

Chip Bead ABSY/ABBK Series

Automotive
AEC-Q200

RoHS Compliant
Halogen Free
REACH Compliant



Noise
Suppression

Shield

Multilayer

Ferrite

General
Signal line

Part Numbering

| A | BBK | 00 | 100505 | 400 | Y | 00 |
|-------|-------------|--------------|-------------------------|------------------|-----------|---------------|
| Grade | Series Name | Control Code | Dimensions Code (mm) | Impedance (Ω) | Tolerance | Internal Code |
| | BSY | | 100505 1.0x0.5x0.5 | 300 30 | Y ±25% | |
| | BBK | | 160808 1.6x0.8x0.8 | 121 120 | | |
| | | | 201209 2.0x1.25x0.9 | 102 1000 | | |
| | | | 321611 3.2x1.6x1.1 | | | |

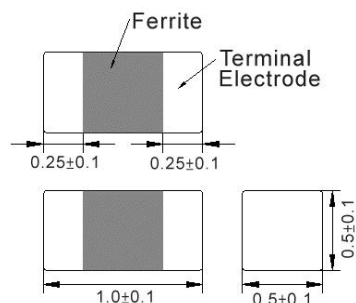
This specification applies to Multilayer Chip ferrite Bead for Automotive Electronics based on AEC-Q200 except for Power train and Safety.

Chip Bead ABSY/ABBK Series

Automotive
AEC-Q200

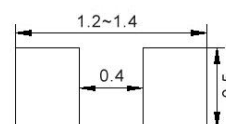
ABSY00100505 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

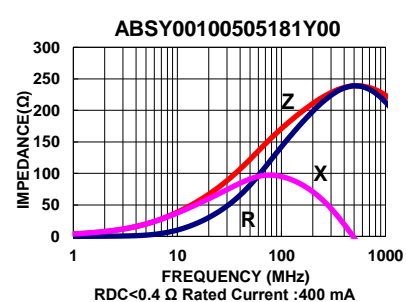
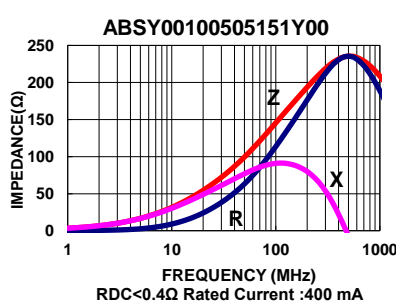
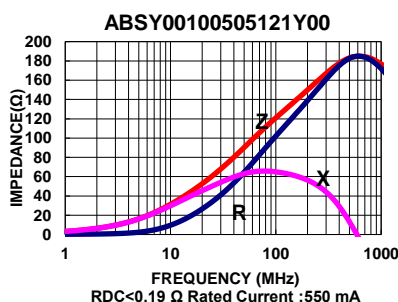
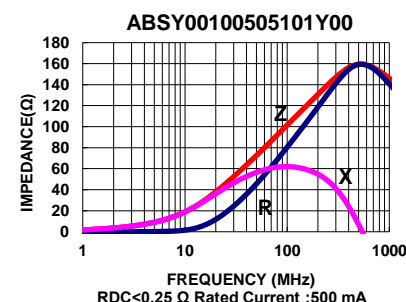
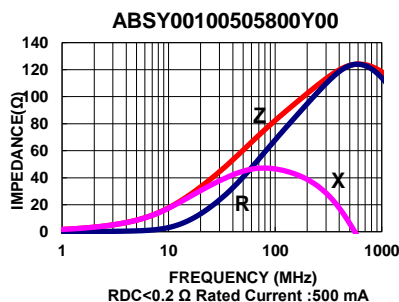
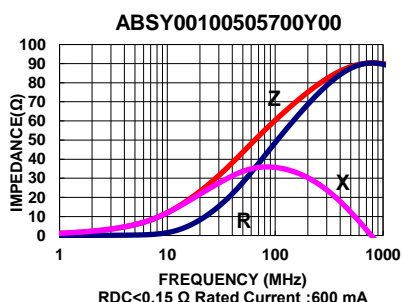
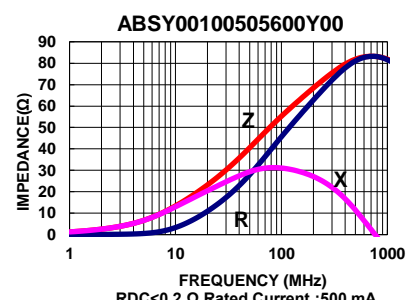
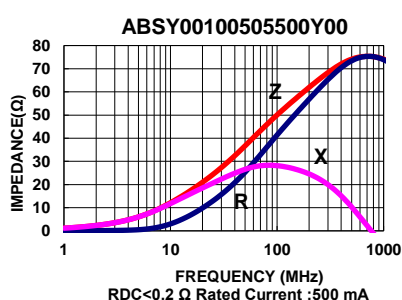
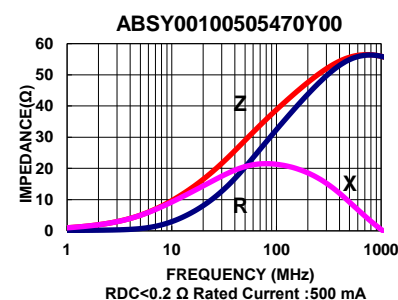
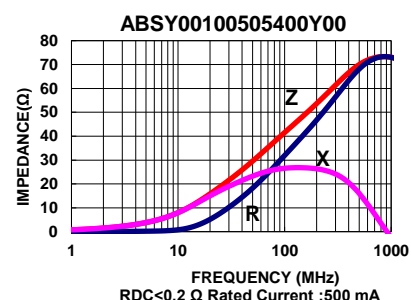
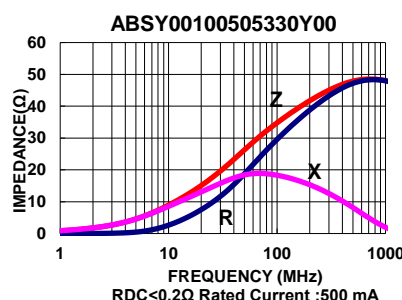
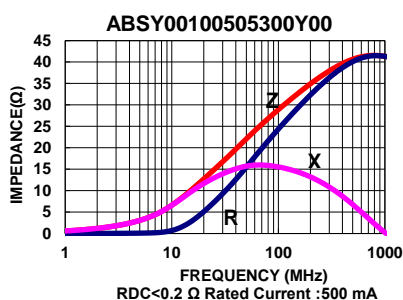
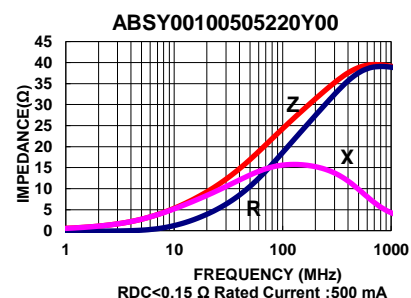
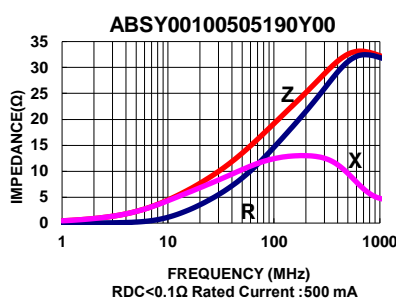
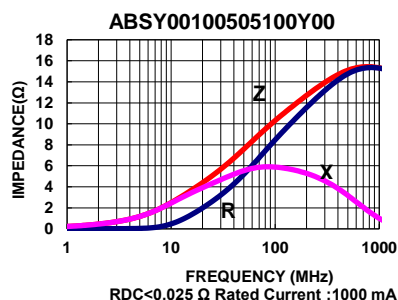
| Part No. | Impedance (Ω) | Test Freq. | RDC (Ω)Max. | Rated Current (mA)Max. |
|--------------------|---------------|----------------|-------------|------------------------|
| ABSY00100505100Y00 | 10 | 100 MHz,200 mV | 0.025 | 1000 |
| ABSY00100505190Y00 | 19 | 100 MHz,200 mV | 0.10 | 500 |
| ABSY00100505220Y00 | 22 | 100 MHz,200 mV | 0.15 | 500 |
| ABSY00100505300Y00 | 30 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505330Y00 | 33 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505400Y00 | 40 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505470Y00 | 47 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505500Y00 | 50 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505600Y00 | 60 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505700Y00 | 70 | 100 MHz,200 mV | 0.15 | 600 |
| ABSY00100505800Y00 | 80 | 100 MHz,200 mV | 0.20 | 500 |
| ABSY00100505101Y00 | 100 | 100 MHz,200 mV | 0.25 | 500 |
| ABSY00100505121Y00 | 120 | 100 MHz,200 mV | 0.19 | 550 |
| ABSY00100505151Y00 | 150 | 100 MHz,200 mV | 0.40 | 400 |
| ABSY00100505181Y00 | 180 | 100 MHz,200 mV | 0.40 | 400 |
| ABSY00100505221Y00 | 220 | 100 MHz,200 mV | 0.29 | 450 |
| ABSY00100505241Y00 | 240 | 100 MHz,200 mV | 0.40 | 400 |
| ABSY00100505301Y00 | 300 | 100 MHz,200 mV | 0.50 | 300 |
| ABSY00100505471Y00 | 470 | 100 MHz,200 mV | 0.50 | 300 |
| ABSY00100505481Y00 | 480 | 100 MHz,200 mV | 0.50 | 300 |
| ABSY00100505601Y00 | 600 | 100 MHz,200 mV | 0.52 | 300 |
| ABSY00100505102Y00 | 1000 | 100 MHz,200 mV | 0.65 | 300 |

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

- Operating temperature range - 55°C ~ 125°C
- 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

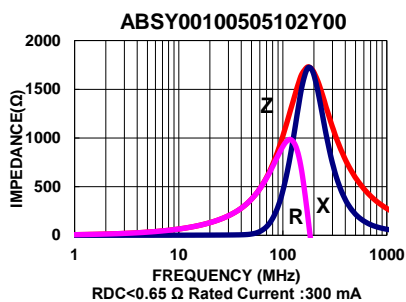
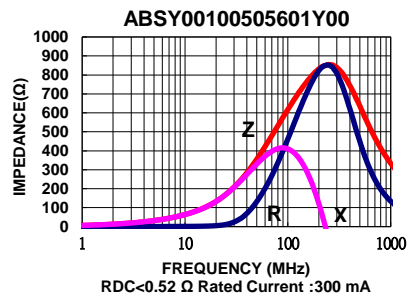
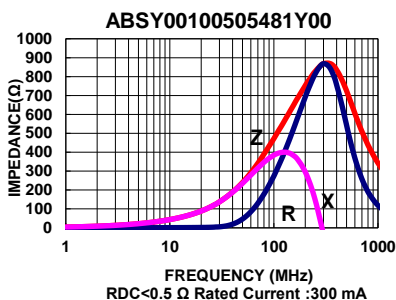
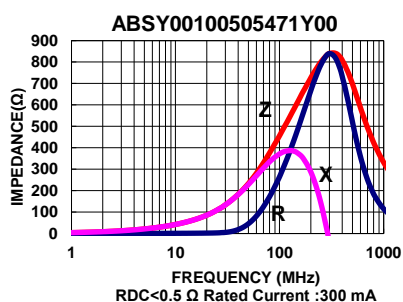
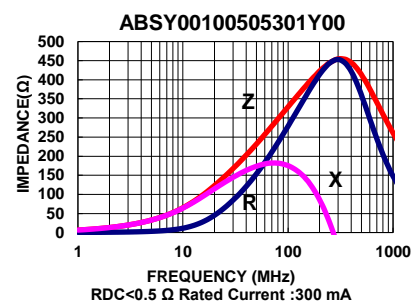
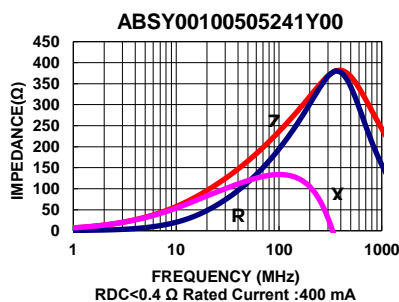
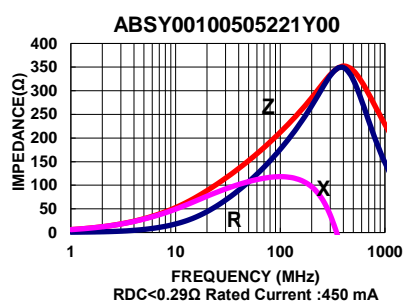
ABSY00100505 Type

Characteristics Graph



ABSY00100505 Type

Characteristics Graph

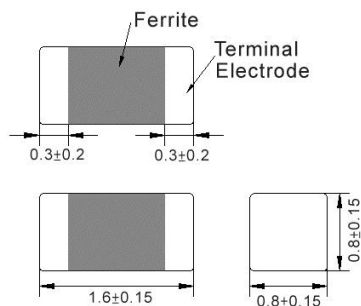


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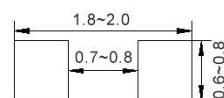
ABBK00160808 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

| Part No. | Impedance (Ω) | Test Freq. | RDC (Ω)Max. | Rated Current (mA)Max. |
|--------------------|---------------|----------------|-------------|------------------------|
| ABBK00160808100Y00 | 10 | 100 MHz,200 mV | 0.05 | 500 |
| ABBK00160808300Y00 | 30 | 100 MHz,200 mV | 0.10 | 400 |
| ABBK00160808600Y00 | 60 | 100 MHz,200 mV | 0.10 | 400 |
| ABBK00160808800Y00 | 80 | 100 MHz,200 mV | 0.15 | 400 |
| ABBK00160808121Y00 | 120 | 100 MHz,200 mV | 0.25 | 400 |
| ABBK00160808181Y00 | 180 | 100 MHz,200 mV | 0.30 | 300 |
| ABBK00160808221Y00 | 220 | 100 MHz,200 mV | 0.30 | 300 |
| ABBK00160808301Y00 | 300 | 100 MHz,200 mV | 0.40 | 300 |
| ABBK00160808471Y00 | 470 | 100 MHz,200 mV | 0.50 | 300 |
| ABBK00160808601Y00 | 600 | 100 MHz,200 mV | 0.50 | 300 |
| ABBK00160808102Y00 | 1000 | 100 MHz,200 mV | 0.60 | 300 |

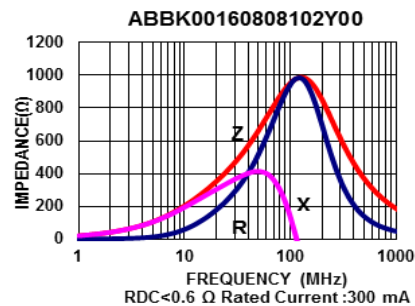
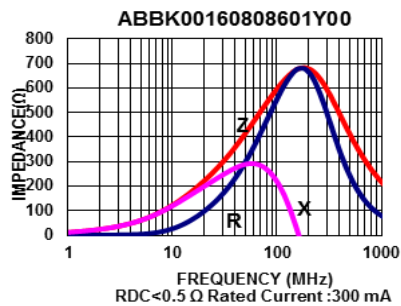
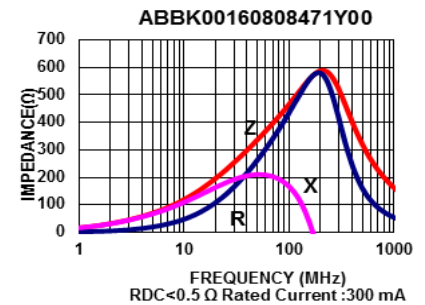
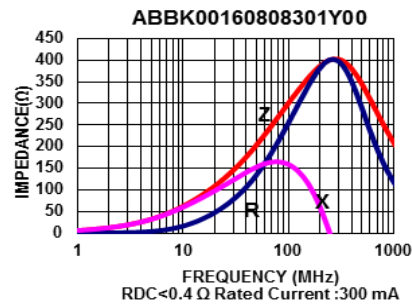
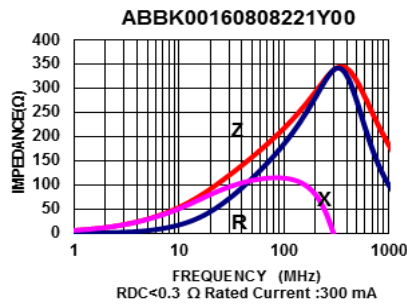
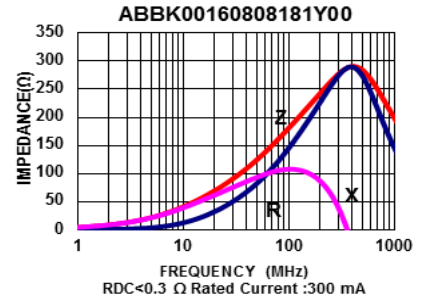
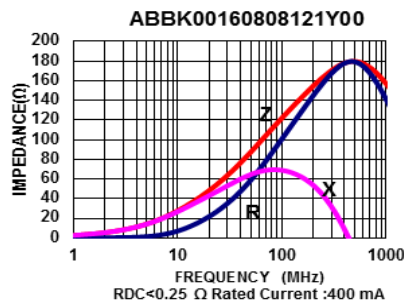
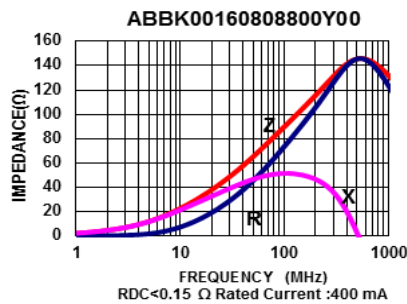
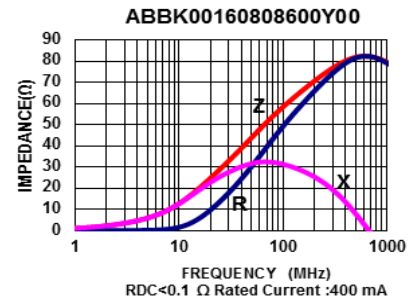
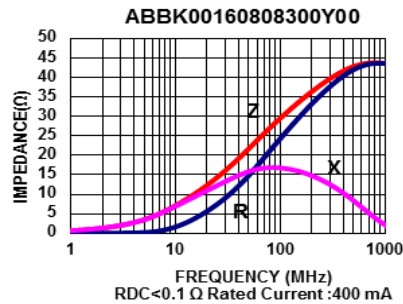
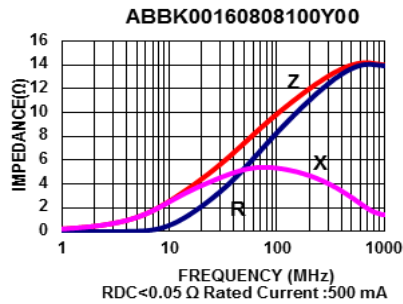
Note: When ordering, please specify tolerance code. Tolerance: Y=±25%

- Operating temperature range - 55°C ~ 125°C
- 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



ABBK00160808 Type

Characteristics Graph

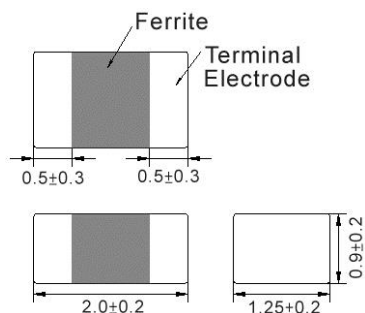


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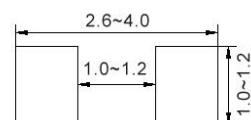
ABBK00201209 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

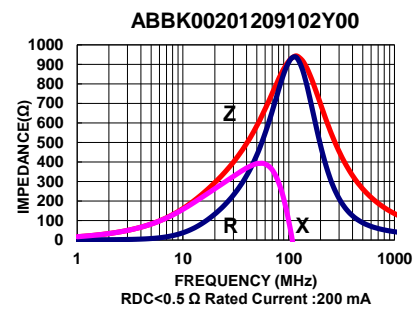
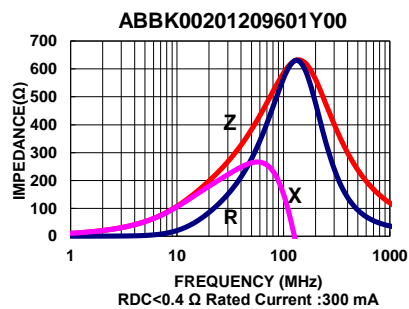
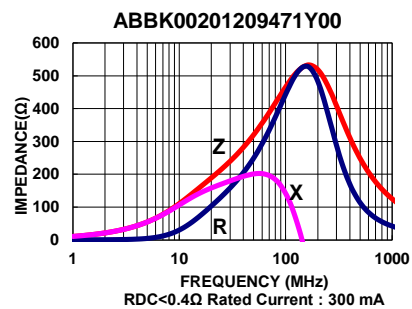
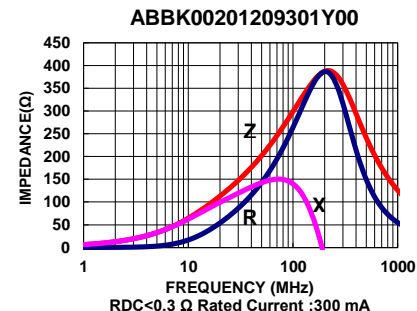
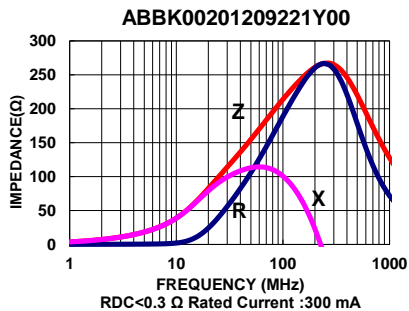
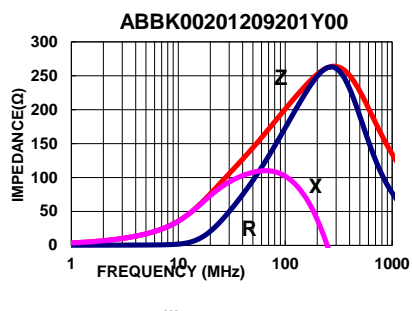
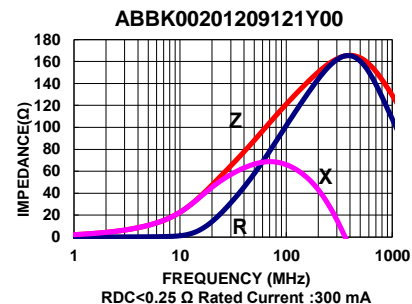
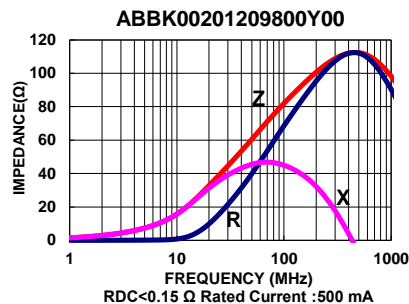
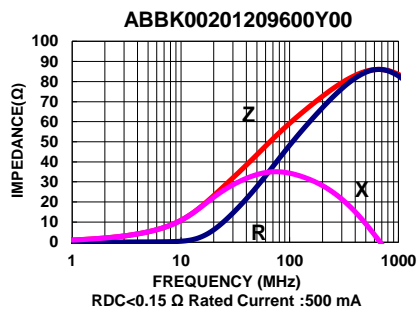
| Part No. | Impedance (Ω) | Test Freq. | RDC (Ω)Max. | Rated Current (mA)Max. |
|--------------------|---------------------------|----------------|-------------------------|---------------------------|
| ABBK00201209600Y00 | 60 | 100 MHz,200 mV | 0.15 | 500 |
| ABBK00201209800Y00 | 80 | 100 MHz,200 mV | 0.15 | 500 |
| ABBK00201209121Y00 | 120 | 100 MHz,200 mV | 0.25 | 300 |
| ABBK00201209201Y00 | 200 | 100 MHz,200 mV | 0.30 | 300 |
| ABBK00201209221Y00 | 220 | 100 MHz,200 mV | 0.30 | 300 |
| ABBK00201209301Y00 | 300 | 100 MHz,200 mV | 0.30 | 300 |
| ABBK00201209471Y00 | 470 | 100 MHz,200 mV | 0.40 | 300 |
| ABBK00201209601Y00 | 600 | 100 MHz,200 mV | 0.40 | 300 |
| ABBK00201209102Y00 | 1000 | 100 MHz,200 mV | 0.50 | 200 |

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

- Operating temperature range - 55°C ~ 125°C
- 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

ABBK00201209 Type

Characteristics Graph

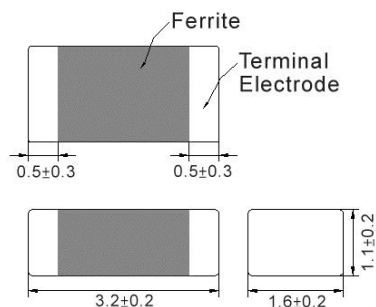


Chip Bead ABSY/ABBK Series

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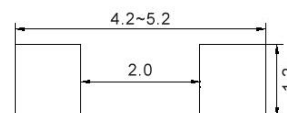
ABBK00321611 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

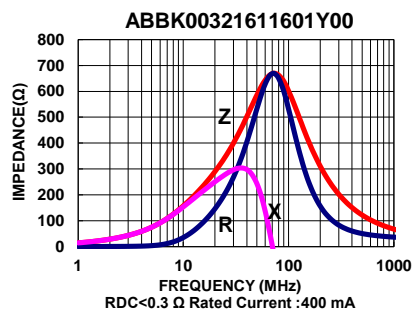
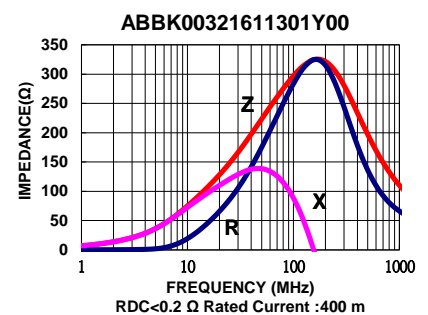
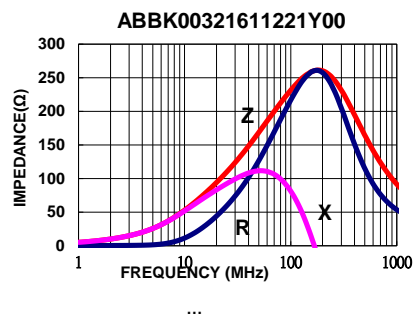
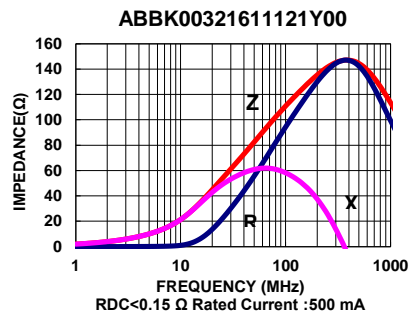
| Part No. | Impedance (Ω) | Test Freq. | RDC (Ω)Max. | Rated Current (mA)Max. |
|--------------------|---------------|-----------------|-------------|------------------------|
| ABBK00321611121Y00 | 120 | 100 MHz, 200 mV | 0.15 | 500 |
| ABBK00321611221Y00 | 220 | 100 MHz, 200 mV | 0.20 | 400 |
| ABBK00321611301Y00 | 300 | 100 MHz, 200 mV | 0.20 | 400 |
| ABBK00321611601Y00 | 600 | 100 MHz, 200 mV | 0.30 | 400 |

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

- Operating temperature range - 55°C ~ 125°C
- 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

ABBK00321611 Type

Characteristics Graph



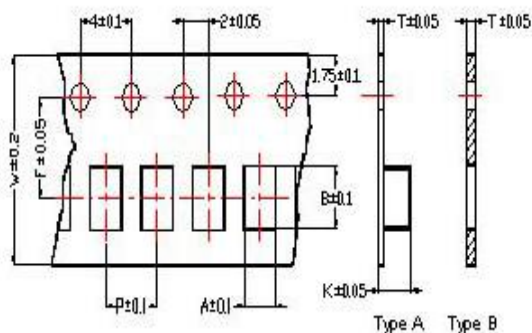


Chip Bead ABSY/ABBK Series

Automotive
AEC-Q200

■ Packaging

Tape Dimensions

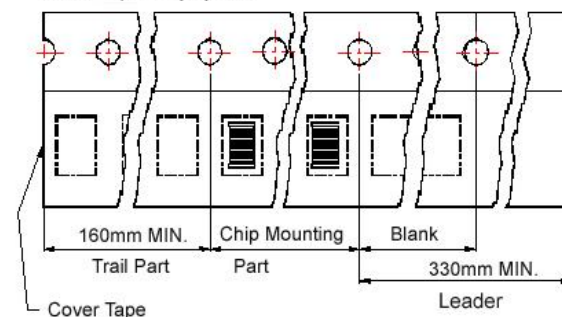


Tape Material

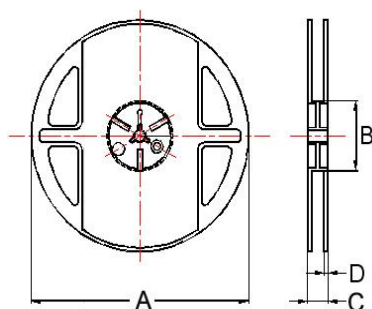
Carrier Tape: Polycarbonate (Tape A)

Carrier Tape: Paper (Tape B)

Cover Tape: Polystyrene



Reel Dimensions



Dimensions in mm

| TYPE | Tape Dimensions | | | | | | | | Reel Dimensions | | | | Quantity PCS / Reel |
|--------------|-----------------|------|------|---|---|-----|------|------|-----------------|----|----|---|------------------------|
| | A | B | T | W | P | F | K | Tape | A | B | C | D | |
| ABBY00100505 | 0.62 | 1.12 | 0.60 | 8 | 2 | 3.5 | - | B | 178 | 60 | 12 | 2 | 10000 |
| ABBK00160808 | 1.05 | 1.85 | 0.95 | 8 | 4 | 3.5 | - | B | 178 | 60 | 12 | 2 | 4000 |
| ABBK00201209 | 1.50 | 2.30 | 0.97 | 8 | 4 | 3.5 | - | B | 178 | 60 | 12 | 2 | 4000 |
| ABBK00321611 | 1.88 | 3.50 | 0.22 | 8 | 4 | 3.5 | 1.27 | A | 178 | 60 | 12 | 2 | 3000 |