

## BSCY Series



The SMD multi-layered ferrite chip inductors provide a cost-effective solution for densely packed PC board designs. BSCY series comes in 3 sizes and is suitable for low frequency applications.

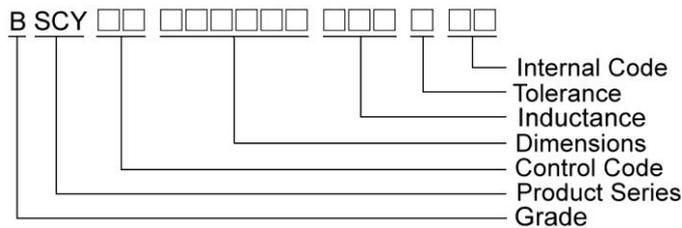
### Features

- RoHS compliant
- High mounting density of compact circuit due to crosstalk elimination that results from a closed magnetic flux in a ferrite material
- Suitable for flow and re-flow soldering
- Available in 3 sizes

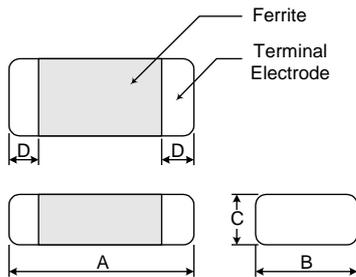
### Applications

- Personal computers, HDDs, other various electronic devices
- Any portable device where compact size and high mounting densities are required

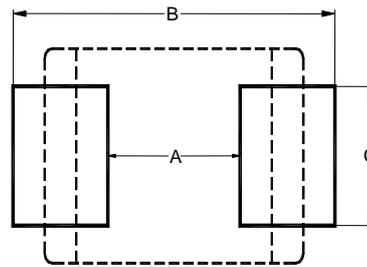
### Product Identification



### Shape and Dimensions



### Recommended Pattern



Dimensions in mm

| TYPE         | A       | B        | C        | D       |
|--------------|---------|----------|----------|---------|
| BSCY00160808 | 1.6±0.2 | 0.80±0.2 | 0.80±0.2 | 0.3±0.2 |
| BSCY00201209 | 2.0±0.2 | 1.25±0.2 | 0.90±0.2 | 0.5±0.3 |
| BSCY00201212 | 2.0±0.2 | 1.25±0.2 | 1.25±0.2 | 0.5±0.3 |

Dimensions in mm

| TYPE         | A         | B         | C         |
|--------------|-----------|-----------|-----------|
| BSCL00160808 | 0.7 ~ 0.8 | 1.8 ~ 2.0 | 0.6 ~ 0.8 |
| BSCL00201209 | 1.0 ~ 1.2 | 2.6 ~ 4.0 | 1.0 ~ 1.4 |
| BSCL00201212 | 1.0 ~ 1.2 | 2.6 ~ 4.0 | 1.0 ~ 1.2 |

# SMD Multilayer Ferrite Chip Inductors – BSCY Series

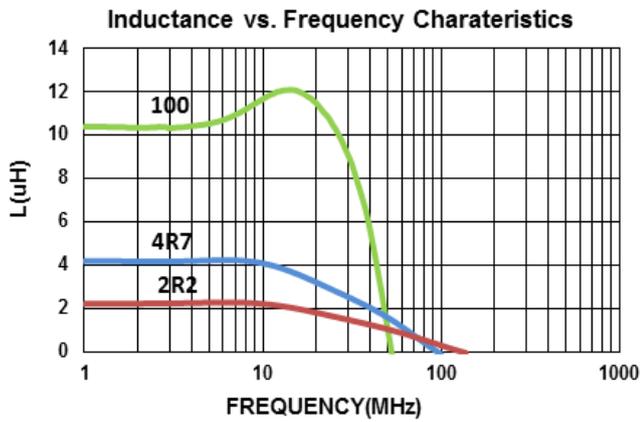
## Electrical Characteristics

| Part Number        | Inductance (μH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) Max | Rated Current (mA) Max |
|--------------------|-----------------|----------------|----------------------|-------------|------------------------|
| BSCY001608082R2□CP | 2.2             | 30 / 20        | 1                    | 0.20        | 1000                   |
| BSCY001608084R7□CP | 4.7             | 30 / 20        | 1                    | 0.25        | 800                    |
| BSCY00160808100□CP | 10              | 30 / 20        | 1                    | 0.90        | 90                     |

**Note:** When ordering, please specify tolerance code. Tolerance : M=±20% , T=±30%

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
  - L & Q : HP4291A
  - SRF : Agilent HP8753D/Agilent E4991A
  - RDC : HP4338B or CHEN HWA 502

**Test Instruments :** Agilent E4991A Impedance / Material Analyzer



# SMD Multilayer Ferrite Chip Inductors – BSCY Series

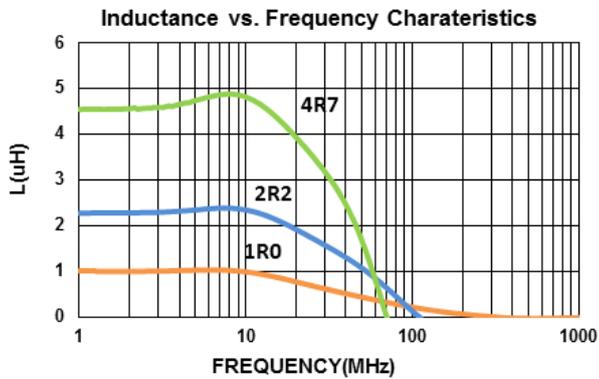
## Electrical Characteristics

| Part Number        | Inductance (μH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) Max | Rated Current (mA) Max |
|--------------------|-----------------|----------------|----------------------|-------------|------------------------|
| BSCY002012091R0□CP | 1.0             | 30 / 20        | 1                    | 0.06        | 2200                   |
| BSCY002012092R2□CP | 2.2             | 30 / 20        | 1                    | 0.10        | 2000                   |
| BSCY002012094R7□CP | 4.7             | 30 / 20        | 1                    | 0.30        | 900                    |

**Note: When ordering, please specify tolerance code. Tolerance : M=±20% , T=±30%**

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- Measure Equipment :
  - L & Q : HP4291A
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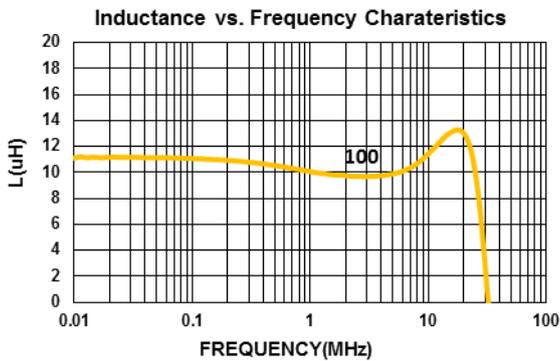
## Electrical Characteristics

| Part Number        | Inductance ( $\mu\text{H}$ ) | Tolerance ( $\pm\%$ ) | Test Frequency (MHz) | RDC ( $\Omega$ ) Max | Rated Current (mA) Max |
|--------------------|------------------------------|-----------------------|----------------------|----------------------|------------------------|
| BSCY00201212100□CP | 10                           | 30 / 20               | 1                    | 0.50                 | 400                    |

**Note:** When ordering, please specify tolerance code. Tolerance : M= $\pm 20\%$  , T= $\pm 30\%$

- Operating temperature range - 40°C ~ 105°C(Including self - temperature rise)
- Rated Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
  - L & Q : HP4291A
  - SRF : Agilent HP8753D/Agilent E4991A
  - RDC : HP4338B or CHEN HWA 502

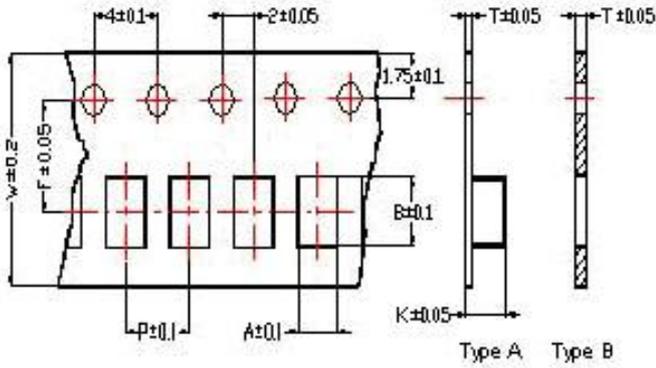
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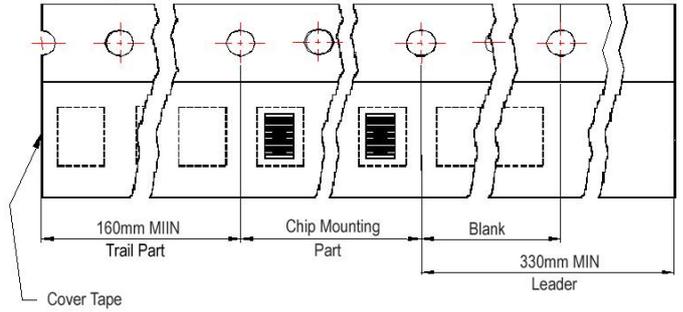
## Packaging Specifications

### Tape Dimensions

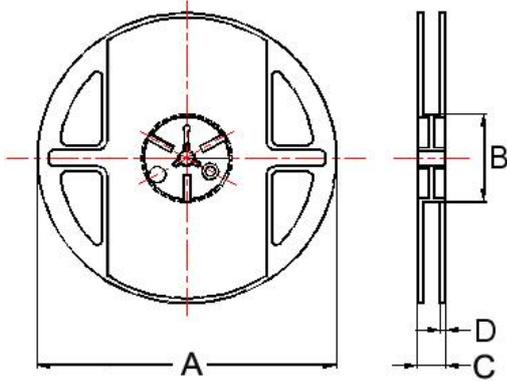


### Tape Material

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



### Reel Dimensions



### Dimensions in mm

| TYPE         | Tape Dimensions |      |      |     |     |     |      |      | Reel Dimensions |    |    |     | Quantity<br>PCS / Reel |
|--------------|-----------------|------|------|-----|-----|-----|------|------|-----------------|----|----|-----|------------------------|
|              | A               | B    | T    | W   | P   | F   | K    | Tape | A               | B  | C  | D   |                        |
| BSCY00160808 | 1.05            | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | -    | B    | 178             | 60 | 12 | 1.5 | 4000                   |
| BSCY00201209 | 1.50            | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | -    | B    | 178             | 60 | 12 | 1.5 | 4000                   |
| BSCY00201212 | 1.35            | 2.25 | 0.22 | 8.0 | 4.0 | 3.5 | 1.35 | A    | 178             | 60 | 12 | 1.5 | 3000                   |