



**THE DATASHEET OF  
SBC9-680-152**



## 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 ( $\mu\text{H}$ )	Rate Current Code (mA)
SBC	Outer size x height 1 = $\Phi$ 4.5 x 6.5 2 = $\Phi$ 6.0 x 6.0 3 = $\Phi$ 8.0 x 7.0 4 = $\Phi$ 8.0 x 10.0 6 = $\Phi$ 11.0 x 13.0 7 = $\Phi$ 14.0 x 12.0 8 = $\Phi$ 14.0 x 17.0 9 = $\Phi$ 11.0 x 10.0	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.*

## Dimensions – Millimeters

### SBC1

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC1-1R0-312	∅ 0.30	-
SBC1-1R5-292	∅ 0.30	-
SBC1-2R2-272	∅ 0.30	-
SBC1-3R3-232	∅ 0.30	-
SBC1-4R7-202	∅ 0.30	-
SBC1-6R8-182	∅ 0.30	-
SBC1-100-172	∅ 0.30	-
SBC1-150-162	∅ 0.30	-
SBC1-220-132	∅ 0.28	-
SBC1-330-102	∅ 0.24	-
SBC1-470-711	-	∅ 0.50
SBC1-680-651	-	∅ 0.50
SBC1-101-571	-	∅ 0.50
SBC1-151-431	-	∅ 0.50
SBC1-221-391	-	∅ 0.50
SBC1-331-341	-	∅ 0.50
SBC1-471-301	-	∅ 0.50
SBC1-561-291	-	∅ 0.50
SBC1-681-251	-	∅ 0.50
SBC1-102-211	-	∅ 0.50
SBC1-152-181	-	∅ 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

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC2-1R0-612	∅ 0.60	-
SBC2-1R5-402	∅ 0.50	-
SBC2-3R3-352	∅ 0.45	-
SBC2-4R7-262	∅ 0.40	-
SBC2-6R8-242	∅ 0.40	-
SBC2-100-212	∅ 0.40	-
SBC2-150-162	∅ 0.35	-
SBC2-220-132	∅ 0.32	-
SBC2-330-112	∅ 0.28	-
SBC2-470-951	∅ 0.28	-
SBC2-680-871	∅ 0.28	-
SBC2-101-671	-	∅ 0.60
SBC2-151-501	-	∅ 0.60
SBC2-221-411	-	∅ 0.60
SBC2-331-341	-	∅ 0.60
SBC2-471-271	-	∅ 0.60
SBC2-681-211	-	∅ 0.60
SBC2-102-181	-	∅ 0.60
SBC2-152-141	-	∅ 0.60
SBC2-222-121	-	∅ 0.60
SBC2-272-101	-	∅ 0.60
SBC2-332-900	-	∅ 0.60

[Soft leads]



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

[Hard leads]

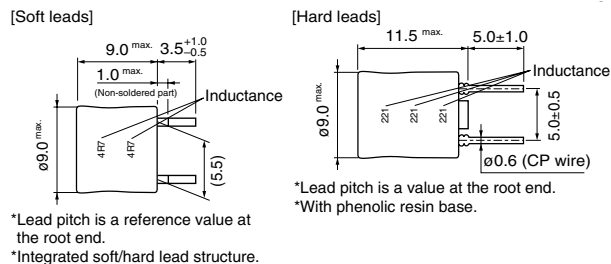


\*Lead pitch is a value at the root end.  
\*With phenolic resin base.

## Dimensions – Millimeters cont.

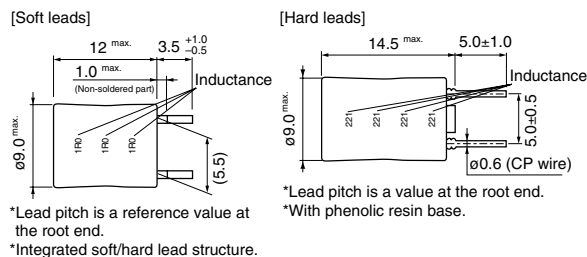
### SBC3

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC3-1R2-752	∅ 0.80	-
SBC3-1R5-632	∅ 0.70	-
SBC3-2R2-602	∅ 0.70	-
SBC3-3R3-472	∅ 0.60	-
SBC3-4R7-422	∅ 0.60	-
SBC3-6R8-392	∅ 0.60	-
SBC3-100-362	∅ 0.60	-
SBC3-150-232	∅ 0.50	-
SBC3-220-202	∅ 0.45	-
SBC3-330-172	∅ 0.40	-
SBC3-470-142	∅ 0.40	-
SBC3-680-112	∅ 0.35	-
SBC3-101-961	∅ 0.32	-
SBC3-151-791	∅ 0.30	-
SBC3-221-681	-	∅ 0.60
SBC3-331-551	-	∅ 0.60
SBC3-471-491	-	∅ 0.60
SBC3-561-421	-	∅ 0.60
SBC3-681-361	-	∅ 0.60
SBC3-102-281	-	∅ 0.60
SBC3-122-281	-	∅ 0.60
SBC3-152-251	-	∅ 0.60
SBC3-222-191	-	∅ 0.60
SBC3-332-151	-	∅ 0.60
SBC3-472-121	-	∅ 0.60
SBC3-682-111	-	∅ 0.60



### SBC4

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC4-1R0-742	∅ 0.80	-
SBC4-1R5-712	∅ 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	-
SBC4-330-182	∅ 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
SBC4-331-591	-	∅ 0.60
SBC4-471-491	-	∅ 0.60
SBC4-681-431	-	∅ 0.60
SBC4-102-291	-	∅ 0.60
SBC4-152-221	-	∅ 0.60
SBC4-222-211	-	∅ 0.60
SBC4-332-161	-	∅ 0.60
SBC4-472-141	-	∅ 0.60
SBC4-682-111	-	∅ 0.60
SBC4-103-111	-	∅ 0.60



## Dimensions – Millimeters cont.

### SBC6

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
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
SBC6-152-451	-	∅ 0.80
SBC6-222-351	-	∅ 0.80
SBC6-332-281	-	∅ 0.80
SBC6-472-241	-	∅ 0.80
SBC6-682-181	-	∅ 0.80
SBC6-103-161	-	∅ 0.80



### SBC7

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC7-6R8-612	∅ 0.90	-
SBC7-100-532	∅ 0.90	-
SBC7-150-482	∅ 0.90	-
SBC7-220-432	∅ 0.90	-
SBC7-330-342	∅ 0.80	-
SBC7-470-282	∅ 0.70	-
SBC7-680-222	∅ 0.60	-
SBC7-101-192	∅ 0.60	-
SBC7-151-172	∅ 0.60	-
SBC7-221-132	∅ 0.50	-
SBC7-331-941	∅ 0.40	-
SBC7-471-851	∅ 0.40	-
SBC7-681-701	∅ 0.35	-
SBC7-102-541	-	∅ 1.00
SBC7-152-481	-	∅ 1.00
SBC7-222-421	-	∅ 1.00
SBC7-332-361	-	∅ 1.00
SBC7-472-281	-	∅ 1.00
SBC7-682-211	-	∅ 1.00
SBC7-103-191	-	∅ 1.00



## Dimensions – Millimeters cont.

### SBC8

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC8-4R7-922	∅ 1.40	-
SBC8-6R8-862	∅ 1.20	-
SBC8-100-692	∅ 1.00	-
SBC8-150-532	∅ 0.90	-
SBC8-220-492	∅ 0.90	-
SBC8-330-452	∅ 0.90	-
SBC8-470-372	∅ 0.90	-
SBC8-680-322	∅ 0.80	-
SBC8-820-262	∅ 0.70	-
SBC8-101-242	∅ 0.70	-
SBC8-151-202	∅ 0.60	-
SBC8-221-182	∅ 0.60	-
SBC8-331-142	∅ 0.55	-
SBC8-391-122	∅ 0.50	-
SBC8-471-112	∅ 0.45	-
SBC8-681-102	∅ 0.45	-
SBC8-102-761	∅ 0.40	-
SBC8-152-581	-	∅ 1.00
SBC8-222-471	-	∅ 1.00
SBC8-332-421	-	∅ 1.00
SBC8-472-391	-	∅ 1.00
SBC8-682-311	-	∅ 1.00
SBC8-103-251	-	∅ 1.00



### SBC9

Part Number	Lead Diameter	
	Soft Lead	Pin Lead
SBC9-1R0-982	∅ 1.20	-
SBC9-1R5-942	∅ 1.20	-
SBC9-2R2-792	∅ 1.00	-
SBC9-3R3-622	∅ 0.90	-
SBC9-4R7-562	∅ 0.80	-
SBC9-6R8-492	∅ 0.70	-
SBC9-100-422	∅ 0.70	-
SBC9-150-362	∅ 0.70	-
SBC9-220-312	∅ 0.70	-
SBC9-330-252	∅ 0.60	-
SBC9-470-202	∅ 0.55	-
SBC9-560-182	∅ 0.50	-
SBC9-680-152	∅ 0.45	-
SBC9-101-122	∅ 0.40	-
SBC9-151-112	∅ 0.40	-
SBC9-221-821	∅ 0.35	-
SBC9-331-671	∅ 0.32	-
SBC9-471-601	-	∅ 0.80
SBC9-681-551	-	∅ 0.80
SBC9-102-451	-	∅ 0.80
SBC9-152-341	-	∅ 0.80
SBC9-222-271	-	∅ 0.80
SBC9-332-221	-	∅ 0.80
SBC9-472-181	-	∅ 0.80
SBC9-682-141	-	∅ 0.80
SBC9-103-121	-	∅ 0.80



## Environmental Compliance

All KEMET through-hole inductors are RoHS Compliant.



## Performance Characteristics

Series	Item	Performance Characteristics
SBC1	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1 – 1,500 $\mu$ H at 10 kHz, 1 mA
	Inductance tolerance	$\pm$ 10% – $\pm$ 20%
	Rated DC resistance range	0.03 – 8.00 $\Omega$ maximum
	Rated current range	0.18 – 3.10 A
SBC2	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1 – 3,300 $\mu$ H at 10 kHz, 1 mA
	Inductance tolerance	$\pm$ 10% – $\pm$ 20%
	Rated DC resistance range	0.01 – 13.80 $\Omega$ maximum
	Rated current range	0.09 – 6.10 A
SBC3	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1.2 – 6,800 $\mu$ H at 10 kHz, 1 mA
	Inductance tolerance	$\pm$ 10% – $\pm$ 20%
	Rated DC resistance range	0.01 – 14.50 $\Omega$ maximum
	Rated current range	0.11 – 7.50 A
SBC4	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1 – 10,000 $\mu$ H at 10 kHz, 1 mA
	Inductance tolerance	$\pm$ 10% – $\pm$ 20%
	Rated DC resistance range	0.01 – 19.50 $\Omega$ maximum
	Rated current range	0.11 – 7.40 A

## Performance Characteristics cont.

Series	Item	Performance Characteristics
SBC6	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1 – 10,000 µH at 10 kHz, 1 mA
	Inductance tolerance	±10% – ±20%
	Rated DC resistance range	0.01 – 13.60 Ω maximum
	Rated current range	0.16 – 9.60 A
SBC7	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	6.8 – 10,000 µH at 10 kHz, 1 mA
	Inductance tolerance	±10% – ±20%
	Rated DC resistance range	0.02 – 10.30 Ω maximum
	Rated current range	0.19 – 6.10 A
SBC8	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	4.7 – 10,000 µH at 10 kHz, 1 mA
	Inductance tolerance	±10% – ±20%
	Rated DC resistance range	0.01 – 6.90 Ω maximum
	Rated current range	0.25 – 9.20 A
SBC9	Operating temperature	-20°C to +105°C (including self-temperature rise)
	Rated inductance range	1 – 10,000 µH at 10 kHz, 1 mA
	Inductance tolerance	±10% – ±20%
	Rated DC resistance range	0.01 – 16.10 Ω maximum
	Rated current range	0.12 – 9.80 A

## Inductance Distribution (µH)

1 - 10,000 µH



**Table 1 – Ratings & Part Number Reference**

Part Number	Inductance L (μH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					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	•		0.350
SBC1-1R5-292	1.5	±20%	0.03	2.90	4.00	4.00	•		0.500
SBC1-2R2-272	2.2	±20%	0.04	2.70	3.70	3.20	•		0.347
SBC1-3R3-232	3.3	±20%	0.04	2.30	3.20	2.70	•		0.360
SBC1-4R7-202	4.7	±20%	0.05	2.00	2.80	2.10	•		0.500
SBC1-6R8-182	6.8	±20%	0.06	1.80	2.50	1.90	•		0.500
SBC1-100-172	10.0	±20%	0.08	1.70	2.30	1.50	•		0.422
SBC1-150-162	15.0	±20%	0.10	1.60	2.20	1.20	•		0.500
SBC1-220-132	22.0	±20%	0.13	1.30	1.80	1.00	•		0.500
SBC1-330-102	33.0	±20%	0.22	1.00	1.40	0.83	•		0.500
SBC1-470-711	47.0	±10%	0.34	0.71	0.99	0.71		•	0.600
SBC1-680-651	68.0	±10%	0.42	0.65	0.91	0.59		•	0.600
SBC1-101-571	100.0	±10%	0.65	0.57	0.79	0.47		•	0.516
SBC1-151-431	150.0	±10%	0.65	0.57	0.79	0.47		•	0.600
SBC1-221-391	220.0	±10%	1.20	0.39	0.54	0.32		•	0.600
SBC1-331-341	330.0	±10%	1.90	0.34	0.47	0.26		•	0.600
SBC1-471-301	470.0	±10%	2.40	0.30	0.42	0.21		•	0.600
SBC1-561-291	560.0	±10%	3.40	0.29	0.40	0.20		•	0.520
SBC1-681-251	680.0	±10%	3.40	0.25	0.35	0.18		•	0.536
SBC1-102-211	1000.0	±10%	4.90	0.21	0.29	0.14		•	0.593
SBC1-152-181	1500.0	±10%	8.00	0.18	0.25	0.12		•	0.600
SBC2-1R0-612	1.0	±20%	0.01	6.10	8.50	6.40	•		0.610
SBC2-1R5-402	1.5	±20%	0.02	4.00	5.60	4.90	•		0.700
SBC2-3R3-352	3.3	±20%	0.03	3.50	4.90	4.00	•		0.629
SBC2-4R7-262	4.7	±20%	0.04	2.60	3.60	3.10	•		0.700
SBC2-6R8-242	6.8	±20%	0.05	2.40	3.30	2.70	•		0.675
SBC2-100-212	10.0	±20%	0.06	2.10	2.90	2.10	•		0.731
SBC2-150-162	15.0	±20%	0.08	1.60	2.20	1.70	•		0.700
SBC2-220-132	22.0	±20%	0.11	1.30	1.80	1.40	•		0.710
SBC2-330-112	33.0	±20%	0.18	1.10	1.50	1.20	•		0.700
SBC2-470-951	47.0	±10%	0.21	0.95	1.30	1.00	•		0.700
SBC2-680-871	68.0	±10%	0.26	0.87	1.20	0.81	•		0.700
SBC2-101-671	100.0	±10%	0.41	0.67	0.93	0.68		•	0.890
SBC2-151-501	150.0	±10%	0.64	0.50	0.70	0.55		•	0.900
SBC2-221-411	220.0	±10%	0.87	0.41	0.57	0.45		•	0.900
SBC2-331-341	330.0	±10%	1.40	0.34	0.47	0.37		•	0.900
SBC2-471-271	470.0	±10%	2.00	0.27	0.37	0.32		•	0.900
SBC2-681-211	680.0	±10%	3.10	0.21	0.29	0.26		•	0.900
SBC2-102-181	1000.0	±10%	4.00	0.18	0.25	0.21		•	0.940
SBC2-152-141	1500.0	±10%	6.20	0.14	0.19	0.17		•	0.900
SBC2-222-121	2200.0	±10%	8.00	0.12	0.16	0.14		•	0.900
SBC2-272-101	2700.0	±10%	11.60	0.10	0.14	0.13		•	0.900
SBC2-332-900	3300.0	±10%	13.80	0.09	0.12	0.11		•	0.900
SBC3-1R2-752	1.2	±20%	0.01	7.50	10.50	9.80	•		1.600
SBC3-1R5-632	1.5	±20%	0.01	6.30	8.80	8.30	•		1.600
SBC3-2R2-602	2.2	±20%	0.02	6.00	8.40	7.20	•		1.600
SBC3-3R3-472	3.3	±20%	0.02	4.70	6.50	5.60	•		1.600
SBC3-4R7-422	4.7	±20%	0.02	4.20	5.80	4.60	•		1.600
SBC3-6R8-392	6.8	±20%	0.03	3.90	5.40	4.00	•		1.600
SBC3-100-362	10.0	±20%	0.03	3.60	5.00	3.00	•		1.650
SBC3-150-232	15.0	±20%	0.05	2.30	3.20	2.60	•		1.600
SBC3-220-202	22.0	±20%	0.06	2.00	2.80	2.10	•		1.600
SBC3-330-172	33.0	±20%	0.09	1.70	2.30	1.80	•		1.600
SBC3-470-142	47.0	±10%	0.12	1.40	1.90	1.40	•		1.610
SBC3-680-112	68.0	±10%	0.19	1.10	1.50	1.20	•		1.550
SBC3-101-961	100.0	±10%	0.26	0.96	1.30	1.00	•		1.536
SBC3-151-791	150.0	±10%	0.36	0.79	1.10	0.81	•		1.600
SBC3-221-681	220.0	±10%	0.49	0.68	0.95	0.67		•	1.791
Part Number	Inductance L (μH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	

**Table 1 – Ratings & Part Number Reference cont.**

Part Number	Inductance L (µH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	
SBC3-331-551	330.0	±10%	0.72	0.55	0.77	0.53		•	1.880
SBC3-471-491	470.0	±10%	1.02	0.49	0.68	0.46		•	1.850
SBC3-561-421	560.0	±10%	1.20	0.42	0.58	0.42		•	1.790
SBC3-681-361	680.0	±10%	1.62	0.36	0.50	0.38		•	1.800
SBC3-102-281	1000.0	±10%	2.37	0.28	0.39	0.31		•	1.686
SBC3-122-281	1200.0	±10%	2.70	0.28	0.39	0.28		•	1.750
SBC3-152-251	1500.0	±10%	3.64	0.25	0.35	0.26		•	1.746
SBC3-222-191	2200.0	±10%	5.62	0.19	0.26	0.21		•	1.800
SBC3-332-151	3300.0	±10%	7.66	0.15	0.21	0.17		•	1.800
SBC3-472-121	4700.0	±10%	11.40	0.12	0.16	0.14		•	1.800
SBC3-682-111	6800.0	±10%	14.50	0.11	0.15	0.12		•	1.800
SBC4-1R0-742	1.0	±20%	0.01	7.40	10.30	14.90	•		1.980
SBC4-1R5-712	1.5	±20%	0.01	7.10	9.90	12.60	•		2.400
SBC4-2R7-662	2.7	±20%	0.02	6.60	9.20	9.60	•		2.080
SBC4-3R3-642	3.3	±20%	0.02	6.40	8.90	8.60	•		2.180
SBC4-4R7-582	4.7	±20%	0.02	5.80	8.10	7.10	•		2.070
SBC4-6R8-452	6.8	±20%	0.03	4.50	6.30	5.60	•		1.972
SBC4-100-292	10.0	±20%	0.04	2.90	4.00	4.60	•		1.910
SBC4-150-232	15.0	±20%	0.06	2.30	3.20	4.00	•		1.880
SBC4-220-202	22.0	±20%	0.07	2.00	2.80	3.20	•		1.950
SBC4-330-182	33.0	±20%	0.09	1.80	2.50	2.60	•		2.400
SBC4-470-162	47.0	±10%	0.11	1.60	2.20	2.10	•		2.424
SBC4-680-122	68.0	±10%	0.19	1.20	1.60	1.80	•		2.050
SBC4-101-102	100.0	±10%	0.26	1.00	1.40	1.50	•		2.012
SBC4-151-861	150.0	±10%	0.36	0.86	1.20	1.20	•		2.164
SBC4-221-721	220.0	±10%	0.47	0.72	1.00	1.00		•	2.490
SBC4-331-591	330.0	±10%	0.67	0.59	0.82	0.81		•	2.600
SBC4-471-491	470.0	±10%	0.95	0.49	0.68	0.68		•	2.620
SBC4-681-431	680.0	±10%	1.32	0.43	0.60	0.57		•	2.600
SBC4-102-291	1000.0	±10%	2.15	0.29	0.40	0.47		•	2.600
SBC4-152-221	1500.0	±10%	3.24	0.22	0.30	0.38		•	2.400
SBC4-222-211	2200.0	±10%	4.97	0.21	0.29	0.32		•	2.600
SBC4-332-161	3300.0	±10%	7.69	0.16	0.22	0.26		•	2.600
SBC4-472-141	4700.0	±10%	9.78	0.14	0.19	0.21		•	2.600
SBC4-682-111	6800.0	±10%	15.00	0.11	0.15	0.18		•	2.600
SBC4-103-111	10000.0	±10%	19.50	0.11	0.15	0.14		•	2.590
SBC6-1R0-962	1.0	±20%	0.01	9.60	13.40	37.70	•		4.500
SBC6-1R5-942	1.5	±20%	0.01	9.40	13.10	30.90	•		4.770
SBC6-2R7-872	2.7	±20%	0.01	8.70	12.10	22.60	•		4.820
SBC6-3R3-852	3.3	±20%	0.01	8.50	11.90	20.00	•		5.641
SBC6-4R7-802	4.7	±20%	0.01	8.00	11.20	16.10	•		6.230
SBC6-6R8-662	6.8	±20%	0.02	6.60	9.20	13.60	•		5.650
SBC6-100-462	10.0	±20%	0.03	4.60	6.40	10.90	•		5.030
SBC6-150-382	15.0	±20%	0.03	3.80	5.30	9.10	•		4.769
SBC6-220-302	22.0	±20%	0.05	3.00	4.20	7.50	•		4.630
SBC6-330-272	33.0	±20%	0.06	2.70	3.70	6.10	•		4.855
SBC6-470-232	47.0	±10%	0.08	2.30	3.20	5.00	•		5.400
SBC6-680-222	68.0	±10%	0.09	2.20	3.00	4.10	•		5.930
SBC6-101-172	100.0	±10%	0.13	1.70	2.30	3.50	•		5.860
SBC6-151-122	150.0	±10%	0.23	1.20	1.60	2.80	•		5.402
SBC6-221-112	220.0	±10%	0.33	1.10	1.50	2.30	•		5.810
SBC6-331-871	330.0	±10%	0.41	0.87	1.20	1.90	•		5.769
SBC6-471-701	470.0	±10%	0.63	0.70	0.98	1.60	•		5.560
SBC6-681-631	680.0	±10%	0.98	0.63	0.88	1.30		•	5.700
SBC6-102-561	1000.0	±10%	1.21	0.56	0.78	1.10		•	6.117
SBC6-152-451	1500.0	±10%	1.80	0.45	0.63	0.90		•	6.500
SBC6-222-351	2200.0	±10%	2.63	0.35	0.49	0.73		•	6.500
SBC6-332-281	3300.0	±10%	4.24	0.28	0.39	0.61		•	6.500
Part Number	Inductance L (µH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	

**Table 1 – Ratings & Part Number Reference cont.**

Part Number	Inductance L (μH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	
SBC6-472-241	4700.0	±10%	5.92	0.24	0.33	0.50		•	6.232
SBC6-682-181	6800.0	±10%	8.92	0.18	0.25	0.42		•	6.068
SBC6-103-161	10000.0	±10%	13.60	0.16	0.22	0.35		•	5.875
SBC7-6R8-612	6.8	±20%	0.02	6.10	8.50	13.90	•		8.000
SBC7-100-532	10.0	±20%	0.02	5.30	7.20	11.80	•		8.000
SBC7-150-482	15.0	±20%	0.03	4.80	6.70	9.60	•		8.000
SBC7-220-432	22.0	±20%	0.03	4.30	6.00	7.80	•		8.870
SBC7-330-342	33.0	±20%	0.05	3.40	4.70	6.20	•		8.000
SBC7-470-282	47.0	±10%	0.06	2.80	3.90	5.20	•		8.000
SBC7-680-222	68.0	±10%	0.09	2.20	3.00	4.50	•		7.715
SBC7-101-192	100.0	±10%	0.12	1.90	2.60	3.60	•		8.440
SBC7-151-172	150.0	±10%	0.16	1.70	2.30	2.90	•		8.000
SBC7-221-132	220.0	±10%	0.25	1.30	1.80	2.40	•		8.730
SBC7-331-941	330.0	±10%	0.45	0.94	1.30	2.00	•		8.000
SBC7-471-851	470.0	±10%	0.55	0.85	1.10	1.60	•		8.000
SBC7-681-701	680.0	±10%	0.81	0.70	0.98	1.40	•		8.000
SBC7-102-541	1000.0	±10%	1.20	0.54	0.75	1.10		•	8.974
SBC7-152-481	1500.0	±10%	1.58	0.48	0.67	0.93		•	10.000
SBC7-222-421	2200.0	±10%	2.18	0.42	0.58	0.77		•	10.000
SBC7-332-361	3300.0	±10%	3.51	0.36	0.50	0.63		•	10.000
SBC7-472-281	4700.0	±10%	4.83	0.28	0.39	0.53		•	10.000
SBC7-682-211	6800.0	±10%	7.00	0.21	0.29	0.44		•	10.000
SBC7-103-191	10000.0	±10%	10.30	0.19	0.26	0.36		•	10.000
SBC8-4R7-922	4.7	±20%	0.01	9.20	12.80	16.80	•		10.000
SBC8-6R8-862	6.8	±20%	0.02	8.60	12.00	13.90	•		10.010
SBC8-100-692	10.0	±20%	0.02	6.90	9.60	11.80	•		10.257
SBC8-150-532	15.0	±20%	0.03	5.30	7.40	9.60	•		11.000
SBC8-220-492	22.0	±20%	0.03	4.90	6.80	7.80	•		12.200
SBC8-330-452	33.0	±20%	0.04	4.50	6.30	6.50	•		12.540
SBC8-470-372	47.0	±10%	0.04	3.70	5.10	5.40	•		12.877
SBC8-680-322	68.0	±10%	0.06	3.20	4.40	4.30	•		12.581
SBC8-820-262	82.0	±10%	0.07	2.60	3.60	4.10	•		10.000
SBC8-101-242	100.0	±10%	0.09	2.40	3.30	3.50	•		10.022
SBC8-151-202	150.0	±10%	0.15	2.00	2.80	3.00	•		11.190
SBC8-221-182	220.0	±10%	0.17	1.80	2.50	2.40	•		11.000
SBC8-331-142	330.0	±10%	0.25	1.40	1.90	2.00	•		12.500
SBC8-391-122	390.0	±10%	0.37	1.20	1.60	1.90	•		12.000
SBC8-471-112	470.0	±10%	0.42	1.10	1.50	1.60	•		11.000
SBC8-681-102	680.0	±10%	0.52	1.00	1.40	1.30	•		12.200
SBC8-102-761	1000.0	±10%	0.78	0.76	1.00	1.10	•		12.328
SBC8-152-581	1500.0	±10%	1.30	0.58	0.81	0.92		•	13.000
SBC8-222-471	2200.0	±10%	1.80	0.47	0.67	0.78		•	13.000
SBC8-332-421	3300.0	±10%	2.50	0.42	0.58	0.63		•	13.000
SBC8-472-391	4700.0	±10%	3.20	0.39	0.54	0.53		•	13.000
SBC8-682-311	6800.0	±10%	4.90	0.31	0.43	0.44		•	13.000
SBC8-103-251	10000.0	±10%	6.90	0.25	0.35	0.36		•	13.000
SBC9-1R0-982	1.0	±20%	0.01	9.80	13.70	31.10	•		4.040
SBC9-1R5-942	1.5	±20%	0.01	9.40	13.10	25.40	•		4.500
SBC9-2R2-792	2.2	±20%	0.01	7.90	11.00	21.50	•		4.500
SBC9-3R3-622	3.3	±20%	0.02	6.20	8.60	16.40	•		4.500
SBC9-4R7-562	4.7	±20%	0.02	5.60	7.80	14.70	•		4.500
SBC9-6R8-492	6.8	±20%	0.03	4.90	6.80	12.10	•		3.930
SBC9-100-422	10.0	±20%	0.03	4.20	5.80	9.60	•		4.070
SBC9-150-362	15.0	±20%	0.04	3.60	5.00	7.50	•		4.500
SBC9-220-312	22.0	±20%	0.04	3.10	4.30	6.20	•		4.220
SBC9-330-252	33.0	±20%	0.06	2.50	3.50	5.20	•		4.500
SBC9-470-202	47.0	±10%	0.09	2.00	2.80	4.30	•		4.500
SBC9-560-182	56.0	±10%	0.10	1.80	2.50	4.00	•		4.500
Part Number	Inductance L (μH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	

**Table 1 – Ratings & Part Number Reference cont.**

Part Number	Inductance L (µH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	
SBC9-680-152	68.0	±10%	0.15	1.50	2.10	3.70	•		5.200
SBC9-101-122	100.0	±10%	0.21	1.20	1.60	3.00	•		4.500
SBC9-151-112	150.0	±10%	0.26	1.10	1.50	2.40	•		4.500
SBC9-221-821	220.0	±10%	0.41	0.82	1.10	2.00	•		4.500
SBC9-331-671	330.0	±10%	0.58	0.67	0.93	1.60	•		4.480
SBC9-471-601	470.0	±10%	0.82	0.60	0.84	1.30		•	5.200
SBC9-681-551	680.0	±10%	1.05	0.55	0.77	1.10		•	4.650
SBC9-102-451	1000.0	±10%	1.53	0.45	0.63	0.87		•	5.200
SBC9-152-341	1500.0	±10%	2.49	0.34	0.47	0.72		•	5.200
SBC9-222-271	2200.0	±10%	3.78	0.27	0.38	0.60		•	4.500
SBC9-332-221	3300.0	±10%	5.68	0.22	0.31	0.48		•	5.200
SBC9-472-181	4700.0	±10%	8.20	0.18	0.25	0.40		•	5.200
SBC9-682-141	6800.0	±10%	12.70	0.14	0.20	0.34		•	5.200
SBC9-103-121	10000.0	±10%	16.10	0.12	0.17	0.28		•	5.200
Part Number	Inductance L (µH) at 10 kHz, 1 mA	Inductance Tolerance	DC Resistance (Ω) Maximum	Rated Current (A) ΔT = 20°C	Current (Reference Value) (A)		Terminal		Weight (g)
					ΔT = 40°C	L Change Rate -10%	Soft Lead	Pin Lead	

**Packaging**

Series	Lead Type	Packaging Type	SPQ	Inner Package	Quantity	Outer Package	Quantity
SBC1	Soft lead	Bulk Vinyl bag	100	Box 	5,000	Box L 210 mm W 380 mm H 220 mm 	10,000
	Hard lead						
SBC2	Soft lead	Tray	250	Tray 	250	Box L 295 mm W 275 mm h 160 mm 	3,750
	Hard lead	Bulk Vinyl bag	100	Box 	4,000	Box L 210 mm W 380 mm H 220 mm 	8,000
SBC3	Soft lead	Tray	400	Tray 	400	Box L 210 mm W 380 mm H 220 mm 	4,000
	Hard lead	Bulk Vinyl bag	100	Box 	2,000	Box L 210 mm W 380 mm H 220 mm 	4,000
SBC4	Soft lead	Tray	300	Tray 	300	Box L 210 mm W 380 mm H 220 mm 	3,000
	Hard lead	Bulk Vinyl bag	100	Box 	2,000	Box L 210 mm W 380 mm H 220 mm 	4,000

## Packaging cont.

Series	Lead Type	Packaging Type	SPQ	Inner Package	Quantity	Outer Package	Quantity
SBC6	Soft lead	Tray	200	Tray 	200	Box L 210 mm W 380 mm H 220 mm 	1,600
	Hard lead	Bulk Vinyl bag	100	Box 	1,000	Box L 210 mm W 380 mm H 220 mm 	2,000
SBC7	Soft lead	Bulk Vinyl bag	50	Box 	500	Box L 210 mm W 380 mm H 220 mm 	1,000
	Hard lead						
SBC8	Soft lead	Tray	150	Tray 	150	Box L 210 mm W 380 mm H 220 mm 	900
	Hard lead	Bulk Vinyl bag	50	Box 	500	Box L 210 mm W 380 mm H 220 mm 	1,000
SBC9	Soft lead	Tray	250	Tray 	250	Box L 210 mm W 380 mm H 220 mm 	2,000
	Hard lead	Bulk Vinyl bag	100	Box 	1,000	Box L 210 mm W 380 mm H 220 mm 	2,000

## Handling Precautions

Inductors should be stored in normal working environments. While the inductors themselves are quite robust in other environments, solderability will be degraded by exposure to high temperatures, high humidity, corrosive atmospheres, and long-term storage.

KEMET recommends that maximum storage temperature not exceed 40°C and maximum storage humidity not exceed 70% relative humidity. Atmospheres should be free of chlorine and sulfur-bearing compounds. Temperature fluctuations should be minimized to avoid condensation on the parts. For optimized solderability, inductors' stock should be used promptly, preferably within six months of receipt.

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