⊕ Feature

- •Wire wound constructure common mode choke.
- •Very high rated current and low RDC.
- •The choke coils structure enables noise suppression without degrading the signal.

⊕ Applications

EMI countermeasures at signal lines of personal computers, microcomputers, peripheral devices, Countermeasures against noise at composite at video signals.

⊕ Product Identification：

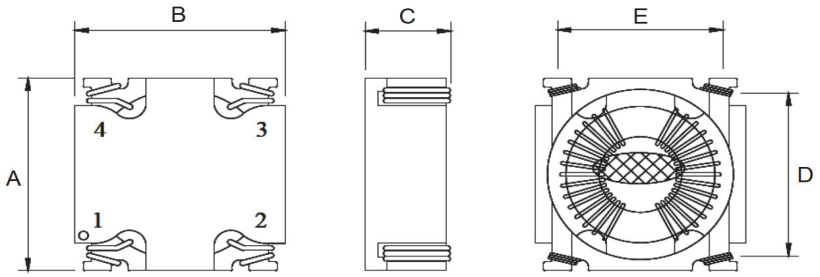
□□□□ □□□ □ - □□□ □

1 2 3 4 5

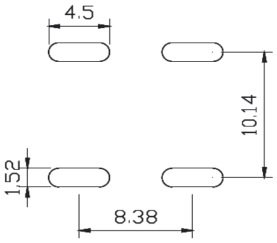
Series name	Dimensions(WxLxH)		Internal code
SBCM	1305	12.7*12.7*5.6mm	A
			:
			S = Standard

Inductance		Tolerance	
1R0	1 uH	K	10%
100	10 Uh	M	20%
101	100 uH	Y	25%
		N	30%

⊕ Shapes And Dimensions



⊕ Shapes And Dimensions



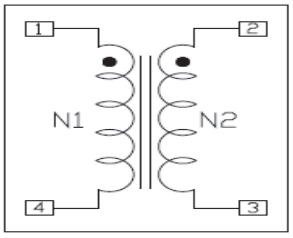
Part No.	Dimensions(mm)						
	A	B	C	D	E	F	G
SBCM1305S-131	12.7	12.7	5.60	10.14	8.83		
	±0.30	±0.50	Max	Ref	Ref		

⊕ Electrical Characteristics：

Part No.	L(N1=N2) (μH) at 1KHz/0.25V	IDC (A)	DCR(N1=N2) (mΩ)	Turn Ratio(N1=N2)	Hi-pot
SBCM1305S-131	130 ± 35%	5 Max	8 Max	1:1 ±2%	1500Vac, 1mA,2Sec.

※IDC:The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝25℃).

⊕ Equivalent Circuit Schematic：



⊕ Material List：

No.	Location	Material
1	Core	Ferrite Core
2	Wire	2UEWF
3	Solder	Sn99.3 Cu0.7

1.Operating temperature -40℃ ~ +105℃

2.Storage conditions -40℃ ~ +105℃

旭創科技
RSiN Technology

Surface Mount Choke Coils \ SBCM Type

TEST DATA FOR PREPRODUCTION SAMPLES

Customer		Test Date	2019/8/25		
RSiN Part No.	SBCM1305S-131	Sample Quantity	5	PCS	
Lot No		Test Temp	25℃	Test Humidity	62%

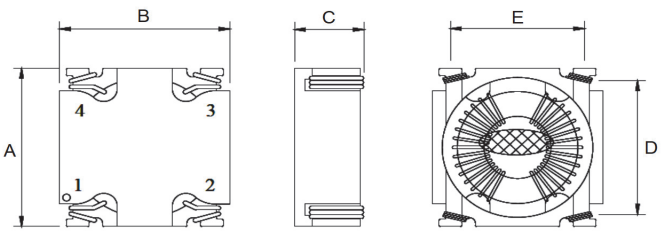
MEAS Item	L (uH)		DCR (mΩ)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)		
SPEC	130		30	12.70	12.70	5.60						
Upper	175.5		30	13.00	13.00	5.60						
Lower	84.5		-	12.40	12.40	-						
Tolerance	35%		Max	0.30	0.30	Max						
Test Freq.	100KHz/0.25V											
1	120.00		6.80	12.83	12.78	5.27						
2	118.00		7.00	12.84	12.75	5.27						
3	124.00		6.70	12.83	12.74	5.26						
4	122.00		6.80	12.85	12.72	5.26						
5	116.00		6.90	12.84	12.75	5.27						
6												
7												
8												
9												
10												
Average	120.00		6.84	12.84	12.75	5.27						
Max	124.00		7.00	12.85	12.78	5.27						
Min	116.00		6.70	12.83	12.72	5.26						
Range	8.00		0.30	0.02	0.06	0.01						
StDevP	2.83		0.10	0.01	0.02	0.00						

Test Instrument

LCR TH2819A

DCR TH2512

Configuration



Coil Spec：

Drawn by	Checked by	Approved by
davy	amanda	Vincent

⊕ Feature

- •Wire wound constructure common mode choke.
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⊕ Product Identification：

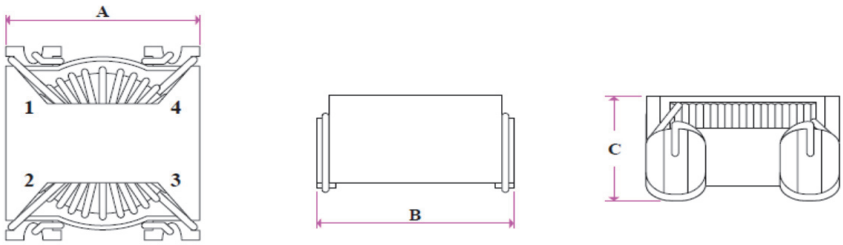
□□□□ □□□ □ - □□□ □

1 2 3 4 5

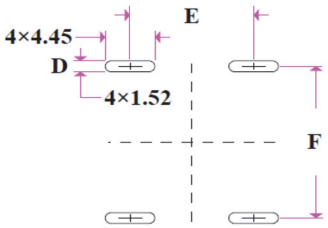
Series name	Dimensions(WxLxH)		Internal code
SBCM	1305	12.7*12.7*5.6mm	A
			:
			S = Standard

Inductance		Tolerance	
1R0	1 uH	K	10%
100	10 Uh	M	20%
101	100 uH	Y	25%
		N	30%

⊕ Shapes And Dimensions



⊕ Shapes And Dimensions



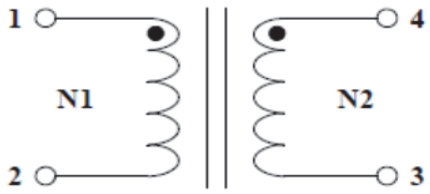
Part No.	Dimensions(mm)						
	A	B	C	D	E	F	G
SBCM1810S-401	15.0	18.2	10.00	1.52	9.40	15.49	
	Max	Max	Max	Ref	±0.13	±0.13	

⊕ Electrical Characteristics：

Part No.	L(N1=N2) (μH) at 10KHz/0.1V	IDC (A)	DCR(N1=N2) (mΩ)	Turn Ratio(N1=N2)	Hi-pot
SBCM1810S-401	400 ± 35%	6 Max	9.4 Max	1:1 ±2%	1500Vac, 1mA,2Sec.

※IDC:The actual value of D.C. current when the temperature rise is △t＝40℃(Ta＝25℃).

⊕ Equivalent Circuit Schematic：



⊕ Material List：

No.	Location	Material
1	Core	Mn-Zn,T10X6X5
2	Wire	2UEWF,0.7mmx1Px8Ts(Ref)
3	Base	LCP
4	Solder	Sn99.3 Cu0.7

1.Operating temperature -40℃ ~ +105℃

2.Storage conditions -40℃ ~ +105℃

TEST DATA FOR PREPRODUCTION SAMPLES

Customer		Test Date	2020/4/8		
RSiN Part No.	SBCM1810S-401	Sample Quantity	5	PCS	
Lot No		Test Temp	25℃	Test Humidity	62%

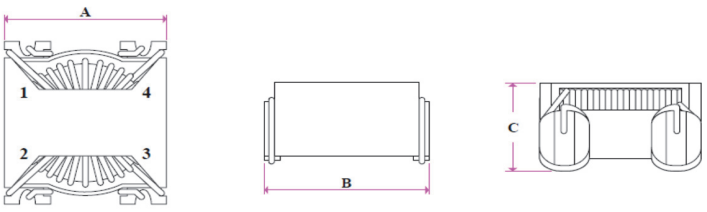
MEAS Item	L(N1=N2) (uH)		DCR(N1=N2) (mΩ)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)		
SPEC	400		9.40	14.99	18.16	10.00						
Upper	540		9.40	14.99	18.16	10.00						
Lower	260		-	-	-	-						
Tolerance	35%		Max	Max	Max	Max						
Test Freq.	10KHz/0.1V											
1	435.00		8.50	14.75	18.05	9.63						
2	362.00		8.20	14.82	18.06	9.65						
3	418.00		8.40	14.83	18.03	9.64						
4	395.00		8.30	14.74	18.04	9.65						
5	375.00		8.10	14.76	18.05	9.63						
6												
7												
8												
9												
10												
Average	397.00		8.30	14.78	18.05	9.64						
Max	435.00		8.50	14.83	18.06	9.65						
Min	362.00		8.10	14.74	18.03	9.63						
Range	73.00		0.40	0.09	0.03	0.02						
StDevP	26.83		0.14	0.04	0.01	0.01						

Test Instrument

LCR TH2819A

DCR TH2512

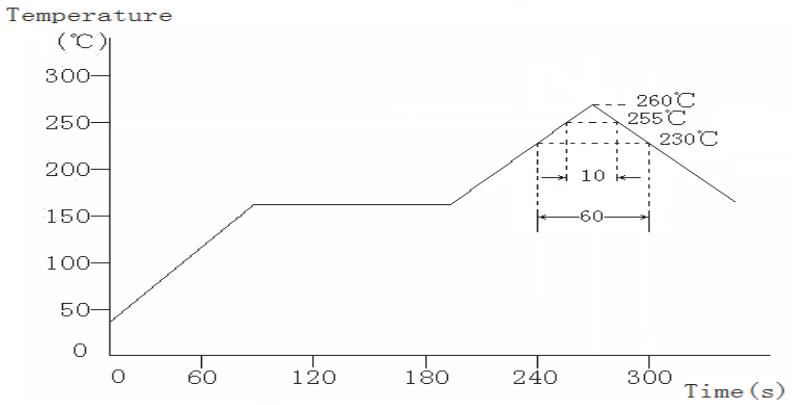
Configuration



Coil Spec ：

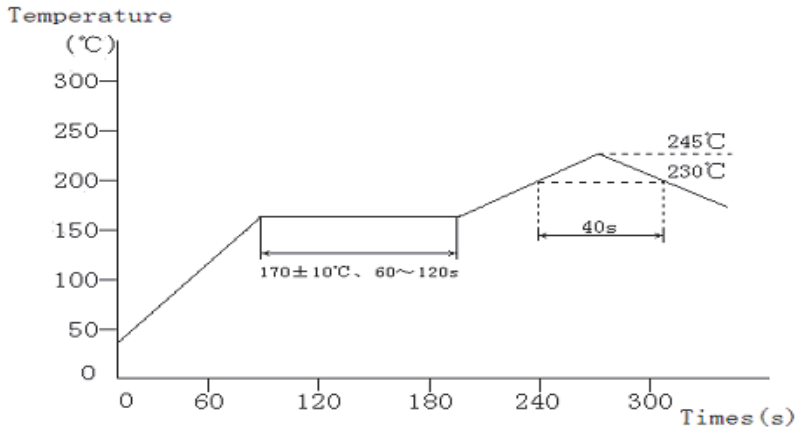
Drawn by	Checked by	Approved by
davy	amanda	Vincent

⊕ Reflow Soldering Heat Endurance



□No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.
□Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.
□The reflow test profile may vary with the testing instruments.

⊕ Recommended Reflow Conditions



The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.