## **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.

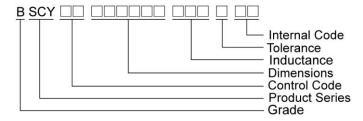
#### **Features**

- 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

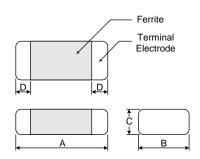
# **Applications**

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

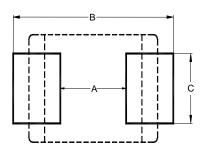
## **Product Identification**



## **Shape and Dimensions**



#### **Recommended Pattern**



# Dimensions in mm

| 21111011010110 11111111 |         |          |          |         |  |
|-------------------------|---------|----------|----------|---------|--|
| TYPE                    | Α       | В        | С        | 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         | Α         | В         | С         |
|--------------|-----------|-----------|-----------|
| 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<br>(μΗ) | Tolerance<br>(±%) | Test<br>Frequency<br>(MHz) | RDC<br>(Ω) Max | Rated Current<br>(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                        |  |

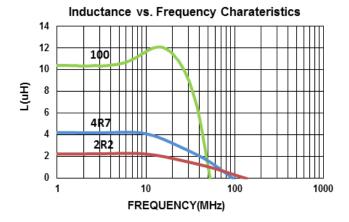
Note: When ordering, please specify tolerance code. Tolerance: M=±20%, T=±30%

- 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 T<br>t Number (μΗ) |         | Test<br>Frequency<br>(MHz) | RDC<br>(Ω) Max | Rated Current<br>(mA) Max |
|--------------------|-------------------------------|---------|----------------------------|----------------|---------------------------|
| BSCY002012092R2□CP | 2.2                           | 30 / 20 | 1                          | 0.10           | 2000                      |
| BSCY002012094R7□CP | 4.7                           | 30 / 20 | 1                          | 0.30           | 900                       |

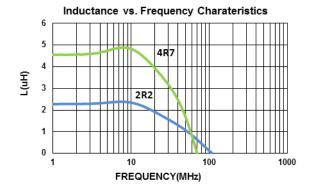
Note: When ordering, please specify tolerance code. Tolerance : M= $\pm 20\%$  , T= $\pm 30\%$ 

- 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

# Test Instruments: Agilent E4991A Impedance / Material Analyzer



# **SMD Multilayer Ferrite Chip Inductors – BSCY Series**

#### **Electrical Characteristics**

| Part Number        | Inductance Tolerance (µH) (±%) |         | Test<br>Frequency<br>(MHz) | RDC<br>(Ω) Max | Rated Current<br>(mA) Max |
|--------------------|--------------------------------|---------|----------------------------|----------------|---------------------------|
| BSCY00201212100□CP | 10                             | 30 / 20 | 1                          | 0.50           | 400                       |

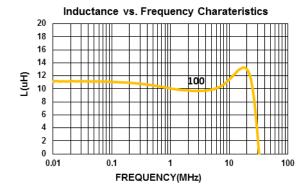
Note: When ordering, please specify tolerance code. Tolerance: M=±20%, T=±30%

- 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

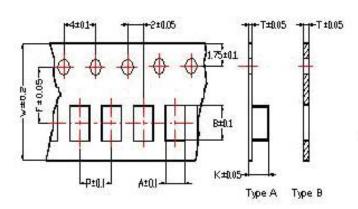
# Test Instruments: Agilent E4991A Impedance / Material Analyzer



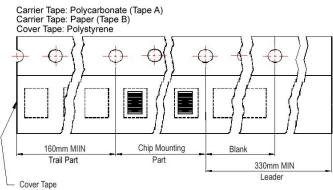
# **SMD Multilayer Ferrite Chip Inductors - BSCY Series**

# **Packaging Specifications**

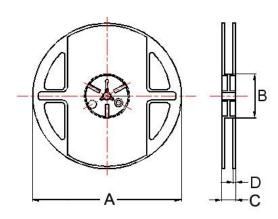
**Tape Dimensions** 



## **Tape Material**



## **Reel Dimensions**



#### Dimensions in mm

| TYPE         | Tape Dimensions |      |      |     |     |     |      |      | Reel Dimensions |    |    |     | Quantity   |
|--------------|-----------------|------|------|-----|-----|-----|------|------|-----------------|----|----|-----|------------|
| IIFE         | Α               | В    | т    | W   | Р   | F   | K    | Таре | Α               | В  | С  | D   | PCS / Reel |
| BSCY00160808 | 1.05            | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | -    | В    | 178             | 60 | 12 | 1.5 | 4000       |
| BSCY00201209 | 1.50            | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | -    | В    | 178             | 60 | 12 | 1.5 | 4000       |
| BSCY00201212 | 1.35            | 2.25 | 0.22 | 8.0 | 4.0 | 3.5 | 1.35 | Α    | 178             | 60 | 12 | 1.5 | 3000       |

