## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Ferrite Inductors Conformally Coated SBCP Coils



#### **Overview**

Ferrite power inductors are useful in various fields and suitable for DC/DC converters and noise filters.

### **Applications**

Typical applications include LED lighting, xDSL modems, copying machines, flat TVs, smart meters and power supplies.

### **Benefits**

- Drum core construction
- Nickel-Zinc (NiZn) ferrite core
- · Magnetic non-shield type
- Operating temperature range of up to +105°C
- · Available in tape and reel
- RoHS Compliant



## **Ordering Information**

SBCP-	47HY	150	Н	В
Series	Core Size	Inductance Code (µH)	External Tube	Packaging Type
SBCP	Outer size x height $47HY = \phi 4.5 \times 7.0$ $87HY = \phi 8.0 \times 7.5$ $80HY = \phi 8.0 \times 10.0$ $11HY = \phi 11.0 \times 11.0$ $14HY = \phi 11.0 \times 14.0$	First two digits represent significant figures. Third digit specifies number of zeros.	Blank = None H = Presence (only for core sizes 87HY, 80HY and 11HY)	B = Bulk Blank = Tape and reel

\*Lead: hard copper wire (ø0.5)

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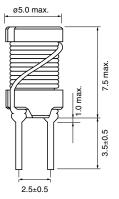
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#### **Dimensions – Millimeters**

#### SBCP-47HY Series



#### 

**Dimensions of Indented Square Hole Plastic Tape** 

Р	P <sub>0</sub>	<b>P</b> <sub>1</sub>	F	W	W <sub>o</sub>	<b>W</b> <sub>1</sub>	W <sub>2</sub>	H	H <sub>1</sub>	D <sub>0</sub>	d	Δh
±1	±0.3	±0.7	±0.5	+1, -0.5	Minimum	+0.75, -0.5	Maximum	+0.2, -0	Maximum	±0.2		±2
12.7	12.7	5.1	2.5	18	12.5	9	3	18	29.5	ø 4	ø 0.5	0

Δh

#### **SBCP-87HY Series**

#### **Dimensions of Indented Square Hole Plastic Tape**

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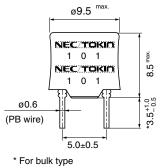
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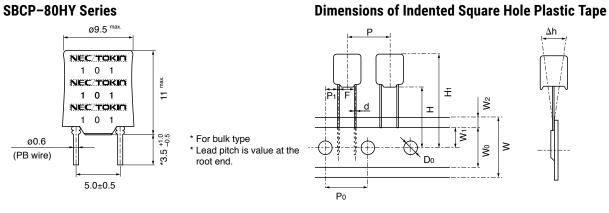
\* Lead pitch is value at the root end.

Р	P <sub>0</sub>	<b>P</b> <sub>1</sub>	F	W	Wo	<b>W</b> <sub>1</sub>	W <sub>2</sub>	Н	H <sub>1</sub>	D <sub>0</sub>	d	Δh
±1.0	±0.3	±0.7	±1	+1, -0.5	Minimum	+0.75, -0.5	Maximum	+0.2, -0	Maximum	±0.2		±2
12.7	12.7	3.85	5	18	12.5	9	3	18	28.5	ø 4	ø 0.6	0

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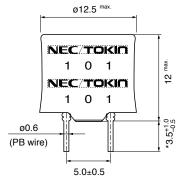


### **Dimensions - Millimeters cont'd**

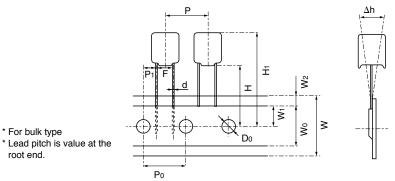


Р	P <sub>0</sub>	<b>P</b> <sub>1</sub>	F	W	W <sub>o</sub>	<b>W</b> <sub>1</sub>	W <sub>2</sub>	Н	H <sub>1</sub>	D <sub>0</sub>	d	Δh
±1	±0.3	±0.7	±1	+1, -0.5	Minimum	+0.75, -0.5	Maximum	+2, -0	Maximum	±0.2		±2
12.7	12.7	3.85	5	18	12.5	9	3	18	31	ø 4	ø 0.6	0

#### **SBCP-11HY Series**



#### **Dimensions of Indented Square Hole Plastic Tape**



Р	P <sub>0</sub>	<b>P</b> <sub>1</sub>	F	W	W <sub>o</sub>	<b>W</b> <sub>1</sub>	W <sub>2</sub>	Н	H <sub>1</sub>	D <sub>0</sub>	d	Δh
±1	±0.3	±0.7	±1	+1, -0.5	Minimum	+0.75, -0.5	Maximum	+2, -0	Maximum	±0.2		±2
12.7	12.7	3.85	5	18	12.5	9	3	18	32	ø 4	ø 0.6	0

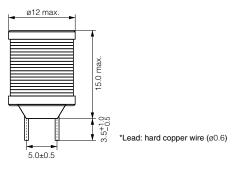
\* For bulk type

root end.



### **Dimensions – Millimeters cont'd**

#### **SBCP-14HY Series**



## Table 1A – Ratings & Part Number Reference

	Inductance L	DC Resistance	Rated Current	Current (Reference Value) (A)				
Part Number	(µH) at 10 kHz, 1 mA	(Ω) Maximum	(A)	ΔT = 20°C	ΔT = 40°C	L −10% (85°C)		
SBCP-47HY2R2B	2.2±20%	29 m	2.60	2.59	3.66	3.20		
SBCP-47HY3R3B	3.3±20%	37 m	2.30	2.28	3.21	2.70		
SBCP-47HY6R8B	6.8±20%	52 m	1.90	1.92	2.71	1.93		
SBCP-47HY100B	10±20%	67 m	1.60	1.69	2.38	1.60		
SBCP-47HY331B	330±10%	1.80	0.27	0.29	0.39	0.27		
SBCP-47HY102B	1,000±10%	6.00	0.15	0.15	0.21	0.16		



## Table 1B – Ratings & Part Number Reference

	Inductor of L (uU)	DC Desistence (0)	Deted Current (A)	Current (Refer	ence Value) (A)
Part Number	Inductance L (μΗ) at 10 kHz, 1 mA	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	ΔT = 40°C	L Change Rate -10%
SBCP-87HY4R7H	4.7±20%	0.03	3.20	4.40	4.30
SBCP-87HY6R8H	6.8±20%	0.04	2.80	3.90	3.40
SBCP-87HY101H	100±10%	0.30	0.90	1.20	0.87
SBCP-87HY681H	680±10%	1.66	0.33	0.46	0.32
SBCP-80HY100H	10±20%	0.05	2.90	4.00	5.30
SBCP-80HY470H	47±10%	0.13	1.90	2.60	2.20
SBCP-80HY680H	68±10%	0.16	1.70	2.30	1.80
SBCP-80HY820H	82±10%	0.24	1.30	1.80	1.70
SBCP-80HY101H	100±10%	0.35	1.10	1.50	1.60
SBCP-80HY331H	330±10%	0.75	0.70	0.98	0.85
SBCP-80HY102H	1,000±10%	1.89	0.40	0.56	0.48
SBCP-11HY470H	47±20%	0.10	2.00	2.90	4.40
SBCP-11HY101H	100±10%	0.19	1.30	1.90	3.00
SBCP-11HY681H	680±10%	1.00	0.55	0.77	1.10
SBCP-14HY221B	220±10%	0.31	1.05	1.51	2.20
SBCP-14HY331B	330±10%	0.38	0.95	1.35	1.84
SBCP-14HY102B	1,000±10%	1.16	0.59	0.82	1.01
SBCP-14HY222B	2,200±10%	2.36	0.38	0.54	0.69
SBCP-14HY332B	3,300±10%	2.42	0.33	0.46	0.57
Part Number	Inductance L (µH)	DC Resistance (Ω)	Rated Current (A)	Current (Refere	ence Value) (A)
	at 10 kHz, 1 mA	Maximum	ΔT = 20°C	ΔT = 40°C	L Change Rate -10%

## Packaging

Series	Packaging Type	Pieces per Box		
SBCP-47HY	Bulk	6,000		
3DUP-4/11	Tape & Reel	<b>4,000</b> <sup>1</sup>		
SBCP-87HY	Bulk	4,000		
300P-0/H1	Tape & Reel	2,000 <sup>2</sup>		
SBCP-80HY	Bulk	4,000		
SDCP-00HY	Tape & Reel	2,000 <sup>2</sup>		
	Bulk	2,000		
SBCP-11HY	Tape & Reel	1,600 <sup>3</sup>		
SBCP-14HY	Bulk	1,500		

<sup>1</sup> The box contains 4 reels of 1,000 pieces each

<sup>2</sup> The box contains 4 reels of 500 pieces each

<sup>3</sup> The box contains 4 reels of 400 pieces each



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