

Product Portfolio – SSMPC mini molding series

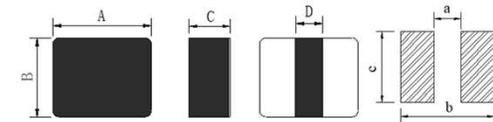
- **SSMPC- Compact Size design Molding Inductors for Electronic- power rail**

Features-

- **SSMPC** Series High Current Shielded Power Inductors.
- Metal material for large current and low loss.
- High performance (I_{sat}) realized by metal dust core.
- Low loss realized with low R_{dc} .
- Closed magnetic circuit design reduces leakage flux.
- Vinyl thermal spray, better surface compactness.
- 100%lead(Pb) free meet RoHS standard

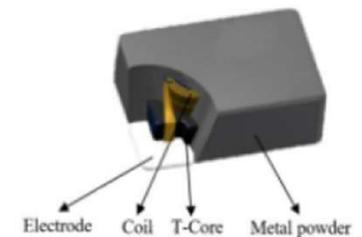
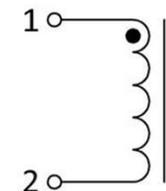
Test Noted-

- 1).All test data is referenced to 25°C ambient. And the Inductance Tolerance $\pm 20\%$. @ Test Condition: 1MHz, 1.0Vrms.
- 2).Rated current: I_{sat} or I_{rms} , whichever is smaller.
- 3). I_{sat} : DC current at which the inductance drops approximate 30% TYP from its value without current.
- 4). I_{rms} : DC current that causes the temperature rise ($\Delta T=40^{\circ}\text{C}$) from 25°C ambient.
- 5).**Absolute maximum voltage 30VDC**



series	A	B	C	D	a	b	c
SSMPC160808	1.60±0.20	0.80±0.20	0.80MAX	0.60±0.20	0.50TYP	1.70TYP	0.90TYP
SSMPC201210	2.00±0.20	1.20±0.20	1.00MAX	0.60±0.20	0.50TYP	2.10TYP	1.30TYP
SSMPC201610	2.00±0.20	1.60±0.20	1.00MAX	0.60±0.20	0.50TYP	2.10TYP	1.70TYP
SSMPC252010	2.50±0.20	2.00±0.20	1.00MAX	0.80±0.20	0.70TYP	2.60TYP	2.10TYP
SSMPC252012	2.50±0.20	2.00±0.20	1.20MAX	0.80±0.20	0.70TYP	2.60TYP	2.10TYP
SSMPC303015	3.00±0.20	3.00±0.20	1.50MAX	0.90±0.20	0.80TYP	3.00TYP	3.00TYP
SSMPC303020	3.00±0.20	3.00±0.20	2.00MAX	1.00±0.20	0.90TYP	3.00TYP	3.00TYP
SSMPC322510	3.20±0.20	2.50±0.20	1.00MAX	1.00±0.20	0.90TYP	3.20TYP	2.50TYP
SSMPC322512	3.20±0.20	2.50±0.20	1.20MAX	1.00±0.20	0.90TYP	3.20TYP	2.50TYP
SSMPC322520	3.20±0.20	2.5±0.20	2.00MAX	1.10TYP	1.00TYP	3.20TYP	2.50TYP

SCHEMATIC



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Part No.	Inductance	DC Resistance		Saturation Current	Heating Rating Current
	L (μH) ±20%	DCR (mΩ)		Isat (A)	Irms (A)
	100KHz, 0.1V	Max.	Typ.	Typ.	Typ.
SSMPC160808-R22MT	0.22	40.0	33.0	5.50	3.40
SSMPC160808-R24MT	0.24	41.0	34.0	5.30	3.30
SSMPC160808-R47MT	0.47	100.0	80.0	4.10	2.60
SSMPC160808-R56MT	0.56	110.0	85.0	4.00	2.20
SSMPC160808-R68MT	0.68	130.0	110.0	3.30	2.10
SSMPC160808-1R0MT	1.00	200.0	180.0	3.00	2.10
SSMPC160808-1R5MT	1.50	285.0	240.0	2.40	1.70
SSMPC160808-2R2MT	2.20	260.0	220.0	1.50	1.40
SSMPC160808-3R3MT	3.30	600.0	500.0	1.40	1.00
SSMPC160808-4R7MT	4.70	700.0	585.0	1.20	1.00
SSMPC201210-R10MT	0.10	13.0	8.0	8.50	7.50
SSMPC201210-R22MT	0.22	22.0	16.0	7.30	7.10
SSMPC201210-R24MT	0.24	23.0	17.0	7.20	7.00
SSMPC201210-R33MT	0.33	32.0	24.0	6.50	5.50
SSMPC201210-R47MT	0.47	36.0	29.0	5.50	4.70
SSMPC201210-R68MT	0.68	43.0	37.0	5.00	4.30
SSMPC201210-1R0MT	1.00	63.0	55.0	4.00	3.90
SSMPC201210-1R5MT	1.50	85.0	76.0	3.20	3.10
SSMPC201210-2R2MT	2.20	150.0	135.0	2.70	2.00
SSMPC201210-3R3MT	3.30	260.0	210.0	2.20	1.80
SSMPC201210-4R7MT	4.70	300.0	275.0	1.60	1.80
SSMPC201210-6R8MT	6.80	520.0	440.0	1.45	1.50
SSMPC201610-R10MT	0.10	12.0	7.0	9.00	8.50
SSMPC201610-R15MT	0.15	14.0	8.0	8.70	7.60
SSMPC201610-R22MT	0.22	18.0	11.0	8.20	6.90
SSMPC201610-R24MT	0.24	19.0	12.0	8.00	6.80
SSMPC201610-R33MT	0.33	22.0	17.0	7.00	5.70
SSMPC201610-R47MT	0.47	25.0	22.0	6.30	5.50

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)		Isat (A)	Irms (A)
	100KHz, 0.1V	Max.	Typ.	Typ.	Typ.
SSMPC201610-R56MT	0.56	23.0	19.0	5.50	7.50
SSMPC201610-R68MT	0.68	32.0	25.0	5.20	4.60
SSMPC201610-1R0MT	1.00	43.0	35.0	4.60	4.50
SSMPC201610-1R5MT	1.50	100.0	80.0	3.20	2.60
SSMPC201610-2R2MT	2.20	125.0	115.0	3.30	2.50
SSMPC201610-3R3MT	3.30	170.0	140.0	2.30	1.70
SSMPC201610-4R7MT	4.70	276.0	250.0	1.90	1.60
SSMPC252010-R22MT	0.22	17.0	12.0	8.60	6.80
SSMPC252010-R24MT	0.24	17.5	12.0	8.50	6.70
SSMPC252010-R33MT	0.33	19.0	13.0	7.60	6.50
SSMPC252010-R47MT	0.47	22.0	15.0	7.20	6.10
SSMPC252010-R68MT	0.68	27.0	23.0	5.90	5.60
SSMPC252010-R82MT	0.82	29.0	25.0	5.30	4.50
SSMPC252010-1R0MT	1.00	30.0	25.0	5.40	4.70
SSMPC252010-1R5MT	1.50	55.0	45.0	4.30	3.40
SSMPC252010-2R2MT	2.20	70.0	62.0	3.30	2.40
SSMPC252010-3R3MT	3.30	100.0	86.0	2.80	2.50
SSMPC252010-4R7MT	4.70	180.0	160.0	2.60	2.00
SSMPC252010-6R8MT	6.80	320.0	270.0	2.40	1.60
SSMPC252010-100MT	10.00	560.0	500.0	1.55	1.05
SSMPC252012-R10MT	0.10	10.0	6.0	13.50	12.00
SSMPC252012-R15MT	0.15	11.0	7.0	13.00	11.50
SSMPC252012-R22MT	0.22	14.0	9.0	9.60	8.20
SSMPC252012-R24MT	0.24	15.0	10.0	9.30	8.00
SSMPC252012-R33MT	0.33	17.0	11.0	8.30	6.80
SSMPC252012-R47MT	0.47	19.0	13.0	7.50	6.50
SSMPC252012-R68MT	0.68	23.0	17.0	6.50	6.30
SSMPC252012-R82MT	0.82	24.0	19.0	6.50	5.80
SSMPC252012-1R0MT	1.00	42.0	35.0	5.60	4.00

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)		Isat (A)	Irms (A)
	100KHz, 0.1V	Max.	Typ.	Typ.	Typ.
SSMPC252012-1R2MT	1.20	45.0	40.0	4.50	3.80
SSMPC252012-1R5MT	1.50	50.0	44.0	4.50	3.70
SSMPC252012-2R2MT	2.20	65.0	55.0	3.80	3.00
SSMPC252012-3R3MT	3.30	97.0	80.0	3.00	2.30
SSMPC252012-4R7MT	4.70	170.0	150.0	2.40	1.80
SSMPC252012-6R8MT	6.80	270.0	245.0	2.00	1.60
SSMPC252012-100MT	10.00	400.0	330.0	1.60	1.20
SSMPC252012-150MT	15.00	800.0	740.0	1.10	1.20
SSMPC303015-R15MT	0.15	6.0	5.0	16.00	12.00
SSMPC303015-R47MT	0.47	11.0	9.0	10.00	9.00
SSMPC303015-1R0MT	1.00	22.0	18.0	7.00	6.00
SSMPC303015-1R5MT	1.50	26.0	22.0	6.00	8.00
SSMPC303015-2R2MT	2.20	50.0	42.0	5.00	4.50
SSMPC303015-4R7MT	4.70	104.0	87.0	4.00	3.50
SSMPC303015-6R8MT	6.80	180.0	160.0	3.50	2.50
SSMPC303015-100MT	10.00	215.0	185.0	2.80	2.00
SSMPC303015-220MT	22.00	700.0	580.0	1.60	1.20
SSMPC303020-R15MT	0.15	5.0	4.0	18.00	13.00
SSMPC303020-R33MT	0.33	9.0	7.5	17.00	10.00
SSMPC303020-R47MT	0.47	11.0	8.0	15.00	9.00
SSMPC303020-R68MT	0.68	16.0	13.0	13.00	8.50
SSMPC303020-1R0MT	1.00	20.0	14.0	8.00	6.50
SSMPC303020-1R5MT	1.50	25.0	19.0	7.00	6.30
SSMPC303020-2R2MT	2.20	45.0	37.0	6.00	4.70
SSMPC303020-3R3MT	3.30	63.0	52.0	5.90	4.50
SSMPC303020-4R7MT	4.70	73.0	60.0	4.80	4.20
SSMPC303020-6R8MT	6.00	135.0	107.0	4.50	3.20
SSMPC303020-100MT	10.00	160.0	135.0	3.80	2.50
SSMPC303020-150MT	15.00	260.0	235.0	2.60	1.80

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	L (μH) ±20%	DCR (mΩ)		Isat (A)	Irms (A)
	100KHz, 0.1V	Max.	Typ.	Typ.	Typ.
SSMPC322510-R22MT	0.22	11.0	9.0	8.50	8.50
SSMPC322510-R33MT	0.33	15.0	11.0	8.30	8.30
SSMPC322510-R47MT	0.47	22.0	17.0	8.30	6.40
SSMPC322510-R68MT	0.68	28.0	22.0	7.50	6.20
SSMPC322510-1R0MT	1.00	30.0	25.0	6.00	5.40
SSMPC322510-1R5MT	1.50	42.0	34.0	5.00	4.00
SSMPC322510-2R2MT	2.20	66.0	55.0	4.00	3.70
SSMPC322510-3R3MT	3.30	120.0	105.0	3.70	2.70
SSMPC322510-4R7MT	4.70	140.0	125.0	2.80	2.30
SSMPC322510-6R8MT	6.80	320.0	290.0	2.40	1.90
SSMPC322510-100MT	10.00	365.0	325.0	2.20	2.20
SSMPC322512-R10MT	0.10	7.0	5.2	18.00	12.00
SSMPC322512-R22MT	0.22	10.0	6.6	11.50	9.20
SSMPC322512-R24MT	0.24	12.0	7.0	11.00	9.00
SSMPC322512-R33MT	0.33	14.0	9.0	10.00	8.40
SSMPC322512-R47MT	0.47	19.0	14.0	8.60	7.50
SSMPC322512-R68MT	0.68	23.0	18.0	8.10	7.30
SSMPC322512-1R0MT	1.00	30.0	26.0	6.60	5.30
SSMPC322512-1R5MT	1.50	44.0	37.0	5.10	4.70
SSMPC322512-2R2MT	2.20	70.0	58.0	4.60	3.60
SSMPC322512-3R3MT	3.30	95.0	75.0	3.70	2.90
SSMPC322512-4R7MT	4.70	135.0	115.0	2.90	2.30
SSMPC322512-6R8MT	6.80	210.0	177.0	2.80	2.10
SSMPC322512-100MT	10.00	230.0	210.0	2.30	2.20
SSMPC322520-R27MT	0.27	6.5	5.5	16.00	16.00
SSMPC322520-R33MT	0.33	9.0	7.5	15.50	9.50
SSMPC322520-R47MT	0.47	10.5	9.0	15.00	9.50
SSMPC322520-R68MT	0.68	14.5	12.5	13.00	9.00
SSMPC322520-1R0MT	1.00	17.5	15.0	9.00	8.20

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, 0.1V	Max.	Typ.	Typ.	Typ.
SSMPC322520-1R5MT	1.50	25.0	22.0	6.80	6.50
SSMPC322520-2R2MT	2.20	43.0	36.0	6.50	5.40
SSMPC322520-3R3MT	3.30	60.0	55.0	4.50	4.50
SSMPC322520-4R7MT	4.70	94.0	81.0	4.00	3.50
SSMPC322520-6R8MT	6.80	125.0	101.0	3.80	2.80

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