

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

SCB 系列

## FEATURES

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
- With magnetic shield against radiation.
- Metallization on ferrite core results in excellent shock resistance and damage-free durability.
- Super low resistance with high current rating and high energy storage.
- Suitable for surface mount equipment.

## APPLICATIONS

- Power supply choke for small electrical equipments such as LED Light, VTR, LCD display, Note book, communication equipment, OA equipments, Mother board, display card, sound card; Power supply or MP3, MP4, MP5, PDA, IPAD, IPHONE, DC-DC converter DC-AC inverters etc.

## ORDERING CODE

SCB 252010 - 100 M T

Packing style(T:taping; B: bulk)  
Tol.(K:±10%;M:±20%;N:±30%)  
Inductance value(uH)  
Specification  
Type

## 特 征

- 磁性树脂涂敷结构极大地降低噪音；
- 磁屏蔽结构，防止高频辐射干扰；
- 直接在磁芯上金属化电极，抗跌落冲击强，经久耐用；
- 超低的直流电阻及高额定电流和高能量储存；
- 适合表面贴装。

## 用 途

- LED 照明、录像机、液晶显示器、笔记本电脑、通讯设备、电脑主机板、声卡、显卡、办公自动化设备的电源扼流；MP3、MP4、MP5、PDA、IPAD、IPHONE、直流-直流整流器、直流-交流换流器等的电源供应器。

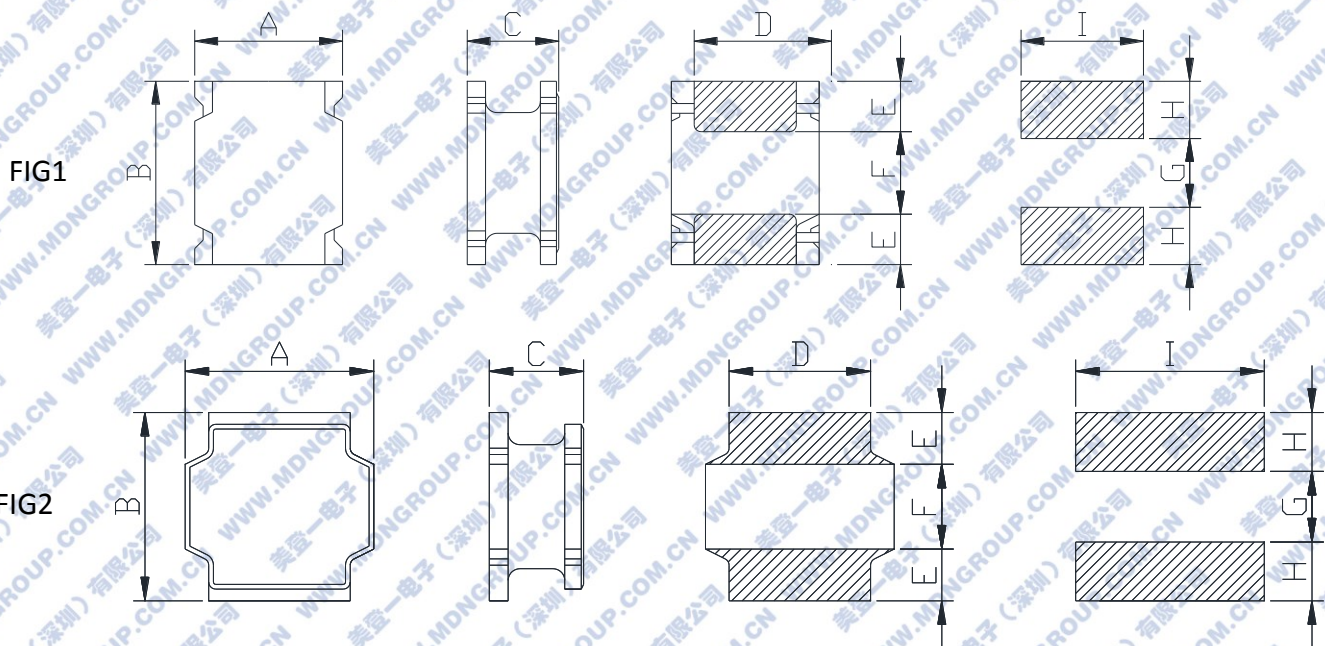
## SHAPE



## 外形尺寸 EXTERNAL DIMENSIONS (长 L×宽 W×高 H) (mm)

TYPE	DIMENSIONS	TYPE	DIMENSIONS
252010	2.5×2.0×1.0	4030	4.0×4.0×3.0
252012	2.5×2.0×1.2	5012	5.0×5.0×1.2
3010	3.0×3.0×1.0	5020	5.0×5.0×2.0
3012	3.0×3.0×1.2	5040	5.0×5.0×4.0
3015	3.0×3.0×1.5	6020	6.0×6.0×2.0
4012	4.0×4.0×1.2	6028	6.0×6.0×2.8
4018	4.0×4.0×1.8	6045	6.0×6.0×4.5
4020	4.0×4.0×2.0	8040	8.0×8.0×4.0
4026	4.0×4.0×2.6	8065	8.0×8.0×6.5

## DIMENSIONS AND LAND PATTERNS(mm)



TYPE	FIG	A (±0.3)	B (±0.3)	C (Max)	D (Ref)	E (Ref)	F (Ref)	G (Ref)	H (Ref)	I (Ref)
SCB252010-	1	2.5	2.0	1.0	1.5	0.80	0.80	0.80	0.85	2.0
SCB252012-	1	2.5	2.0	1.2	1.5	0.80	0.80	0.80	0.85	2.0
SCB3010-	2	3.0	3.0	1.0	2.5	0.75	1.5	1.5	0.8	2.7
SCB3012-	2	3.0	3.0	1.2	2.5	0.75	1.5	1.5	0.8	2.7
SCB3015-	2	3.0	3.0	1.5	2.5	0.75	1.5	1.5	0.8	2.7
SCB4012-	2	4.0	4.0	1.2	3.3	0.95	2.1	1.9	1.1	3.7
SCB4018-	2	4.0	4.0	1.8	3.3	0.95	2.1	1.9	1.1	3.7
SCB4020-	2	4.0	4.0	2.0	3.3	0.95	2.1	1.9	1.1	3.7
SCB4026-	2	4.0	4.0	2.6	3.3	0.95	2.1	1.9	1.1	3.7
SCB4030-	2	4.0	4.0	3.0	3.3	0.95	2.1	1.9	1.1	3.7
SCB5012-	2	5.0	5.0	1.2	4.0	1.25	2.5	2.3	1.4	4.2
SCB5020-	2	5.0	5.0	2.0	4.0	1.25	2.5	2.3	1.4	4.2
SCB5040-	2	5.0	5.0	4.0	4.0	1.25	2.5	2.3	1.4	4.2
SCB6020-	2	6.0	6.0	2.0	4.9	1.55	2.9	2.8	1.7	5.7
SCB6028-	2	6.0	6.0	2.8	4.9	1.55	2.9	2.8	1.7	5.7
SCB6045-	2	6.0	6.0	4.5	4.9	1.55	2.9	2.8	1.7	5.7
SCB8040-	2	8.0	8.0	4.4	6.3	2.0	4.0	3.8	2.2	7.5
SCB8065-	2	8.0	8.0	6.5	6.3	2.0	4.0	3.8	2.2	7.5

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB252010-SERIES

P/N	L( $\mu$ H) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$	Typ.	Typ.
R47N	0.47	$\pm 30\%$	0.047	3.35	2.56
R56N	0.56	$\pm 30\%$	0.060	3.20	2.18
R68N	0.68	$\pm 30\%$	0.062	2.75	2.05
1R0N	1.00	$\pm 30\%$	0.090	2.20	1.80
1R5N	1.50	$\pm 30\%$	0.150	2.10	1.42
2R2N	2.20	$\pm 30\%$	0.175	1.60	1.30
3R3M	3.30	$\pm 20\%$	0.275	1.30	0.98
4R7M	4.70	$\pm 20\%$	0.470	1.15	0.76
5R6M	5.60	$\pm 20\%$	0.650	0.95	0.80
6R8M	6.80	$\pm 20\%$	0.750	0.92	0.64
100M	10.00	$\pm 20\%$	0.910	0.78	0.55

## SCB252012-SERIES

P/N	L( $\mu$ H) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$	Typ.	Typ.
R47N	0.47	$\pm 30\%$	0.047	4.27	2.34
R68N	0.68	$\pm 30\%$	0.057	3.68	2.13
1R0N	1.00	$\pm 30\%$	0.069	2.90	2.10
1R5N	1.50	$\pm 30\%$	0.115	2.51	1.53
2R2N	2.20	$\pm 30\%$	0.166	2.07	1.25
3R3M	3.30	$\pm 20\%$	0.203	1.80	1.13
4R7M	4.70	$\pm 20\%$	0.290	1.45	0.92
5R6M	5.60	$\pm 20\%$	0.414	1.25	0.80
6R8M	6.80	$\pm 20\%$	0.447	1.09	0.75
100M	10.00	$\pm 20\%$	0.531	0.88	0.68
120M	12.00	$\pm 20\%$	0.827	0.82	0.56
150M	15.00	$\pm 20\%$	1.224	0.77	0.46
220M	22.00	$\pm 20\%$	1.520	0.59	0.41

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB3012-SERIES

P/N	L( $\mu$ H) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$		
1R0N	1.0	$\pm 30\%$	0.04	1.88	2.20
2R2N	2.2	$\pm 30\%$	0.075	1.20	1.55
3R3N	3.3	$\pm 30\%$	0.100	1.10	1.35
4R7N	4.7	$\pm 30\%$	0.120	0.90	1.24
100M	10	$\pm 20\%$	0.265	0.60	0.83
150M	15	$\pm 20\%$	0.360	0.45	0.70
220M	22	$\pm 20\%$	0.645	0.42	0.55
330M	33	$\pm 20\%$	0.875	0.36	0.45
470M	47	$\pm 20\%$	1.450	0.28	0.35
680M	68	$\pm 20\%$	1.670	0.25	0.33
101M	100	$\pm 20\%$	2.860	0.20	0.25

## SCB3015-SERIES

P/N	L( $\mu$ H) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$		
1R0N	1.0	$\pm 30\%$	0.03	2.32	2.35
2R2N	2.2	$\pm 30\%$	0.06	1.60	1.60
3R3N	3.3	$\pm 30\%$	0.08	1.32	1.36
4R7N	4.7	$\pm 30\%$	0.125	1.10	1.05
100M	10	$\pm 20\%$	0.250	0.72	0.75
150M	15	$\pm 20\%$	0.350	0.66	0.65
220M	22	$\pm 20\%$	0.460	0.52	0.57
330M	33	$\pm 20\%$	0.820	0.44	0.43
470M	47	$\pm 20\%$	1.250	0.35	0.35
560M	56	$\pm 20\%$	1.280	0.33	0.34
680M	68	$\pm 20\%$	2.700	0.28	0.30

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB4012-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$	Typ.	Typ.
1R0N	1.0	$\pm 30\%$	0.050	2.61	1.65
2R2N	2.2	$\pm 30\%$	0.080	1.76	1.32
3R3N	3.3	$\pm 30\%$	0.110	1.72	1.12
4R7N	4.7	$\pm 30\%$	0.125	1.15	1.05
6R8N	6.8	$\pm 30\%$	0.198	0.85	0.84
100M	10	$\pm 20\%$	0.265	0.80	0.77
150M	15	$\pm 20\%$	0.340	0.56	0.64
220M	22	$\pm 20\%$	0.587	0.46	0.49
330M	33	$\pm 20\%$	0.810	0.42	0.42
470M	47	$\pm 20\%$	1.100	0.35	0.37
680M	68	$\pm 20\%$	1.950	0.38	0.27
101M	100	$\pm 20\%$	2.210	0.25	0.25

## SCB4018-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR( $\Omega$ ) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			$\pm 30\%$	Typ.	Typ.
1R0N	1.0	$\pm 30\%$	0.025	4.80	2.00
2R2N	2.2	$\pm 30\%$	0.045	2.70	1.65
3R3N	3.3	$\pm 30\%$	0.070	2.45	1.23
4R7N	4.7	$\pm 30\%$	0.090	1.70	1.20
100M	10	$\pm 20\%$	0.180	1.30	0.84
150M	15	$\pm 20\%$	0.250	0.94	0.65
220M	22	$\pm 20\%$	0.360	0.80	0.59
330M	33	$\pm 20\%$	0.530	0.56	0.49
470M	47	$\pm 20\%$	0.650	0.52	0.42
680M	68	$\pm 20\%$	1.000	0.47	0.32
101M	100	$\pm 20\%$	1.750	0.40	0.25
151M	150	$\pm 20\%$	2.500	0.31	0.22
221M	220	$\pm 20\%$	4.000	0.27	0.17

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB4020-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	1.0	± 30%	0.029	4.78	2.15
2R2N	2.2	± 30%	0.040	3.40	1.85
3R3N	3.3	± 30%	0.070	3.20	1.40
4R7N	4.7	± 30%	0.075	2.35	1.34
6R8N	6.8	± 30%	0.125	2.20	1.04
100M	10	± 20%	0.165	1.60	0.90
150M	15	± 20%	0.230	1.35	0.77
220M	22	± 20%	0.350	1.05	0.62
330M	33	± 20%	0.550	0.85	0.49
470M	47	± 20%	0.710	0.74	0.44
680M	68	± 20%	1.060	0.61	0.36
820M	82	± 20%	1.170	0.50	0.34
101M	100	± 20%	1.550	0.48	0.31

## SCB4026-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R2N	1.2	± 30%	0.030	3.10	2.30
2R2N	2.2	± 30%	0.040	2.10	2.00
3R3N	3.3	± 30%	0.050	1.80	1.70
4R7N	4.7	± 30%	0.055	1.45	1.60
6R8N	6.8	± 30%	0.065	1.30	1.50
100M	10	± 20%	0.085	1.00	1.30
150M	15	± 20%	0.110	0.90	1.10
220M	22	± 20%	0.165	0.60	0.90
330M	33	± 20%	0.270	0.55	0.70
470M	47	± 20%	0.300	0.40	0.65

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB5012-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	1.0	± 30%	0.057	4.40	2.00
1R5N	1.5	± 30%	0.072	3.70	1.90
2R2N	2.2	± 30%	0.090	3.10	1.70
3R3N	3.3	± 30%	0.126	2.40	1.40
4R7N	4.7	± 30%	0.164	2.20	1.30
6R8N	6.8	± 30%	0.245	1.70	1.00
100M	10	± 20%	0.344	1.40	0.85
150M	15	± 20%	0.436	1.20	0.80

## SCB5020-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	1.0	± 30%	0.020	4.10	3.80
1R5N	1.5	± 30%	0.026	4.10	3.20
2R2N	2.2	± 30%	0.032	3.20	2.90
3R3N	3.3	± 30%	0.043	2.55	2.50
4R7N	4.7	± 30%	0.057	2.45	2.20
6R8N	6.8	± 30%	0.083	2.05	1.80
8R2N	8.2	± 30%	0.100	1.85	1.65
100M	10	± 20%	0.110	1.70	1.55
150M	15	± 20%	0.165	1.35	1.25
220M	22	± 20%	0.226	1.15	1.10
330M	33	± 20%	0.390	0.92	0.90
470M	47	± 20%	0.523	0.77	0.77
680M	68	± 20%	0.740	0.65	0.64
101M	100	± 20%	1.100	0.53	0.52

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40℃.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

SCB5040-SERIES					
P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	1.0	± 30%	0.012	7.35	4.90
1R2N	1.2	± 30%	0.016	6.50	4.15
1R5N	1.5	± 30%	0.018	6.30	4.30
2R2N	2.2	± 30%	0.019	4.90	3.80
2R7N	2.7	± 30%	0.022	4.30	3.60
3R0N	3.0	± 30%	0.023	4.15	3.50
3R3N	3.3	± 30%	0.024	3.95	3.40
3R9N	3.9	± 30%	0.027	3.55	3.20
4R7N	4.7	± 30%	0.030	3.50	3.00
5R6N	5.6	± 30%	0.035	3.00	2.80
6R8N	6.8	± 30%	0.043	2.90	2.50
8R2N	8.2	± 30%	0.048	2.70	2.30
100M	10	± 20%	0.064	2.35	2.10
150M	15	± 20%	0.086	2.00	2.00
220M	22	± 20%	0.129	1.60	1.50
330M	33	± 20%	0.188	1.30	1.20
470M	47	± 20%	0.272	1.10	1.00
680M	68	± 20%	0.4	0.90	0.80
101M	100	± 20%	0.56	0.75	0.70
151M	150	± 20%	0.75	0.65	0.60

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40℃.



## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB6020-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	2.2	± 30%	0.020	4.15	3.50
2R2N	2.2	± 30%	0.035	3.75	2.75
3R3N	3.3	± 30%	0.035	3.15	2.60
4R7N	4.7	± 30%	0.058	3.00	2.00
6R8N	6.8	± 30%	0.079	2.20	1.80
8R2N	8.2	± 30%	0.105	2.10	1.40
100M	10	± 20%	0.115	1.75	1.40
150M	15	± 20%	0.120	1.20	1.20
220M	22	± 20%	0.210	1.05	1.00
330M	33	± 20%	0.300	0.95	0.84

## SCB6028-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
1R0N	1.0	± 30%	0.010	5.75	5.20
2R2N	2.2	± 30%	0.020	5.10	3.75
3R3N	3.3	± 30%	0.025	4.15	3.48
4R7N	4.7	± 30%	0.030	4.15	3.48
6R8N	6.8	± 30%	0.047	2.60	2.40
100M	10	± 20%	0.072	2.04	1.95
150M	15	± 20%	0.125	1.75	1.45
220M	22	± 20%	0.140	1.45	1.40
330M	33	± 20%	0.185	1.35	1.22
470M	47	± 20%	0.315	1.15	1.05
680M	68	± 20%	0.360	0.80	0.86
820M	82	± 30%	0.500	0.80	0.70
101M	100	± 20%	0.520	0.65	0.65

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40℃.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

## SCB6045-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
2R2N	2.2	± 30%	0.015	6.40	5.10
3R3N	3.3	± 30%	0.020	5.20	4.60
4R7N	4.7	± 30%	0.025	4.40	4.10
100M	10	± 20%	0.048	3.20	3.00
150M	15	± 20%	0.068	2.50	2.30
220M	22	± 20%	0.090	2.10	2.00
330M	33	± 20%	0.135	1.60	1.50
470M	47	± 20%	0.200	1.40	1.40
680M	68	± 20%	0.290	1.10	1.00
101M	100	± 20%	0.430	0.90	0.80
151M	150	± 20%	0.580	0.80	0.70
221M	220	± 20%	0.840	0.70	0.60
331M	330	± 20%	1.280	0.55	0.55

## SCB8040-SERIES

P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
2R2N	2.2	± 30%	0.012	6.70	6.20
3R3N	3.3	± 30%	0.017	5.20	5.20
4R7N	4.7	± 30%	0.019	4.40	4.50
100M	10	± 20%	0.030	3.20	3.50
150M	15	± 20%	0.048	2.60	2.90
220M	22	± 20%	0.070	2.20	2.50
330M	33	± 20%	0.100	1.80	2.10
470M	47	± 20%	0.135	1.50	1.70
680M	68	± 20%	0.200	1.20	1.40
101M	100	± 20%	0.290	1.00	1.20
221M	220	± 20%	0.600	0.85	0.80
331M	330	± 20%	0.889	0.68	0.64

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.

## SMD INDUCTORS FOR POWER CIRCUITS 贴片功率电感

## SCB 系列

SCB8065-SERIES					
P/N	L(uH) Inductance 100KHz/0.25V	Inductance Tolerance	DCR(Ω) DC Resistance	Isat(A) Inductance decrease current	Irms(A) Temperature rise current
			± 30%	Typ.	Typ.
3R3N	3.3	± 30%	0.015	9.50	5.10
4R7N	4.7	± 30%	0.018	8.50	4.70
6R8N	6.8	± 30%	0.026	7.60	4.30
100M	10	± 20%	0.033	6.60	4.00
150M	15	± 20%	0.045	5.20	3.50
220M	22	± 20%	0.055	4.30	2.85
330M	33	± 20%	0.085	3.60	2.00
470M	47	± 20%	0.135	2.85	1.80
680M	68	± 20%	0.181	2.50	1.50
101M	100	± 20%	0.250	2.00	1.30
151M	150	± 20%	0.360	1.60	1.00
221M	220	± 20%	0.530	1.30	0.90
331M	330	± 20%	0.85	1.20	0.70
471M	470	± 20%	1.30	1.00	0.55
102M	1000	± 20%	2.35	0.65	0.40
152M	1500	± 20%	3.65	0.54	0.32
202M	2000	± 20%	4.90	0.45	0.27
222M	2200	± 20%	5.10	0.43	0.27
302M	3000	± 20%	7.00	0.38	0.25
332M	3300	± 20%	7.30	0.36	0.23
452M	4500	± 20%	12.3	0.30	0.18
472M	4700	± 20%	12.5	0.29	0.18
562M	5600	± 20%	16.0	0.26	0.15
682M	6800	± 20%	18.7	0.25	0.14
822M	8200	± 20%	19.0	0.22	0.13
103M	10000	± 20%	22.0	0.20	0.12

Remark : Inductance decrease current: Value of inductance decrease within 30%.

Temperature rise current: A rise in temperature of core surface is within 40°C.