Conformally Coated SBC 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
- RoHS Compliant

Ordering Information

SBC	1–	101–	571
Series	Core Size	Inductance Code (µH)	Rate Current Code (mA)
SBC	1 2 3 4 6 7 8 9	First two digits represent significant figures. Third digit specifies number of zeros.	First two digits represent significant figures. Third digit specifies number of zeros.

The presence of an external tube may not be indicated on the surface of sample products.

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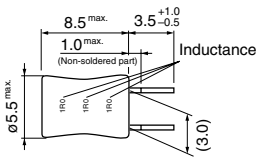
Dimensions – Millimeters

SBC1 Series

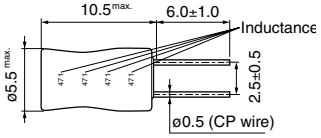
Model	Lead Diameter
SBC1-1R0-312	0.30
SBC1-2R2-272	0.30
SBC1-3R3-232	0.30
SBC1-100-172	0.30
SBC1-101-571	0.50
SBC1-681-251	0.50
SBC1-102-211	0.50

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]

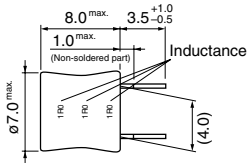


*Lead pitch is a value at the root end.
*With phenolic resin base.

SBC2 Series

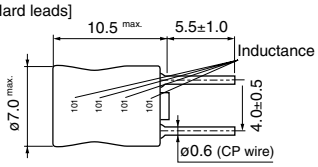
Model	Lead Diameter
SBC2-1R0-612	0.60
SBC2-3R3-352	0.45
SBC2-6R8-242	0.40
SBC2-100-212	0.40
SBC2-220-132	0.32
SBC2-470-951	0.28
SBC2-101-671	0.60
SBC2-102-181	0.60

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]

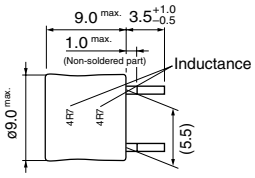


*Lead pitch is a value at the root end.
*With phenolic resin base.

SBC3 Series

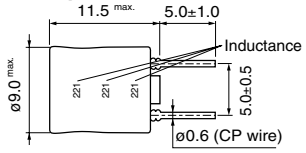
Model	Lead Diameter
SBC3-4R7-422	0.60
SBC3-100-362	0.60
SBC3-470-142	0.40
SBC3-680-112	0.35
SBC3-101-961	0.32
SBC3-221-681	0.60
SBC3-331-551	0.60
SBC3-471-491	0.60
SBC3-102-281	0.60
SBC3-152-251	0.60

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]



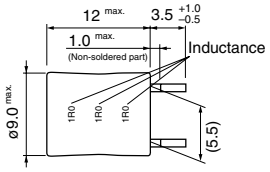
*Lead pitch is a value at the root end.
*With phenolic resin base.

Dimensions – Millimeters cont'd

SBC4 Series

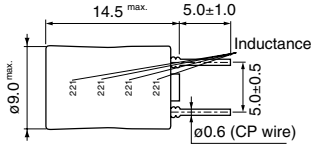
Model	Lead Diameter
SBC4-1R0-742	0.80
SBC4-2R7-662	0.80
SBC4-3R3-642	0.80
SBC4-4R7-582	0.70
SBC4-6R8-452	0.60
SBC4-100-292	0.50
SBC4-150-232	0.45
SBC4-220-202	0.45
SBC4-470-162	0.45
SBC4-680-122	0.35
SBC4-101-102	0.32
SBC4-151-861	0.32
SBC4-221-721	0.60
SBC4-471-491	0.60
SBC4-103-111	0.60

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]

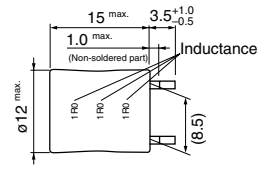


*Lead pitch is a value at the root end.
*With phenolic resin base.

SBC6 Series

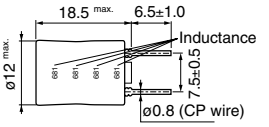
Model	Lead Diameter
SBC6-1R0-962	1.20
SBC6-1R5-942	1.20
SBC6-2R7-872	1.20
SBC6-3R3-852	1.20
SBC6-4R7-802	1.20
SBC6-6R8-662	1.00
SBC6-100-462	0.80
SBC6-150-382	0.70
SBC6-220-302	0.60
SBC6-330-272	0.60
SBC6-470-232	0.60
SBC6-680-222	0.60
SBC6-101-172	0.55
SBC6-151-122	0.45
SBC6-221-112	0.40
SBC6-331-871	0.40
SBC6-471-701	0.35
SBC6-681-631	0.80
SBC6-102-561	0.80
SBC6-472-241	0.80
SBC6-682-181	0.80
SBC6-103-161	0.80

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]



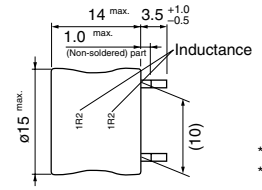
*Lead pitch is a value at the root end.
*With phenolic resin base.

Dimensions – Millimeters cont'd

SBC7 Series

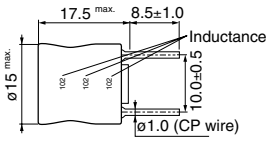
Model	Lead Diameter
SBC7–220–432	0.90
SBC7–680–222	0.60
SBC7–101–192	0.60
SBC7–221–132	0.50
SBC7–102–541	1.00

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]

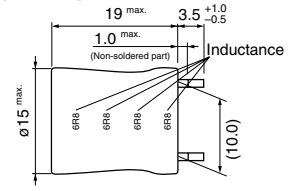


*Lead pitch is a value at the root end.
*With phenolic resin base.

SBC8 Series

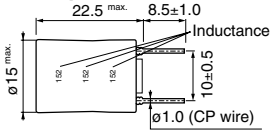
Model	Lead Diameter
SBC8–6R8–862	1.20
SBC8–100–692	1.00
SBC8–220–492	0.90
SBC8–330–452	0.90
SBC8–470–372	0.90
SBC8–680–322	0.80
SBC8–101–242	0.70
SBC8–151–202	0.60
SBC8–221–182	0.60
SBC8–331–142	0.55
SBC8–681–102	0.45
SBC8–102–761	0.40

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]

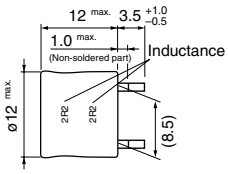


*Lead pitch is a value at the root end.
*With phenolic resin base.

SBC9 Series

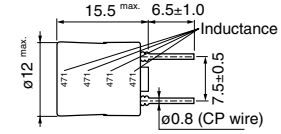
Model	Lead Diameter
SBC9–1R0–982	1.20
SBC9–6R8–492	0.70
SBC9–100–422	0.70
SBC9–220–312	0.70
SBC9–331–671	0.32
SBC9–681–551	0.80

[Soft leads]



*Lead pitch is a reference value at the root end.
*Integrated soft/hard lead structure.

[Hard leads]



*Lead pitch is a value at the root end.
*With phenolic resin base.

Table 1 – Ratings & Part Number Reference

Part Number	Inductance L (µH) at 10 kHz, 1 mA	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20˚C	Current (Reference Value) (A)		Terminal	
				ΔT = 40˚C	L Change Rate -10%	Soft Lead	Pin Lead
SBC1-1R0-312	1.0±20%	0.03	3.10	4.30	5.20	•	
SBC1-2R2-272	2.2±20%	0.04	2.70	3.70	3.20	•	
SBC1-3R3-232	3.3±20%	0.04	2.30	3.20	2.70	•	
SBC1-100-172	10±20%	0.08	1.70	2.30	1.50	•	
SBC1-101-571	100±10%	0.65	0.57	0.79	0.47		•
SBC1-681-251	680±10%	3.40	0.25	0.35	0.18		•
SBC1-102-211	1,000±10%	4.90	0.21	0.29	0.14		•
SBC2-1R0-612	1.0±20%	0.01	6.10	8.50	6.40	•	
SBC2-3R3-352	3.3±20%	0.03	3.50	4.90	4.00	•	
SBC2-6R8-242	6.8±20%	0.05	2.40	3.30	2.70	•	
SBC2-100-212	10±20%	0.06	2.10	2.90	2.10	•	
SBC2-220-132	22±20%	0.11	1.30	1.80	1.40	•	
SBC2-470-951	47±10%	0.21	0.95	1.30	1.00	•	
SBC2-101-671	100±10%	0.41	0.67	0.93	0.68		•
SBC2-102-181	1,000±10%	4.00	0.18	0.25	0.21		•
SBC3-4R7-422	4.7±20%	0.02	4.20	5.80	4.60	•	
SBC3-100-362	10±20%	0.03	3.60	5.00	3.00	•	
SBC3-470-142	47±10%	0.12	1.40	1.90	1.40	•	
SBC3-680-112	68±10%	0.19	1.10	1.50	1.20	•	
SBC3-101-961	100±10%	0.26	0.96	1.30	1.00	•	
SBC3-221-681	220±10%	0.49	0.68	0.95	0.67		•
SBC3-331-551	330±10%	0.72	0.55	0.77	0.53		•
SBC3-471-491	470±10%	1.02	0.49	0.68	0.46		•
SBC3-102-281	1,000±10%	2.37	0.28	0.39	0.31		•
SBC3-152-251	1,500±10%	3.64	0.25	0.35	0.26		•
SBC4-1R0-742	1.0±20%	0.01	7.40	10.30	14.90	•	
SBC4-2R7-662	2.7±20%	0.02	6.60	9.20	9.60	•	
SBC4-3R3-642	3.3±20%	0.02	6.40	8.90	8.60	•	
SBC4-4R7-582	4.7±20%	0.02	5.80	8.10	7.10	•	
SBC4-6R8-452	6.8±20%	0.03	4.50	6.30	5.60	•	
SBC4-100-292	10±20%	0.04	2.90	4.00	4.60	•	
SBC4-150-232	15±20%	0.06	2.30	3.20	4.00	•	
SBC4-220-202	22±20%	0.07	2.00	2.80	3.20	•	
SBC4-470-162	47±10%	0.11	1.60	2.20	2.10	•	
SBC4-680-122	68±10%	0.19	1.20	1.60	1.80	•	
SBC4-101-102	100±10%	0.26	1.00	1.40	1.50	•	
SBC4-151-861	150±10%	0.36	0.86	1.20	1.20	•	
SBC4-221-721	220±10%	0.47	0.72	1.00	1.00		•
SBC4-471-491	470±10%	0.95	0.49	0.68	0.68		•
SBC4-103-111	10,000±10%	19.5	0.11	0.15	0.14		•
SBC6-1R0-962	1.0±20%	0.01	9.60	13.40	37.70	•	
SBC6-1R5-942	1.5±20%	0.01	9.40	13.10	30.90	•	
SBC6-2R7-872	2.7±20%	0.01	8.70	12.10	22.60	•	
SBC6-3R3-852	3.3±20%	0.01	8.50	11.90	20.00	•	
SBC6-4R7-802	4.7±20%	0.01	8.00	11.20	16.10	•	
SBC6-6R8-662	6.8±20%	0.02	6.60	9.20	13.60	•	
SBC6-100-462	10±20%	0.03	4.60	6.40	10.90	•	
SBC6-150-382	15±20%	0.03	3.80	5.30	9.10	•	
SBC6-220-302	22±20%	0.05	3.00	4.20	7.50	•	
SBC6-330-272	33±20%	0.06	2.70	3.70	6.10	•	
SBC6-470-232	47±10%	0.08	2.30	3.20	5.00	•	
SBC6-680-222	68±10%	0.09	2.20	3.00	4.10	•	
SBC6-101-172	100±10%	0.13	1.70	2.30	3.50	•	
SBC6-151-122	150±10%	0.23	1.20	1.60	2.80	•	
SBC6-221-112	220±10%	0.33	1.10	1.50	2.30	•	
SBC6-331-871	330±10%	0.41	0.87	1.20	1.90	•	
SBC6-471-701	470±10%	0.63	0.70	0.98	1.60	•	
SBC6-681-631	680±10%	0.98	0.63	0.88	1.30		•
Part Number	Inductance L (µH) at 10 kHz, 1 mA	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20˚C	Current (Reference Value) (A)		Terminal	
				ΔT = 40˚C	L Change Rate -10%	Soft Lead	Pin Lead

Table 1 – Ratings & Part Number Reference cont'd

Part Number	Inductance L (µH) at 10 kHz, 1 mA	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20˚C	Current (Reference Value) (A)		Terminal	
				ΔT = 40˚C	L Change Rate -10%	Soft Lead	Pin Lead
SBC6-102-561	1,000±10%	1.21	0.56	0.78	1.10		•
SBC6-472-241	4,700±10%	5.92	0.24	0.33	0.50		•
SBC6-682-181	6,800±10%	8.92	0.18	0.25	0.42		•
SBC6-103-161	10,000±10%	13.60	0.16	0.22	0.35		•
SBC7-220-432	22±20%	0.03	4.30	6.00	7.80	•	
SBC7-680-222	68±10%	0.09	2.20	3.00	4.50	•	
SBC7-101-192	100±10%	0.12	1.90	2.60	3.60	•	
SBC7-221-132	220±10%	0.25	1.30	1.80	2.40	•	
SBC7-102-541	1,000±10%	1.20	0.54	0.75	1.10		•
SBC8-6R8-862	6.8±20%	0.02	8.60	12.00	13.90	•	
SBC8-100-692	10±20%	0.02	6.90	9.60	11.80	•	
SBC8-220-492	22±20%	0.03	4.90	6.80	7.80	•	
SBC8-330-452	33±20%	0.04	4.50	6.30	6.50	•	
SBC8-470-372	47±10%	0.04	3.70	5.10	5.40	•	
SBC8-680-322	68±10%	0.06	3.20	4.40	4.30	•	
SBC8-101-242	100±10%	0.09	2.40	3.30	3.50	•	
SBC8-151-202	150±10%	0.15	2.00	2.80	3.00	•	
SBC8-221-182	220±10%	0.17	1.80	2.50	2.40	•	
SBC8-331-142	330±10%	0.25	1.40	1.90	2.00	•	
SBC8-681-102	680±10%	0.52	1.00	1.40	1.30	•	
SBC8-102-761	1,000±10%	0.78	0.76	1.00	1.10	•	
SBC9-1R0-982	1.0±20%	0.01	9.80	13.70	31.10	•	
SBC9-6R8-492	6.8±20%	0.03	4.90	6.80	12.10	•	
SBC9-100-422	10±20%	0.03	4.20	5.80	9.60	•	
SBC9-220-312	22±20%	0.04	3.10	4.30	6.20	•	
SBC9-331-671	330±10%	0.58	0.67	0.93	1.60	•	
SBC9-681-551	680±10%	1.05	0.55	0.77	1.10		•
Part Number	Inductance L (µH) at 10 kHz, 1 mA	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20˚C	Current (Reference Value) (A)		Terminal	
				ΔT = 40˚C	L Change Rate -10%	Soft Lead	Pin Lead

Packaging

Series	Lead Type	Packaging Type	Pieces per Box
SBC1	All	Bulk	10,000
SBC2	Soft Lead	Bulk	3,750
	Pin Lead	Bulk	8,000
SBC3	All	Bulk	4,000
SBC4	Soft Lead	Bulk	3,000
	Pin Lead	Bulk	4,000
SBC6	Soft Lead	Bulk	1,600
	Pin Lead	Bulk	2,000
SBC7	All	Bulk	1,000
SBC8	Soft Lead	Bulk	900
	Pin Lead	Bulk	1,000
SBC9	All	Bulk	2,000

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