 0.14 | 1400 |
| BBPY00100505181Y00 | 180 | 100 | 0.14 | 900 |
| BBPY00100505221Y00 | 220 | 100 | 0.18 | 1100 |
| BBPY00100505601Y00 | 600 | 100 | 0.34 | 700 |
| BBPY00100505102Y00 | 1000 | 100 | 0.49 | 500 |

Note: When ordering, please specify tolerance code. Tolerance : $Y \pm 25\%$

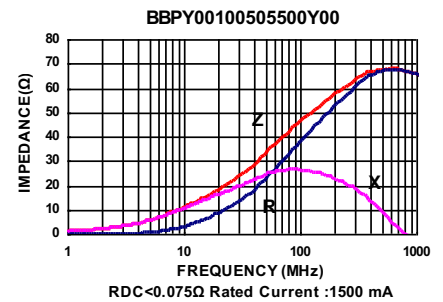
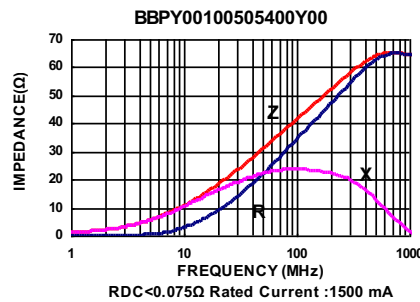
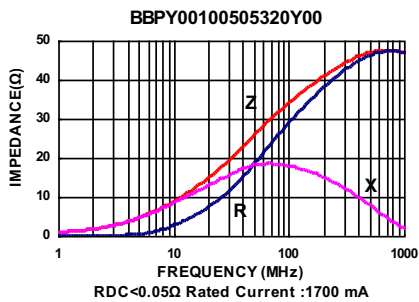
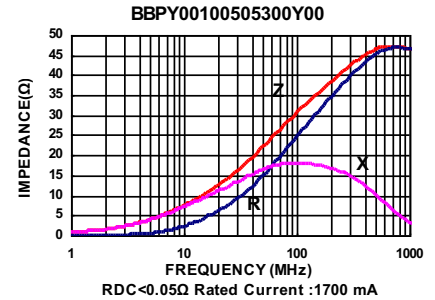
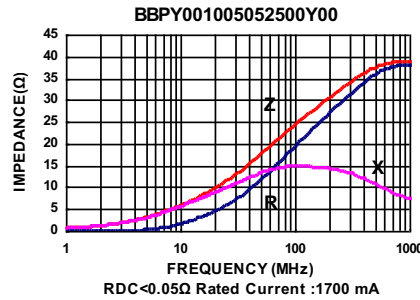
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

SMD Multi-layer Ferrite Chip Beads

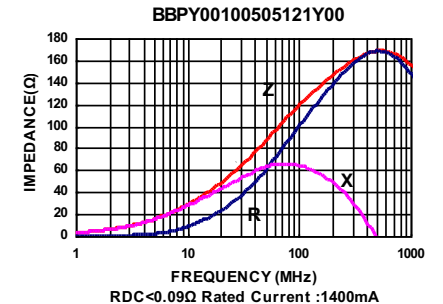
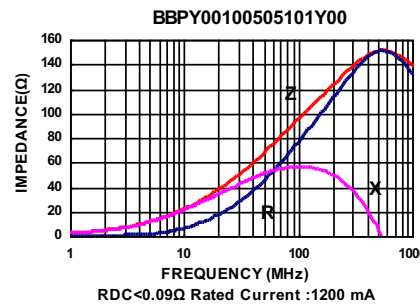
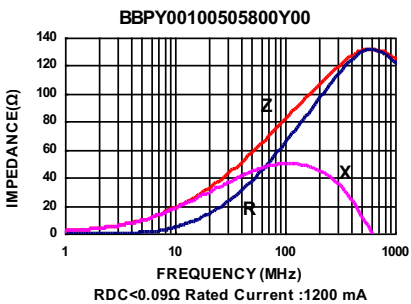
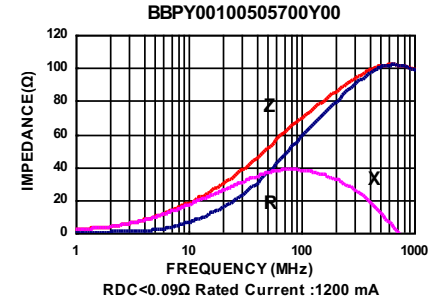
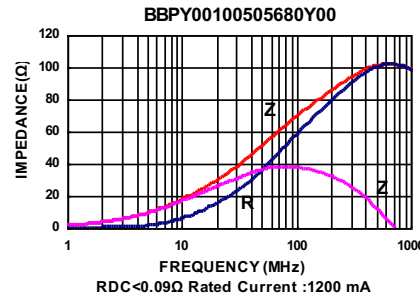
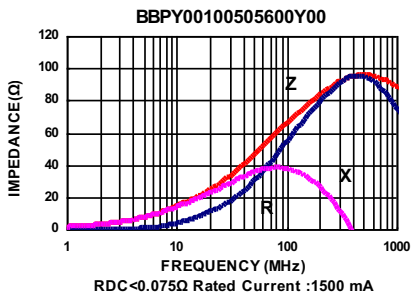
BBPY Series



Test Instruments : Agilent E4991A Impedance / Material Analyzer

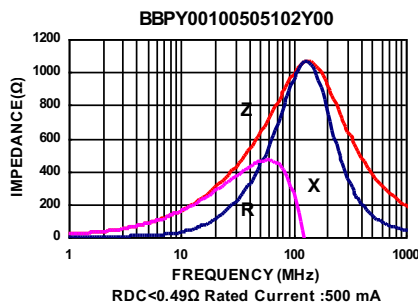
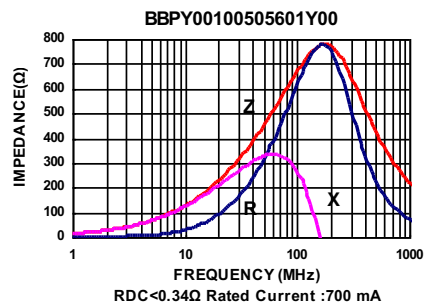
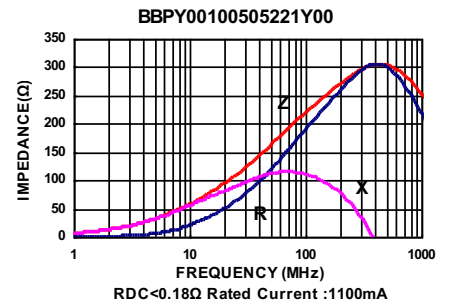
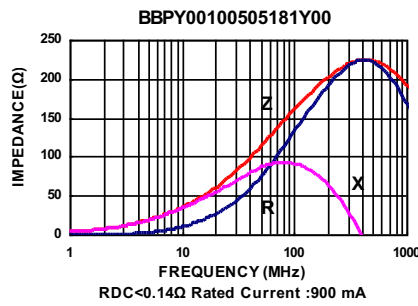
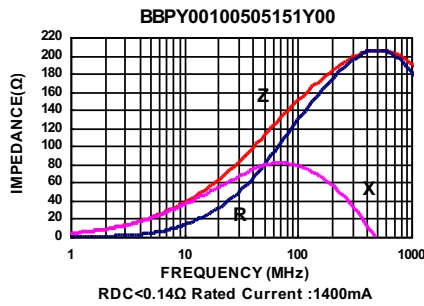


Test Instruments : Agilent E4991A Impedance / Material Analyzer



SMD Multi-layer Ferrite Chip Beads

BBPY Series



Electrical Characteristics

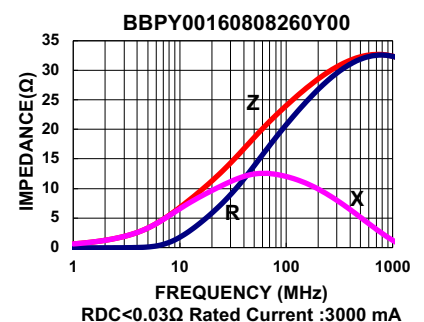
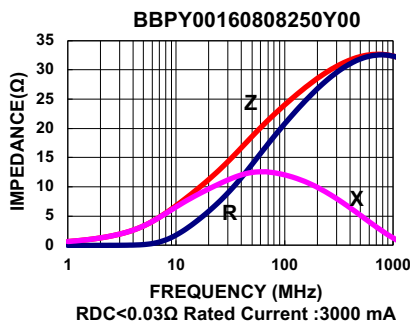
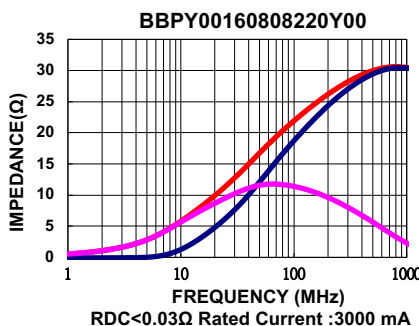
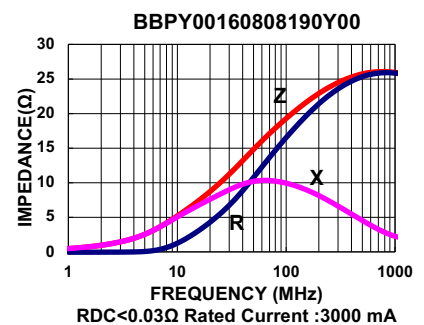
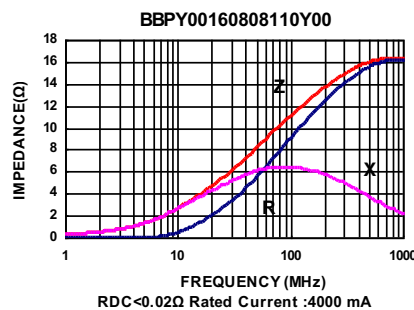
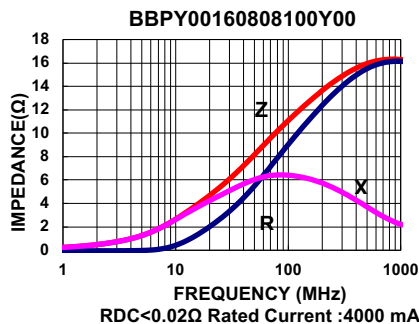
| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| BBPY00160808100Y00 | 10 | 100 | 0.020 | 4000 |
| BBPY00160808110Y00 | 11 | 100 | 0.020 | 4000 |
| BBPY00160808190Y00 | 19 | 100 | 0.03 | 3000 |
| BBPY00160808220Y00 | 22 | 100 | 0.030 | 3000 |
| BBPY00160808250Y00 | 25 | 100 | 0.03 | 3000 |
| BBPY00160808260Y00 | 26 | 100 | 0.03 | 3000 |
| BBPY00160808300Y00 | 30 | 100 | 0.030 | 3000 |
| BBPY00160808330Y00 | 33 | 100 | 0.035 | 3000 |
| BBPY00160808400Y00 | 40 | 100 | 0.035 | 3000 |
| BBPY00160808470Y00 | 47 | 100 | 0.04 | 3000 |
| BBPY00160808500Y00 | 50 | 100 | 0.04 | 3000 |
| BBPY00160808600Y00 | 60 | 100 | 0.040 | 3000 |
| BBPY00160808680Y00 | 68 | 100 | 0.05 | 2500 |
| BBPY00160808700Y00 | 70 | 100 | 0.05 | 2500 |
| BBPY00160808750Y00 | 75 | 100 | 0.05 | 2500 |
| BBPY00160808800Y00 | 80 | 100 | 0.050 | 2500 |

| | | | | |
|--------------------|------|-----|-------|------|
| BBPY00160808101Y00 | 100 | 100 | 0.050 | 2500 |
| BBPY00160808121Y00 | 120 | 100 | 0.080 | 2500 |
| BBPY00160808151Y00 | 150 | 100 | 0.085 | 2000 |
| BBPY00160808181Y00 | 180 | 100 | 0.090 | 2000 |
| BBPY00160808201Y00 | 200 | 100 | 0.095 | 2000 |
| BBPY00160808221Y00 | 220 | 100 | 0.100 | 2000 |
| BBPY00160808241Y00 | 240 | 100 | 0.12 | 1500 |
| BBPY00160808301Y00 | 300 | 100 | 0.120 | 1500 |
| BBPY00160808331Y00 | 330 | 100 | 0.120 | 1500 |
| BBPY00160808471Y00 | 470 | 100 | 0.150 | 1500 |
| BBPY00160808601Y00 | 600 | 100 | 0.200 | 1000 |
| BBPY00160808102Y00 | 1000 | 100 | 0.250 | 800 |
| BBPY00160808122Y00 | 1200 | 100 | 0.250 | 800 |
| BBPY00160808152Y00 | 1500 | 100 | 0.400 | 500 |

Note: When ordering, please specify tolerance code. Tolerance : Y=±25%

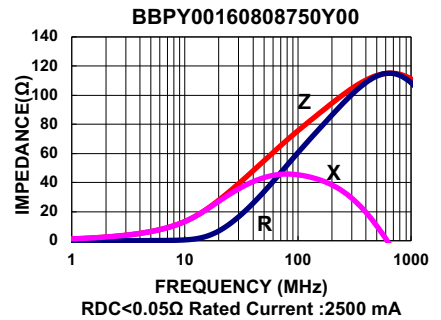
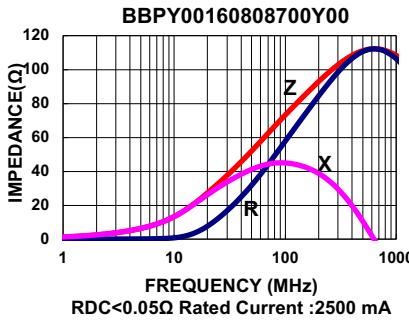
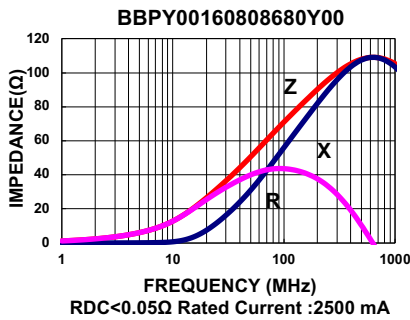
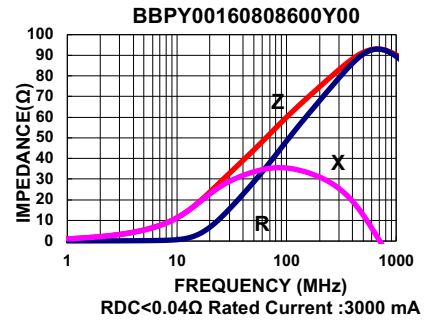
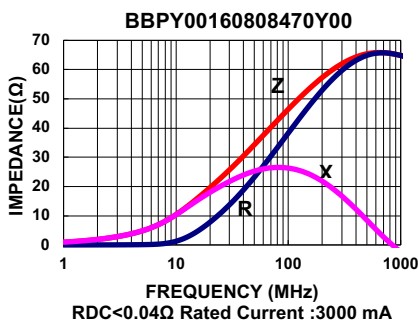
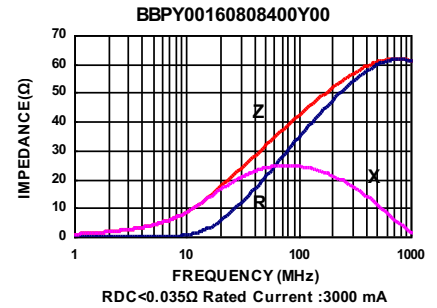
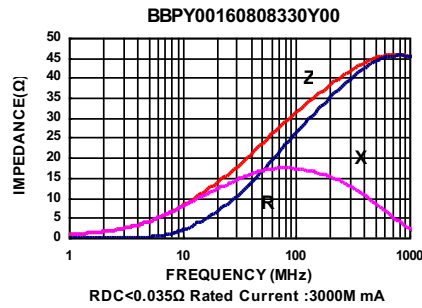
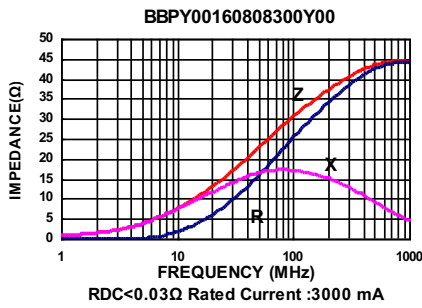
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer

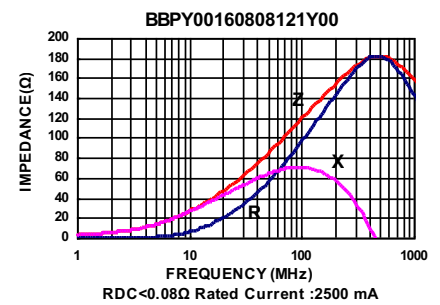
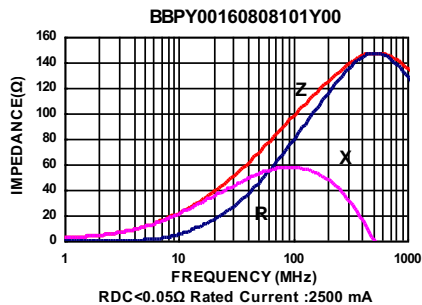
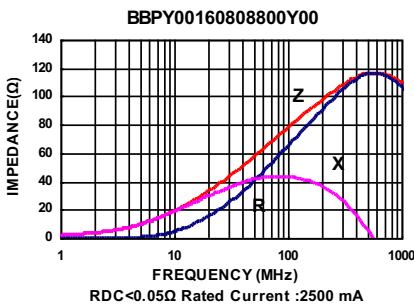


SMD Multi-layer Ferrite Chip Beads

BBPY Series



Test Instruments : Agilent E4991A Impedance / Material Analyzer



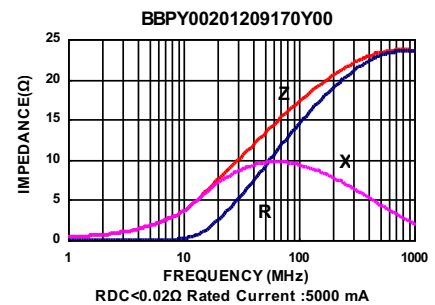
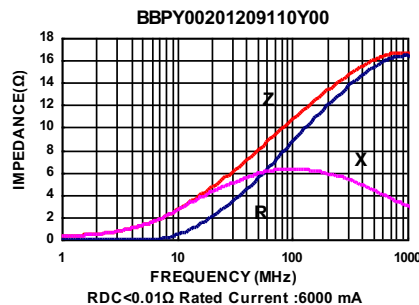
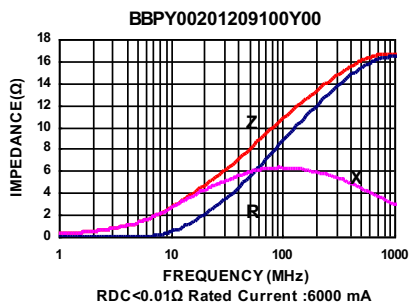
Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| BBPY00201209100Y00 | 10 | 100 | 0.01 | 6000 |
| BBPY00201209110Y00 | 11 | 100 | 0.01 | 6000 |
| BBPY00201209170Y00 | 17 | 100 | 0.02 | 5000 |
| BBPY00201209300Y00 | 30 | 100 | 0.015 | 4000 |
| BBPY00201209500Y00 | 50 | 100 | 0.025 | 3000 |
| BBPY00201209600Y00 | 60 | 100 | 0.03 | 3000 |
| BBPY00201209700Y00 | 70 | 100 | 0.04 | 3000 |
| BBPY00201209800Y00 | 80 | 100 | 0.04 | 3000 |
| BBPY00201209101Y00 | 100 | 100 | 0.04 | 3000 |
| BBPY00201209121Y00 | 120 | 100 | 0.04 | 3000 |
| BBPY00201209221Y00 | 220 | 100 | 0.08 | 2000 |
| BBPY00201209301Y00 | 300 | 100 | 0.08 | 2000 |
| BBPY00201209331Y00 | 330 | 100 | 0.08 | 2000 |
| BBPY00201209471Y00 | 470 | 100 | 0.10 | 2000 |
| BBPY00201209601Y00 | 600 | 100 | 0.10 | 2000 |
| BBPY00201209102Y00 | 1000 | 100 | 0.12 | 1500 |
| BBPY00201209152Y00 | 1500 | 100 | 0.30 | 1000 |

Note: When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

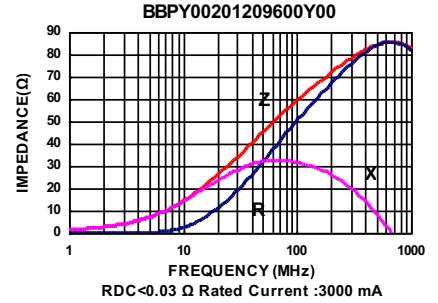
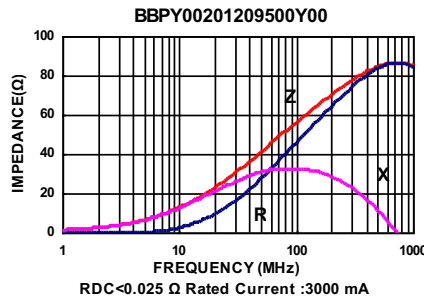
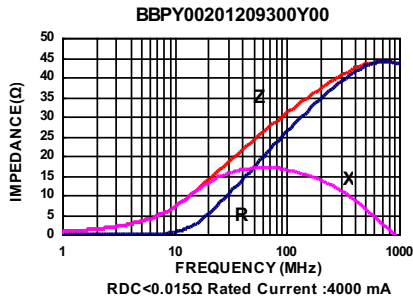
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer

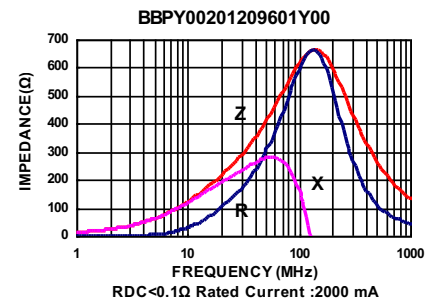
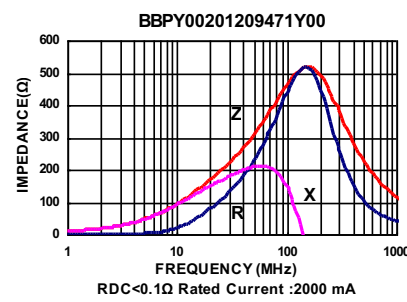
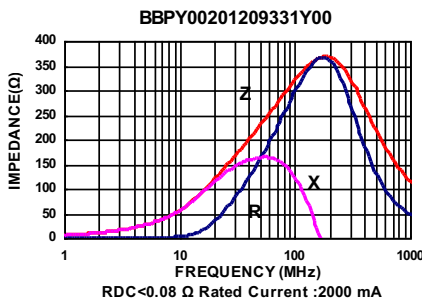
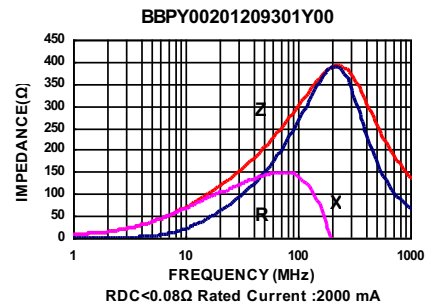
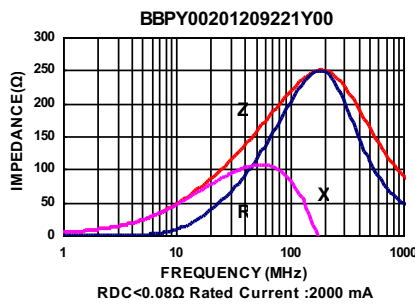
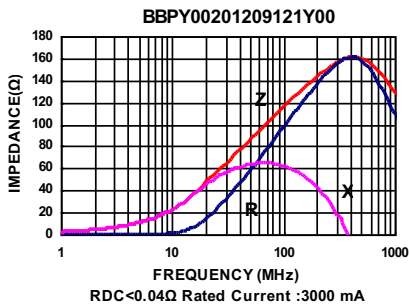
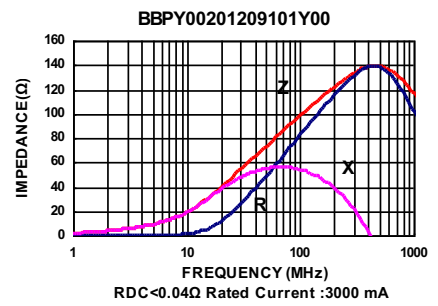
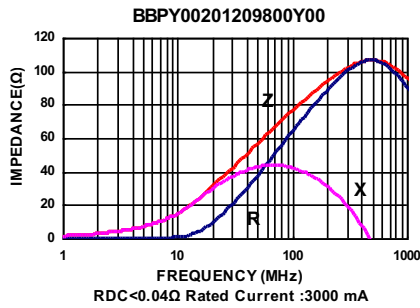
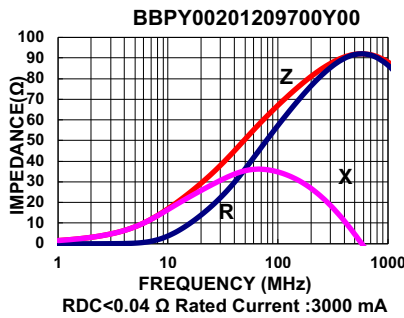


SMD Multi-layer Ferrite Chip Beads

BBPY Series

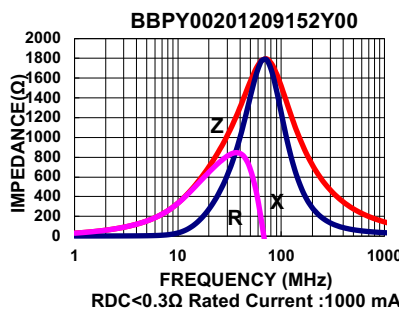
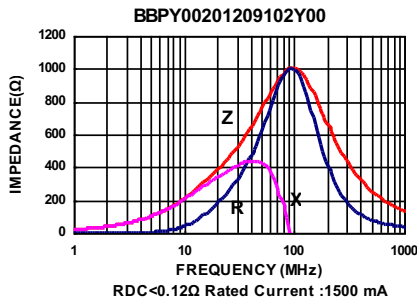


Test Instruments : Agilent E4991A Impedance / Material Analyzer



SMD Multi-layer Ferrite Chip Beads

BBPY Series



Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | RDC (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-------------------------|---------------------------|
| BBPY00321611100Y00 | 10 | 100 | 0.015 | 6000 |
| BBPY00321611110Y00 | 11 | 100 | 0.015 | 6000 |
| BBPY00321611300Y00 | 30 | 100 | 0.015 | 4000 |
| BBPY00321611320Y00 | 32 | 100 | 0.015 | 4000 |
| BBPY00321611330Y00 | 33 | 100 | 0.015 | 4000 |
| BBPY00321611400Y00 | 40 | 100 | 0.015 | 4000 |
| BBPY00321611500Y00 | 50 | 100 | 0.02 | 4000 |
| BBPY00321611600Y00 | 60 | 100 | 0.02 | 4000 |
| BBPY00321611700Y00 | 70 | 100 | 0.02 | 4000 |
| BBPY00321611800Y00 | 80 | 100 | 0.025 | 3000 |
| BBPY00321611101Y00 | 100 | 100 | 0.03 | 3000 |
| BBPY00321611121Y00 | 120 | 100 | 0.03 | 3000 |
| BBPY00321611151Y00 | 150 | 100 | 0.04 | 2000 |
| BBPY00321611201Y00 | 200 | 100 | 0.05 | 2000 |
| BBPY00321611221Y00 | 220 | 100 | 0.05 | 2000 |
| BBPY00321611301Y00 | 300 | 100 | 0.06 | 2000 |
| BBPY00321611331Y00 | 330 | 100 | 0.06 | 2000 |
| BBPY00321611391Y00 | 390 | 100 | 0.06 | 2000 |
| BBPY00321611401Y00 | 400 | 100 | 0.1 | 2000 |
| BBPY00321611471Y00 | 470 | 100 | 0.1 | 2000 |
| BBPY00321611501Y00 | 500 | 100 | 0.1 | 2000 |
| BBPY00321611601Y00 | 600 | 100 | 0.1 | 2000 |

SMD Multi-layer Ferrite Chip Beads

BBPY Series

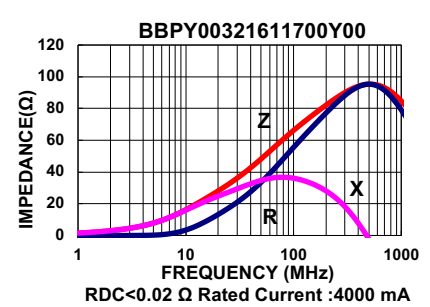
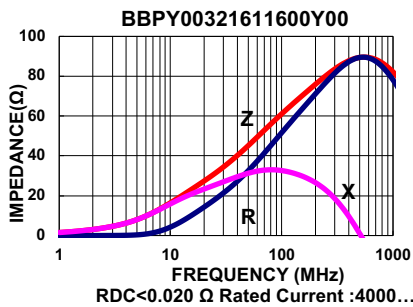
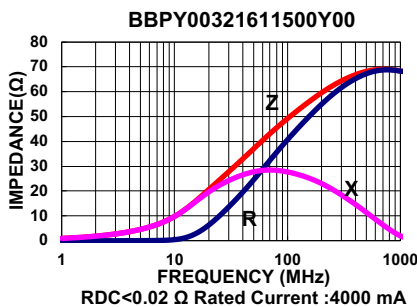
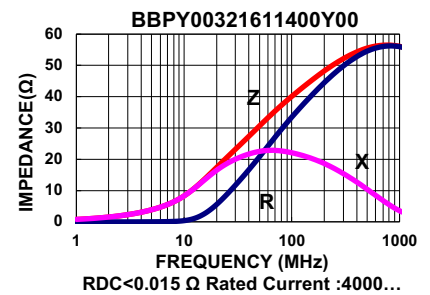
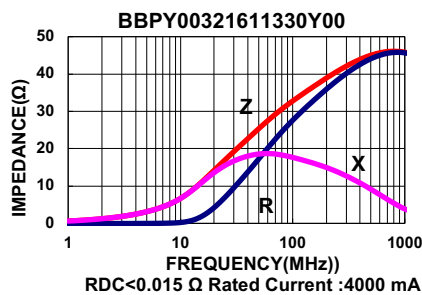
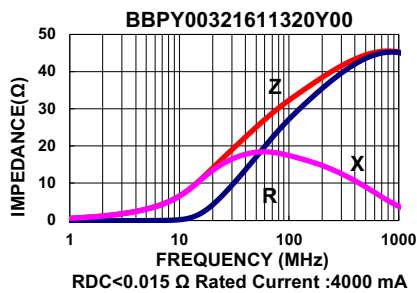
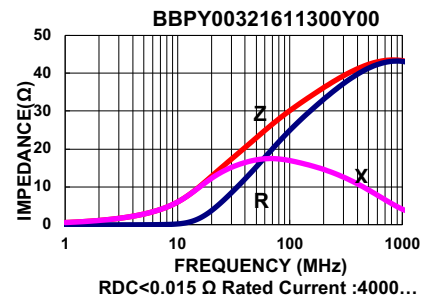
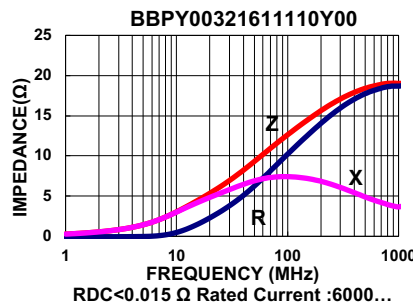
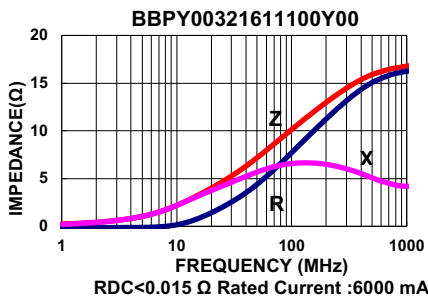


| | | | | |
|--------------------|------|----|------|------|
| BBPY00321611102Y00 | 1000 | 50 | 0.15 | 1200 |
| BBPY00321611122Y00 | 1200 | 50 | 0.18 | 1000 |
| BBPY00321611152Y00 | 1500 | 50 | 0.2 | 800 |

Note: When ordering, please specify tolerance code. Tolerance : Y=±25%

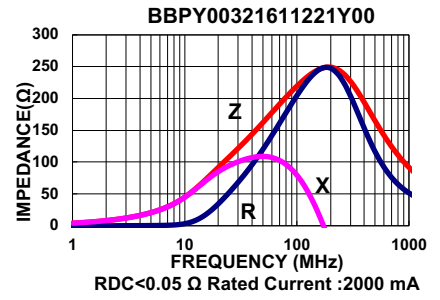
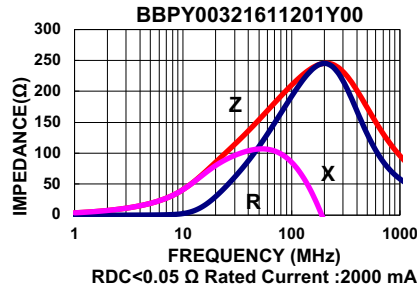
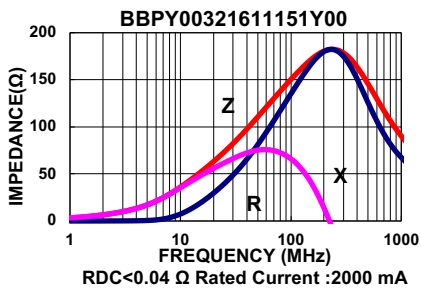
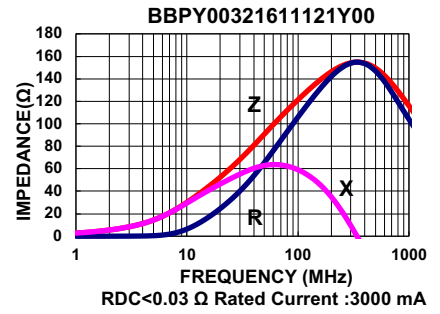
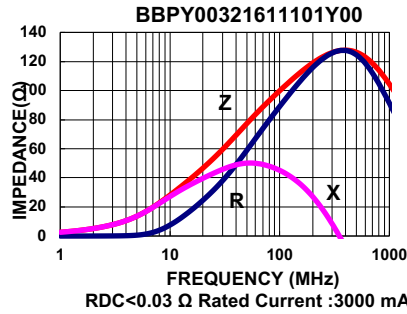
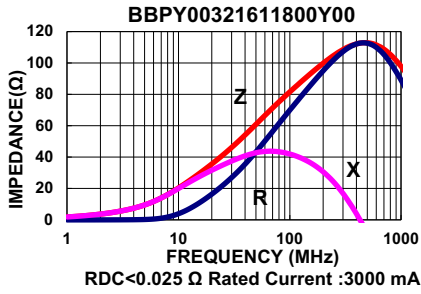
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer

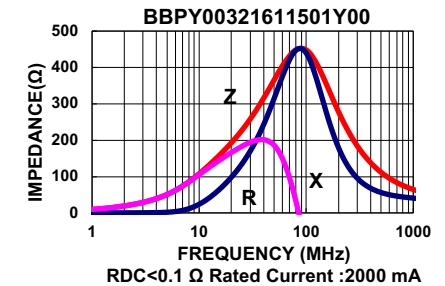
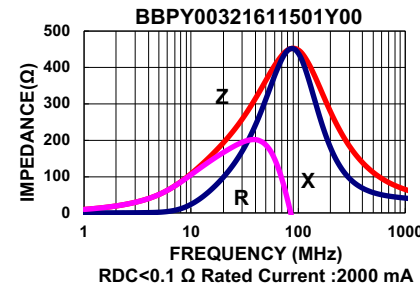
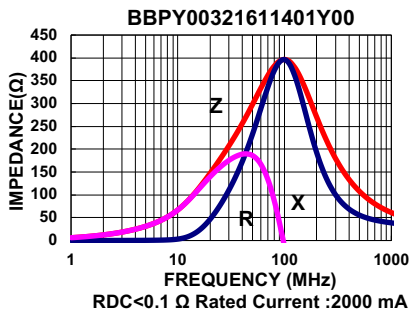
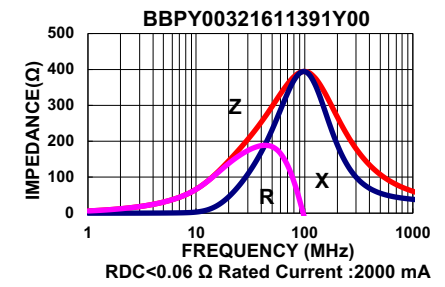
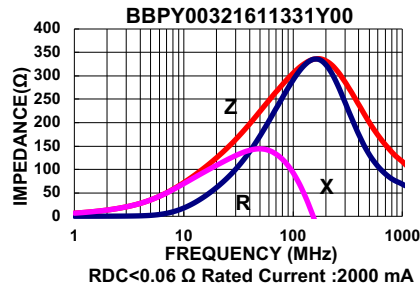
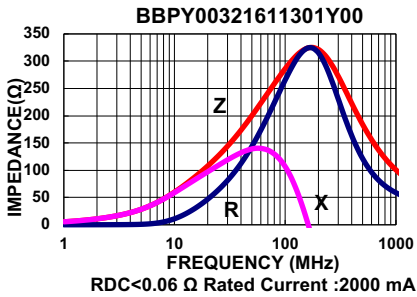


SMD Multi-layer Ferrite Chip Beads

BBPY Series

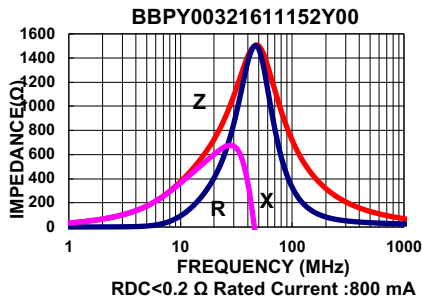
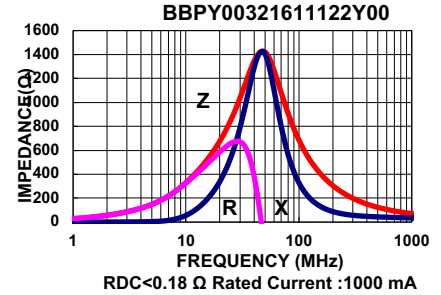
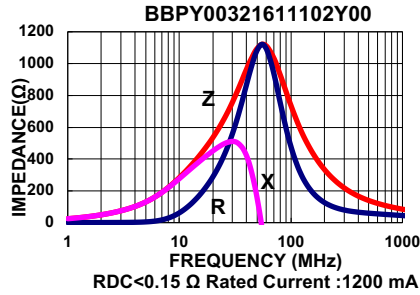
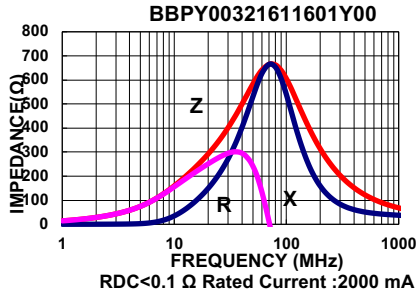


Test Instruments : Agilent E4991A Impedance / Material Analyzer



SMD Multi-layer Ferrite Chip Beads

BBPY Series



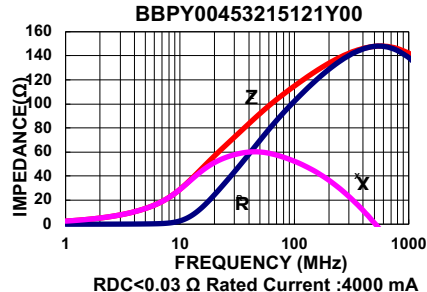
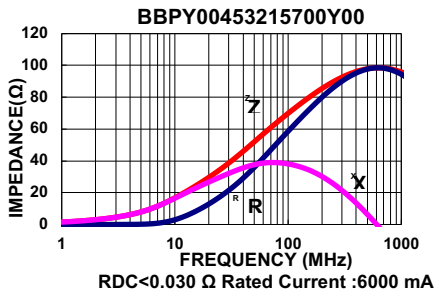
Electrical Characteristics

| Part Number | Impedance ($\Omega \pm 25\%$) | Test Frequency (MHz) | DC Resistance (Ω) Max | Rated current (mA) Max |
|--------------------|------------------------------------|-------------------------|-----------------------------------|---------------------------|
| BBPY00453215700Y00 | 70 | 100 | 0.030 | 6000 |
| BBPY00453215121Y00 | 120 | 100 | 0.030 | 4000 |

Note: When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer

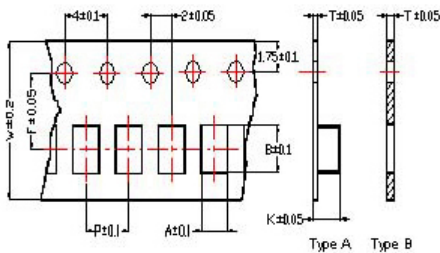


SMD Multi-layer Ferrite Chip Beads

BBPY Series

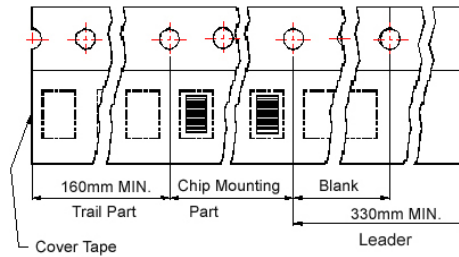
Packaging Specifications

Tape Dimensions

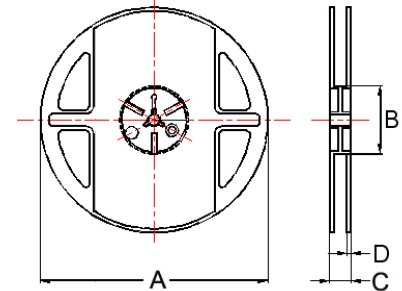


Tape Material

Carrier Tape: Polycarbonate (Tape A)
Carrier Tape: Paper (Tape B)
Cover Tape: Polystyrene



Reel Dimensions



- ① : BBSY/BBSJ/BBNQ/BBPY ③ : BBUP
- ② : BBSY/BBSJ/BBNQ/BBPY/BBUP/BBFY/BBFJ
- ④ : BBBK/BBSJ/BBGK/BBPY/BBNQ/BBUP/BBHV
- ⑤ : BBBK/BBGK/BBPY/BBUP
- ⑥ : BBSY/BBBK/BBPY/BBUP
- ⑦ : BBPY/BBUP

Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | | Reel Dimensions | | | | Quantity |
|---------|-----------------|------|------|-----|-----|-----|------|------|-----------------|----|----|---|------------|
| | A | B | T | W | P | F | K | Tape | A | B | C | D | PCS / REEL |
| ①060303 | 0.37 | 0.67 | 0.42 | 8.0 | 2.0 | 3.5 | - | B | 178 | 60 | 10 | 2 | 15000 |
| ②100505 | 0.62 | 1.12 | 0.60 | 8.0 | 2.0 | 3.5 | - | B | 178 | 60 | 12 | 2 | 10000 |
| ③160805 | 1.05 | 1.85 | 0.60 | 8.0 | 2.0 | 3.5 | - | B | 178 | 60 | 12 | 2 | 10000 |
| ④160808 | 1.05 | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | - | B | 178 | 60 | 12 | 2 | 4000 |
| ⑤201209 | 1.50 | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | - | B | 178 | 60 | 12 | 2 | 4000 |
| ⑥321611 | 1.88 | 3.50 | 0.22 | 8.0 | 4.0 | 3.5 | 1.27 | A | 178 | 60 | 12 | 2 | 3000 |
| ⑦453215 | 3.66 | 4.95 | 0.24 | 12 | 8.0 | 5.5 | 1.85 | A | 178 | 60 | 14 | 2 | 1000 |

For More Information:

Americas - prodinfo_power_americas@yageo.com | Europe - prodinfo_power_emea@yageo.com | Asia - prodinfo_power_asia@yageo.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. Pulse Electronics, Inc. All rights reserved.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View BBPY00201209600Y00 on WIN SOURCE](#)

 [Pulse Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management