

Product Portfolio – SMPCB Carbonyl series

- **SMPCB- Square Size design** Molding Inductors for Electronic- power rail

Features-

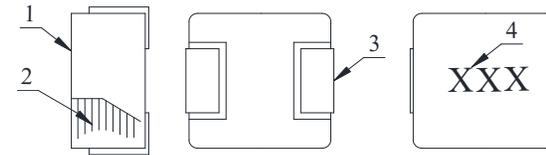
- **SMPCB Carbonyl** Series High Current Shielded Power Inductors.
- Halogen Free & ROHS compliant.
- Operating temperature:-55°C~+125°C
- Low profile and low DCR
- Frequency range up to 5MHz

Test Noted-

- 1).All test data is referenced to 25°C ambient.
- 2).Inductance Tolerance \pm 20%.
- 3).Test Condition:100KHz, 1.0Vrms.
- 4).Rated current: Isat or Irms, whichever is smaller.
- 5).Isat: DC current at which the inductance drops approximate 30% TYP from its value without current.
- 6).Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 25°C ambient.

7).Absolute maximum voltage **30VDC**

Square Type :



series	A	B	C	D	E	a	b	c
SMPCB0420	4.50±0.40	4.30±0.40	2.00MAX	2.00±0.50	0.80±0.50	2.20TYP	5.20TYP	2.50TYP
SMPCB0518	5.50±0.40	5.30±0.40	1.80MAX	2.20±0.50	1.20±0.50	2.20TYP	6.00TYP	2.70TYP
SMPCB0520	5.50±0.40	5.30±0.40	2.00MAX	2.20±0.50	1.20±0.50	2.20TYP	6.00TYP	2.70TYP
SMPCB0530	5.50±0.40	5.30±0.40	3.00MAX	2.20±0.50	1.20±0.50	2.20TYP	6.00TYP	2.70TYP
SMPCB0618	7.30±0.40	6.80±0.40	1.80MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB0620	7.30±0.40	6.80±0.40	2.00MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB0624	7.30±0.40	6.80±0.40	2.40MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB0630	7.30±0.40	6.80±0.40	3.00MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB0640	7.30±0.40	6.80±0.40	4.00MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB0650	7.30±0.40	6.80±0.40	5.00MAX	3.00±0.50	1.60±0.50	3.70TYP	8.40TYP	3.50TYP
SMPCB1030	11.1±0.40	10.0±0.40	3.00MAX	3.00±0.50	2.00±0.50	5.40TYP	13.60TYP	4.10TYP
SMPCB1040	11.1±0.40	10.0±0.40	4.00MAX	3.00±0.50	2.00±0.50	5.40TYP	13.60TYP	4.10TYP
SMPCB1050	11.1±0.40	10.0±0.40	5.00MAX	3.00±0.50	2.00±0.50	5.40TYP	13.60TYP	4.10TYP
SMPCB1350	13.6±0.40	12.8±0.40	5.00MAX	3.80±0.50	2.20±0.50	8.00TYP	15.50TYP	5.00TYP
SMPCB1360	13.6±0.40	12.8±0.40	6.00MAX	3.80±0.50	2.20±0.50	8.00TYP	15.50TYP	5.00TYP
SMPCB1365	13.6±0.40	12.8±0.40	6.50MAX	3.80±0.50	2.20±0.50	8.00TYP	15.50TYP	5.00TYP
SMPCB1770	18.1±0.40	17.1±0.40	7.00MAX	11.9±0.50	2.50±0.50	11.20TYP	18.70TYP	12.80TYP

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- SMPCB- **Square Size design** Molding Inductors for Electronic- power rail
- Same size and Main inductance cross

Part Number	Inductance	DC Resistance	Saturation Current	Heat Rating Current	DCR Reduce %	Isat Enhancement %
	@100KHZ, 1V	Max.	Typ.	Typ.		
Units	μH	mΩ	A	A		
Symbol	L	DCR	Isat	Irms		
SMPC0402S-1R0MT	1.0±20%	27	7	6		
SMPCB0420-1R0MT	1.0±20%	27	8.5	5		+17.65%
SMPCEV0402A-1R0MT	1.0±20%	14.6	9.6	9.6	↓ -45.93%	↑ +27.08%
SMTU0420-1R0MT	1.0±20%	9	9.5	14	↓ -66.67%	+26.32%
SMPC0603S-1R0MT	1.0±20%	7.4	15	12		
SMPCB0630-1R0MT	1.0±20%	10	22	11		+31.82%
SMPCEV0603A-1R0MT	1.0±20%	6.05	23	18	↓ -18.24%	↑ +34.78%
SMTU0630-1R0MT	1.0±20%	5	25	20	↓ -32.43%	+40.00%
SMPC1003S-1R0MT	1.0±20%	6	21	15		
SMPCB1030-1R0MT	1.0±20%	6	22	15		+4.55%
SMPCEV1003A-1R0MT	1.0±20%	4.95	35	23	↓ -17.50%	↑ +40.00%
SMTU1040-1R2MT	1.2±20%	2.5	33	27	↓ -58.33%	+36.36%

Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0420-R10MT	0.10	4.00	3.20	35.0	14.0
SMPCB0420-R22MT	0.22	7.30	6.60	24.0	13.0
SMPCB0420-R33MT	0.33	8.60	7.80	18.0	10.0
SMPCB0420-R47MT	0.47	14.00	11.20	12.0	8.0
SMPCB0420-R56MT	0.56	16.00	13.50	10.0	7.3
SMPCB0420-R68MT	0.68	19.00	16.00	10.0	7.0
SMPCB0420-1R0MT	1.00	27.00	22.00	8.5	5.0
SMPCB0420-1R5MT	1.50	42.00	34.80	7.0	4.5
SMPCB0420-2R2MT	2.20	61.00	51.00	6.0	4.0
SMPCB0420-3R3MT	3.30	76.00	69.00	4.0	3.5
SMPCB0420-4R7MT	4.70	105.00	95.00	3.5	2.6
SMPCB0420-5R6MT	5.60	125.00	112.00	3.0	2.2
SMPCB0420-6R8MT	6.80	172.00	150.00	2.8	2.1
SMPCB0420-8R2MT	8.20	180.00	158.00	2.5	2.0
SMPCB0420-100MT	10.00	243.00	215.00	2.3	1.8

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0518-R15MT	0.15	3.90	3.50	27.0	15.5
SMPCB0518-R22MT	0.22	5.00	4.20	22.0	13.0
SMPCB0518-R33MT	0.33	8.60	7.50	15.0	11.0
SMPCB0518-R47MT	0.47	11.30	9.80	14.0	10.0
SMPCB0518-R56MT	0.56	13.00	11.00	13.5	9.5
SMPCB0518-R68MT	0.68	14.30	12.40	13.0	9.0
SMPCB0518-1R0MT	1.00	21.00	18.20	10.0	6.8
SMPCB0518-1R5MT	1.50	30.00	26.00	9.0	6.0
SMPCB0518-2R2MT	2.20	48.30	42.00	7.5	4.5
SMPCB0518-3R3MT	3.30	69.00	60.00	5.0	3.5
SMPCB0518-4R7MT	4.70	98.00	85.00	4.5	3.0
SMPCB0518-5R6MT	5.60	127.00	110.00	4.0	2.5
SMPCB0518-6R8MT	6.80	137.00	118.00	3.5	2.4
SMPCB0518-8R2MT	8.20	165.00	143.00	3.0	2.3
SMPCB0518-100MT	10.00	190.00	165.00	2.8	2.3

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
2. **75VDC types**. Adding the suffix "H" to the part number signifies a product intended for high-voltage applications. @200VDC Impulse Winding Test

Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0520-R10MT	0.10	4.00	3.60	45.0	18.0
SMPCB0520-R15MT	0.15	4.60	3.80	27.0	16.0
SMPCB0520-R22MT	0.22	5.50	4.00	25.0	15.0
SMPCB0520-R33MT	0.33	7.30	6.30	21.3	12.0
SMPCB0520-R47MT	0.47	8.60	7.30	18.0	11.5
SMPCB0520-R68MT	0.68	12.40	11.00	12.8	10.0
SMPCB0520-1R0MT	1.00	20.00	17.50	13.7	7.0
SMPCB0520-1R5MT	1.50	30.50	26.50	9.8	5.5
SMPCB0520-2R2MT	2.20	50.00	42.00	9.0	4.2
SMPCB0520-3R3MT	3.30	76.00	66.00	7.3	3.3
SMPCB0520-4R7MT	4.70	116.00	103.00	5.0	2.8
SMPCB0520-5R6MT	5.60	122.00	112.00	4.0	2.5
SMPCB0520-6R8MT	6.80	150.00	130.00	3.8	2.4
SMPCB0520-8R2MT	8.20	171.00	148.00	3.5	2.3
SMPCB0520-100MT	10.00	199.00	180.00	3.4	2.3

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0530-R10MT	0.10	2.60	2.20	40.0	24.0
SMPCB0530-R15MT	0.15	3.00	2.50	37.0	22.0
SMPCB0530-R22MT	0.22	3.80	3.20	32.0	19.0
SMPCB0530-R33MT	0.33	5.00	4.30	20.0	15.0
SMPCB0530-R47MT	0.47	7.10	6.30	18.0	13.0
SMPCB0530-R56MT	0.56	8.60	7.80	17.0	12.0
SMPCB0530-R68MT	0.68	9.00	8.00	15.5	11.0
SMPCB0530-R82MT	0.82	10.00	8.80	14.0	10.0
SMPCB0530-1R0MT	1.00	12.70	11.00	13.0	9.0
SMPCB0530-1R5MT	1.50	16.60	14.40	11.5	8.0
SMPCB0530-2R2MT	2.20	29.20	26.00	11.0	7.0
SMPCB0530-3R3MT	3.30	38.00	33.00	9.0	6.0
SMPCB0530-4R7MT	4.70	53.00	48.00	8.0	5.5
SMPCB0530-5R6MT	5.60	62.00	54.00	7.3	4.7
SMPCB0530-6R8MT	6.80	76.20	68.00	6.0	4.2
SMPCB0530-8R2MT	8.20	97.00	85.00	5.0	3.8
SMPCB0530-100MT	10.00	120.00	104.00	4.0	3.5

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0618-R10MT	0.10	2.50	2.10	45.0	18.0
SMPCB0618-R15MT	0.15	2.60	2.20	34.0	18.0
SMPCB0618-R22MT	0.22	3.00	2.50	26.0	16.0
SMPCB0618-R33MT	0.33	5.80	4.80	22.0	14.0
SMPCB0618-R47MT	0.47	7.40	6.40	18.0	12.0
SMPCB0618-R56MT	0.56	10.00	8.50	17.5	11.0
SMPCB0618-R68MT	0.68	11.00	9.50	17.0	10.0
SMPCB0618-R82MT	0.82	14.00	11.50	15.5	8.5
SMPCB0618-1R0MT	1.00	17.00	14.50	14.0	7.0
SMPCB0618-1R5MT	1.50	25.20	21.00	13.0	6.0
SMPCB0618-2R2MT	2.20	35.00	31.00	11.0	6.0
SMPCB0618-3R3MT	3.30	46.00	40.00	9.0	5.0
SMPCB0618-4R7MT	4.70	76.00	68.00	7.0	4.0
SMPCB0618-5R6MT	5.60	86.00	78.00	6.0	3.5
SMPCB0618-6R8MT	6.80	104.00	93.00	5.5	3.0
SMPCB0618-8R2MT	8.20	140.00	123.00	4.5	2.6
SMPCB0618-100MT	10.00	160.00	143.00	3.5	2.3

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0620-R15MT	0.15	2.50	2.10	40.0	22.0
SMPCB0620-R22MT	0.22	3.50	2.80	30.0	18.0
SMPCB0620-R33MT	0.33	4.80	4.00	25.0	15.0
SMPCB0620-R36MT	0.36	5.20	4.20	23.0	13.0
SMPCB0620-R47MT	0.47	5.50	4.60	20.0	12.0
SMPCB0620-R56MT	0.56	6.40	5.20	19.0	11.0
SMPCB0620-R68MT	0.68	8.00	7.00	17.0	10.0
SMPCB0620-R82MT	0.82	10.00	8.20	16.0	9.0
SMPCB0620-1R0MT	1.00	12.00	10.50	15.0	8.0
SMPCB0620-1R5MT	1.50	17.00	15.00	13.0	7.0
SMPCB0620-2R2MT	2.20	24.00	20.00	12.0	5.0
SMPCB0620-3R3MT	3.30	38.00	32.00	9.0	4.5
SMPCB0620-4R7MT	4.70	50.00	42.00	8.0	4.0
SMPCB0620-6R8MT	6.80	75.00	65.00	7.0	3.2
SMPCB0620-100MT	10.00	120.00	100.00	5.0	2.5

- 1. Absolute maximum voltage 30VDC** In production process test @100VDC Impulse Winding
- 2. 75VDC types.** Adding the suffix "H" to the part number signifies a product intended for high-voltage applications. @200VDC Impulse Winding Test

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		Isat (A)	Irms (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0624-R10MT	0.10	1.70	1.40	70.0	30.0
SMPCB0624-R15MT	0.15	2.30	1.80	45.0	30.0
SMPCB0624-R22MT	0.22	3.20	2.00	34.0	21.0
SMPCB0624-R33MT	0.33	4.40	3.60	30.0	18.0
SMPCB0624-R36MT	0.36	4.60	3.80	29.0	17.0
SMPCB0624-R47MT	0.47	5.10	4.80	26.0	15.0
SMPCB0624-R56MT	0.56	6.50	5.50	24.0	13.0
SMPCB0624-R68MT	0.68	7.20	6.40	21.0	13.0
SMPCB0624-R82MT	0.82	9.50	8.00	17.0	11.0
SMPCB0624-1R0MT	1.00	13.50	10.50	16.0	11.0
SMPCB0624-1R5MT	1.50	20.00	17.00	15.0	9.0
SMPCB0624-2R2MT	2.20	28.00	23.00	14.0	7.0
SMPCB0624-3R3MT	3.30	39.00	34.00	10.0	6.0
SMPCB0624-4R7MT	4.70	50.00	41.00	9.0	5.5
SMPCB0624-5R6MT	5.60	62.00	56.00	8.0	5.0
SMPCB0624-6R8MT	6.80	72.00	65.00	7.0	4.0
SMPCB0624-8R2MT	8.20	95.00	81.00	6.0	3.6
SMPCB0624-100MT	10.00	101.00	92.00	5.0	3.2
SMPCB0624-150MT	15.00	180.00	150.00	3.5	2.5
SMPCB0624-220MT	22.00	215.00	185.00	3.0	1.8

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μ H) \pm 20%	DCR (m Ω)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0630-R10MT	0.10	1.70	1.20	60.0	32.5
SMPCB0630-R22MT	0.22	2.80	2.10	40.0	23.0
SMPCB0630-R33MT	0.33	3.90	3.50	32.0	20.0
SMPCB0630-R36MT	0.36	4.20	3.60	32.0	19.0
SMPCB0630-R47MT	0.47	4.20	4.00	26.0	17.5
SMPCB0630-R56MT	0.56	5.00	4.70	25.5	16.5
SMPCB0630-R68MT	0.68	5.50	4.80	25.0	15.5
SMPCB0630-R82MT	0.82	8.00	6.70	24.0	13.0
SMPCB0630-1R0MT	1.00	10.00	8.30	22.0	11.0
SMPCB0630-1R5MT	1.50	15.00	13.00	18.0	9.0
SMPCB0630-2R2MT	2.20	20.00	18.00	14.0	8.0
SMPCB0630-3R3MT	3.30	30.00	28.00	13.5	6.0
SMPCB0630-4R7MT	4.70	40.00	37.00	10.0	5.5
SMPCB0630-5R6MT	5.60	48.00	43.00	9.0	5.0
SMPCB0630-6R8MT	6.80	60.00	54.00	8.0	4.5
SMPCB0630-8R2MT	8.20	68.00	64.00	7.5	4.0
SMPCB0630-100MT	10.00	85.00	75.00	6.0	3.5
SMPCB0630-150MT	15.00	123.00	107.00	4.0	3.0
SMPCB0630-220MT	22.00	190.00	165.00	3.5	2.0

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0640-R12MT	0.12	1.00	0.70	64.0	32.0
SMPCB0640-R15MT	0.15	1.20	0.90	55.0	30.0
SMPCB0640-R47MT	0.47	3.40	3.00	28.0	23.0
SMPCB0640-R56MT	0.56	4.30	3.80	26.0	20.0
SMPCB0640-R68MT	0.68	4.50	4.10	24.0	16.0
SMPCB0640-1R0MT	1.00	8.00	6.80	22.0	14.0
SMPCB0640-1R5MT	1.50	12.00	10.00	20.0	12.0
SMPCB0640-2R2MT	2.20	14.00	11.50	14.0	9.0
SMPCB0640-4R7MT	4.70	32.50	28.00	11.0	6.0
SMPCB0640-5R6MT	5.60	38.00	33.00	9.0	5.0
SMPCB0640-6R8MT	6.80	50.00	44.00	8.5	4.5
SMPCB0640-8R2MT	8.20	64.00	55.00	8.0	4.5
SMPCB0640-100MT	10.00	72.00	64.00	7.0	4.0
SMPCB0640-150MT	15.00	90.00	80.00	3.5	3.0
SMPCB0640-220MT	22.00	145.00	120.00	3.5	2.5
SMPCB0640-330MT	33.00	210.00	180.00	3.2	1.8

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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB0650-R33MT	0.33	3.00	2.50	32.0	25.0
SMPCB0650-R47MT	0.47	3.90	3.50	30.0	22.0
SMPCB0650-R56MT	0.56	4.20	3.60	27.0	20.0
SMPCB0650-R68MT	0.68	4.50	4.00	24.0	18.0
SMPCB0650-R82MT	0.82	4.90	4.60	22.0	16.5
SMPCB0650-1R0MT	1.00	6.50	6.10	20.0	15.0
SMPCB0650-1R5MT	1.50	9.00	8.60	16.5	12.0
SMPCB0650-2R2MT	2.20	12.00	11.20	14.0	10.0
SMPCB0650-3R3MT	3.30	20.90	19.00	12.0	8.0
SMPCB0650-4R7MT	4.70	30.80	28.00	10.0	6.5
SMPCB0650-5R6MT	5.60	49.00	43.50	9.0	6.0

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
2. **75VDC types**. Adding the suffix "H" to the part number signifies a product intended for high-voltage applications. @200VDC Impulse Winding Test

Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1030-R22MT	0.22	1.30	1.10	55.0	30.0
SMPCB1030-R33MT	0.33	1.50	1.20	47.0	25.0
SMPCB1030-R36MT	0.36	1.60	1.30	40.0	23.0
SMPCB1030-R47MT	0.47	2.50	2.10	33.0	20.0
SMPCB1030-R56MT	0.56	3.00	2.60	24.0	16.0
SMPCB1030-R82MT	0.82	4.50	3.90	22.0	15.0
SMPCB1030-1R0MT	1.00	6.00	4.60	20.0	15.0
SMPCB1030-1R5MT	1.50	7.50	6.50	20.0	13.0
SMPCB1030-2R2MT	2.20	9.00	8.00	16.0	12.0
SMPCB1030-3R3MT	3.30	16.00	14.50	14.0	9.0
SMPCB1030-4R7MT	4.70	22.50	20.50	13.0	7.0
SMPCB1030-5R6MT	5.60	32.50	28.00	12.0	7.0
SMPCB1030-6R8MT	6.80	35.00	30.20	9.5	6.5
SMPCB1030-8R2MT	8.20	48.00	42.00	8.5	6.0
SMPCB1030-100MT	10.00	55.00	50.00	8.0	5.0

- Absolute maximum voltage 30VDC** In production process test @100VDC Impulse Winding
- 75VDC types.** Adding the suffix "H" to the part number signifies a product intended for high-voltage applications. @200VDC Impulse Winding Test

Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		Isat (A)	Irms (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1350-R20MT	0.20	0.55	0.45	110.0	52.0
SMPCB1350-R22MT	0.22	0.70	0.50	110.0	52.0
SMPCB1350-R33MT	0.33	0.90	0.70	80.0	42.0
SMPCB1350-R36MT	0.36	0.95	0.75	75.0	42.0
SMPCB1350-R47MT	0.47	1.10	0.86	65.0	38.0
SMPCB1350-R56MT	0.56	1.50	1.00	55.0	36.0
SMPCB1350-R68MT	0.68	1.70	1.40	54.0	34.0
SMPCB1350-R82MT	0.82	2.10	1.70	52.0	31.0
SMPCB1350-1R0MT	1.00	2.50	1.85	50.0	29.0
SMPCB1350-1R5MT	1.50	3.30	2.80	48.0	27.0
SMPCB1350-2R2MT	2.20	5.50	4.20	32.0	20.0
SMPCB1350-3R3MT	3.30	9.20	6.80	32.0	15.0
SMPCB1350-4R7MT	4.70	15.00	11.40	27.0	12.0
SMPCB1350-5R6MT	5.60	16.50	12.30	22.0	11.5
SMPCB1350-6R8MT	6.80	18.50	14.50	21.0	11.0
SMPCB1350-8R2MT	8.20	22.50	16.80	18.0	9.5
SMPCB1350-100MT	10.00	25.50	21.40	16.0	9.0
SMPCB1350-150MT	15.00	38.00	32.00	13.0	8.2
SMPCB1350-220MT	22.00	58.00	50.00	10.0	6.5
SMPCB1350-330MT	33.00	88.00	73.00	8.0	5.0
SMPCB1350-470MT	47.00	120.00	100.00	6.5	4.0

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
2. **75VDC types**. Adding the suffix "H" to the part number signifies a product intended for high-voltage applications. @200VDC Impulse Winding Test

Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1050-R22MT	0.22	0.50	0.45	70.0	45.0
SMPCB1050-R56MT	0.56	1.50	1.30	43.0	26.5
SMPCB1050-1R0MT	1.00	3.50	2.80	30.0	22.0
SMPCB1050-1R5MT	1.50	4.10	3.50	27.0	19.0
SMPCB1050-2R2MT	2.20	6.00	5.40	24.0	16.0
SMPCB1050-3R3MT	3.30	10.40	9.00	22.0	14.0
SMPCB1050-4R7MT	4.70	12.50	10.00	19.0	13.0
SMPCB1050-5R6MT	5.60	16.80	14.00	16.0	10.0
SMPCB1050-6R8MT	6.80	21.00	16.50	15.0	9.5
SMPCB1050-8R2MT	8.20	24.00	18.50	14.5	9.0
SMPCB1050-100MT	10.00	29.00	25.00	13.5	8.0
SMPCB1050-150MT	15.00	45.00	37.00	9.5	5.5
SMPCB1050-220MT	22.00	60.00	50.00	9.0	5.0
SMPCB1050-330MT	33.00	92.00	80.00	7.5	4.3
SMPCB1050-470MT	47.00	145.00	125.00	6.5	3.8

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
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Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) $\pm 20\%$	DCR ($\text{m}\Omega$)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1350-R20MT	0.20	0.55	0.45	110.0	52.0
SMPCB1350-R22MT	0.22	0.70	0.50	110.0	52.0
SMPCB1350-R33MT	0.33	0.90	0.70	80.0	42.0
SMPCB1350-R36MT	0.36	0.95	0.75	75.0	42.0
SMPCB1350-R47MT	0.47	1.10	0.86	65.0	38.0
SMPCB1350-R56MT	0.56	1.50	1.00	55.0	36.0
SMPCB1350-R68MT	0.68	1.70	1.40	54.0	34.0
SMPCB1350-R82MT	0.82	2.10	1.70	52.0	31.0
SMPCB1350-1R0MT	1.00	2.50	1.85	50.0	29.0
SMPCB1350-1R5MT	1.50	3.30	2.80	48.0	27.0
SMPCB1350-2R2MT	2.20	5.50	4.20	32.0	20.0
SMPCB1350-3R3MT	3.30	9.20	6.80	32.0	15.0
SMPCB1350-4R7MT	4.70	15.00	11.40	27.0	12.0
SMPCB1350-5R6MT	5.60	16.50	12.30	22.0	11.5
SMPCB1350-6R8MT	6.80	18.50	14.50	21.0	11.0
SMPCB1350-8R2MT	8.20	22.50	16.80	18.0	9.5
SMPCB1350-100MT	10.00	25.50	21.40	16.0	9.0
SMPCB1350-150MT	15.00	38.00	32.00	13.0	8.2
SMPCB1350-220MT	22.00	58.00	50.00	10.0	6.5
SMPCB1350-330MT	33.00	88.00	73.00	8.0	5.0
SMPCB1350-470MT	47.00	120.00	100.00	6.5	4.0

1. Absolute maximum voltage **30VDC** In production process test @100VDC Impulse Winding
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Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1360-R22MT	0.22	0.65	0.48	120.0	55.0
SMPCB1360-R36MT	0.36	0.90	0.72	80.0	42.0
SMPCB1360-R47MT	0.47	1.30	0.92	64.0	38.0
SMPCB1360-R56MT	0.56	1.50	1.15	60.0	35.0
SMPCB1360-R68MT	0.68	1.70	1.33	57.0	33.0
SMPCB1360-R82MT	0.82	1.90	1.50	55.0	31.0
SMPCB1360-1R0MT	1.00	2.40	1.80	53.0	29.0
SMPCB1360-1R5MT	1.50	3.20	2.70	50.0	26.0
SMPCB1360-2R2MT	2.20	4.70	4.00	43.0	21.0
SMPCB1360-3R3MT	3.30	7.10	5.80	35.0	17.0
SMPCB1360-4R7MT	4.70	11.50	9.50	30.0	16.0
SMPCB1360-5R6MT	5.60	12.60	10.80	28.0	15.5
SMPCB1360-6R8MT	6.80	13.80	12.00	25.0	15.0
SMPCB1360-8R2MT	8.20	16.00	13.60	23.0	11.0
SMPCB1360-100MT	10.00	20.70	18.00	21.0	11.0
SMPCB1360-150MT	15.00	29.00	25.00	16.0	9.0
SMPCB1360-180MT	18.00	35.00	30.00	15.0	8.5
SMPCB1360-220MT	22.00	39.50	34.00	14.0	8.0
SMPCB1360-330MT	33.00	75.00	65.00	12.0	6.0
SMPCB1360-470MT	47.00	90.00	80.00	11.0	5.5
SMPCB1360-680MT	68.00	140.00	120.00	9.0	5.0

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Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1365-R22MT	0.22	0.6	0.47	112	53
SMPCB1365-R33MT	0.33	0.8	0.65	68	46
SMPCB1365-R36MT	0.36	0.9	0.7	66	45
SMPCB1365-R47MT	0.47	1.2	0.9	63	41
SMPCB1365-R56MT	0.56	1.2	1.05	58	37
SMPCB1365-R68MT	0.68	1.5	1.25	55	35
SMPCB1365-R82MT	0.82	1.9	1.5	50	33
SMPCB1365-1R0MT	1	2.3	1.7	48	30
SMPCB1365-1R5MT	1.5	3	2.5	45	27
SMPCB1365-2R2MT	2.2	4.2	3.8	37	22
SMPCB1365-3R3MT	3.3	6.8	5.7	30	18
SMPCB1365-4R7MT	4.7	8.4	7	28	13.5
SMPCB1365-5R6MT	5.6	10	8.5	23	12.5
SMPCB1365-6R8MT	6.8	11.5	9.5	18	11.5
SMPCB1365-8R2MT	8.2	15.5	12	16	10.5
SMPCB1365-100MT	10	16.5	13.2	15.5	10
SMPCB1365-150MT	15	28	23.2	13	9
SMPCB1365-220MT	22	37	32.5	12	9
SMPCB1365-330MT	33	58	48	11	8
SMPCB1365-470MT	47	90	76	9.5	6.5
SMPCB1365-680MT	68	130	110	7.8	4.8
SMPCB1365-101MT	100	165	145	5.5	4.2

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Product Portfolio – SMPCB Carbonyl series

Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		I _{sat} (A)	I _{rms} (A)
	@100KHz, 1.0V	Max.	Typ.	Typ.	Typ.
SMPCB1770-R45MT	0.45	0.96	0.8	125.0	62.0
SMPCB1770-R47MT	0.47	1.03	1.0	123.0	62.0
SMPCB1770-1R0MT	1.00	2.00	1.6	70.0	52.0
SMPCB1770-1R5MT	1.50	2.50	2.0	65.0	47.0
SMPCB1770-2R2MT	2.20	2.70	2.4	62.0	43.5
SMPCB1770-3R3MT	3.30	3.90	3.5	54.0	28.0
SMPCB1770-4R7MT	4.70	5.50	4.8	50.0	25.0
SMPCB1770-5R6MT	5.60	7.05	5.8	45.0	21.0
SMPCB1770-6R8MT	6.80	9.20	8.4	39.0	19.0
SMPCB1770-8R2MT	8.20	10.80	9.6	31.0	18.0
SMPCB1770-100MT	10.00	13.00	11.8	29.0	16.5
SMPCB1770-150MT	15.00	20.50	17.8	27.0	12.5
SMPCB1770-220MT	22.00	26.50	25.1	23.0	12.0
SMPCB1770-330MT	33.00	44.00	38.0	20.0	10.7
SMPCB1770-470MT	47.00	55.00	48.0	16.0	8.7
SMPCB1770-560MT	56.00	62.00	54.0	15.0	7.8
SMPCB1770-680MT	68.00	80.00	68.0	13.0	7.0
SMPCB1770-820MT	82.00	100.00	87.0	12.0	5.7

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