SMD Power chokes- SPD-SC Series

SPD -SC series chokes For High Current Use

Features

1.Shielded construction.

2.High current Lowest DCR

3.High frequency range up to 3.0MHz

4.Ultra low buzz noise, due to composite construction.

Applications

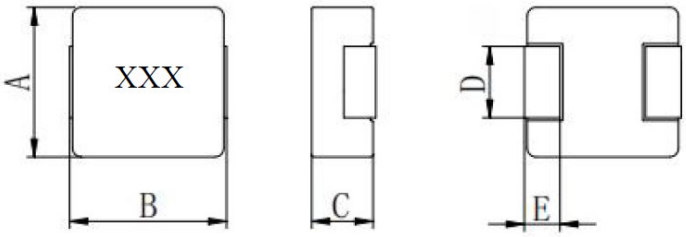
Netebook/Deaktop/Server applications

low profile high current power supplise

Battery powered devices

DC/DC Converter for field programmable gate arrary (FPGA)

Dimensions (mm)



Product Identification

SPD 0420 SC – 1R2 M

SPD: SERIES NAME

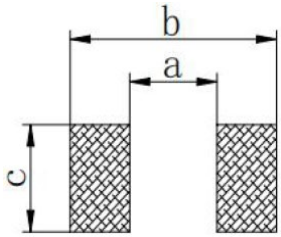
0420:DIMENSION SIZE CODE

SC: Material Code

1R2: INDUCTANCE CODE.

M: TOLERANCE, J=5% K=10% M=20%.

RECOMMENDER P.C.B LAYOUT



SERIES	A	B	C	D	E	a	b	c
SPD0412SC	4.2±0.25	4.4±0.4	1.2 max	1.5±0.5	1.0±0.5	2.2	5.2	2.5
SPD0420SC	4.2±0.25	4.4±0.4	2.0max	1.5±0.5	1.0±0.5	2.2	5.2	2.5
SPD5418SC	5.45±0.35	5.5±0.4	1.8max	2.0±0.5	1.2±0.5	2.2	6.0	2.5
SPD5430SC	5.45±0.35	5.5±0.4	3.0max	2.0±0.5	1.2±0.5	2.2	6.0	2.5
SPD0715SC	6.6±0.3	7.1±0.3	1.5max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD0718SC	6.6±0.3	7.1±0.3	1.8max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD0724SC	6.6±0.3	7.1±0.3	2.4max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD0730SC	6.6±0.3	7.1±0.3	3.0max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD0740SC	6.6±0.3	7.1±0.3	4.0max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD0750SC	6.6±0.3	7.1±0.3	5.0max	3.0±0.3	1.6±0.5	3.7	8.4	3.5
SPD1030SC	10.0±0.3	11.6max	3.0max	3.0±0.5	2.0±0.5	5.4	13.6	4.1
SPD1040SC	10.0±0.3	11.6max	4.0max	3.0±0.5	2.0±0.5	5.4	13.6	4.1
SPD1050SC	10.0±0.3	11.6max	5.0max	3.0±0.5	2.0±0.5	5.4	13.6	4.1
SPD1340SC	12.8±0.3	13.45±0.35	4.0max	3.7±0.5	2.0±0.5	8	14.5	5.5
SPD1350SC	12.6±0.3	13.45±0.35	5.0max	3.7±0.5	2.0±0.5	8	14.5	5.5
SPD1360SC	12.6±0.3	13.45±0.35	6.0max	3.7±0.5	2.0±0.5	8	14.5	5.5
SPD1365SC	12.6±0.3	13.45±0.35	6.5max	3.7±0.5	2.0±0.5	8	14.5	5.5
SPD1770SC	17.15max	17.15±0.36	7.0max	12.0±0.5	2.5±0.5	11.2	18.2	12.8

SPD 04XXSC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD0412SC-R15M	0.15	9.00	7.50	15.00
SPD0412SC-R22M	0.22	11.00	7.00	11.00
SPD0412SC-R33M	0.33	19.00	6.00	8.40
SPD0412SC-R47M	0.47	21.00	6.00	6.80
SPD0412SC-R68M	0.68	36.00	4.70	6.00
SPD0412SC-1R0M	1.00	47.00	4.50	5.50
SPD0412SC-1R5M	1.50	75.00	3.25	4.00
SPD0412SC-2R2M	2.20	83.50	2.75	3.00
SPD0412SC-4R7M	4.70	195.00	1.80	2.20
SPD0420SC-R10M	0.1	4	12	22
SPD0420SC-R22M	0.22	6.6	9	12.5
SPD0420SC-R33M	0.33	11	8	12
SPD0420SC-R47M	0.47	14	7	9.5
SPD0420SC-R56M	0.56	16	6.5	9.3
SPD0420SC-R68M	0.68	21	5.2	8
SPD0420SC-1R0M	1	27	4.5	7
SPD0420SC-1R2M	1.2	27	4.5	6.5
SPD0420SC-1R5M	1.5	46	4	5.5
SPD0420SC-2R2M	2.2	58	3	5
SPD0420SC-3R3M	3.3	87	2.5	4
SPD0420SC-4R7M	4.7	126	2.2	3
SPD0420SC-6R8M	6.8	175	1.6	2.5
SPD0420SC-100M	10	282	1.3	2
SPD0420SC-220M	22	363	1.2	1.4

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 54XXSC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD5418SC-R47M	0.47	9	10.5	15.5
SPD5418SC-R56M	0.56	10	9.5	15
SPD5418SC-R68M	0.68	13.8	8.9	11.2
SPD5418SC-1R0M	1	17	8	9
SPD5418SC-1R5M	1.5	26	7.5	8
SPD5418SC-2R2M	2.2	35	5	6.5
SPD5418SC-3R3M	3.2	58	4.5	5
SPD5418SC-4R7M	4.7	85	3.5	4
SPD5418SC-6R8M	6.8	120	2.8	3.4
SPD5418SC-100M	10	155	2.5	3
SPD5430SC-R10M	0.1	3	25	30
SPD5430SC-R20M	0.2	3.9	14	20
SPD5430SC-R33M	0.33	5.5	14	18
SPD5430SC-R47M	0.47	8.5	10	14
SPD5430SC-R68M	0.68	12	8	11.5
SPD5430SC-1R0M	1	15	7	10
SPD5430SC-1R2M	1.2	16	6.5	9.5
SPD5430SC-1R5M	1.5	25	6	9
SPD5430SC-2R2M	2.2	35	5	7
SPD5430SC-3R3M	3.3	46	4.5	6
SPD5430SC-4R7M	4.7	60	4	4.6
SPD5430SC-6R8M	6.8	110	3	3.6
SPD5430SC-100M	10	126	2.5	3.5
SPD5430SC-220M	22	270	2	2

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 071XSC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD0715SC-R47M	0.47	8.5	10	16
SPD0715SC-R56M	0.56	11	9	14
SPD0715SC-R68M	0.68	12	8.5	12
SPD0715SC-R82M	0.82	17	8	10
SPD0715SC-1R0M	1	21	6	9
SPD0715SC-2R2M	2.2	54	3.8	7
SPD0715SC-3R3M	3.3	63	3.5	5.5
SPD0715SC-4R7M	4.7	85	3.2	5
SPD0715SC-6R8M	6.8	135	2.5	4
SPD0715SC-100M	10	175	2	3
SPD0718SC-R10M	0.1	2.3	25	38
SPD0718SC-R22M	0.22	5.2	14	24
SPD0718SC-R33M	0.33	6.8	12	22
SPD0718SC-R47M	0.47	8.4	11	18
SPD0718SC-R68M	0.68	12.7	9	17
SPD0718SC-1R0M	1	20	7	12
SPD0718SC-1R5M	1.5	26	6.5	9.2
SPD0718SC-2R2M	2.2	35	6	8
SPD0718SC-3R3M	3.3	50	4.5	6
SPD0718SC-4R7M	4.7	70	3.5	5
SPD0718SC-6R8M	6.8	110	2.8	3.5
SPD0718SC-100M	10	155	2.3	2.5
SPD0718SC-220M	22	350	1.8	2.3

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 0724SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD0724SC-R33M	0.33	4.1	18	24.5
SPD0724SC-R47M	0.47	6.5	15	22
SPD0724SC-R56M	0.56	6.5	13	17
SPD0724SC-R68M	0.68	7	12	16
SPD0724SC-1R0M	1	13.5	9	15
SPD0724SC-1R5M	1.5	20	8	13.5
SPD0724SC-2R2M	2.2	28	7	10
SPD0724SC-3R3M	3.3	39	5.5	8
SPD0724SC-4R7M	4.7	50	5	6.5
SPD0724SC-6R8M	6.8	70	4	6
SPD0724SC-100M	10	101	3.1	4
SPD0724SC-150M	15	160	2.5	3.3
SPD0724SC-220M	22	230	2	2.5

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 0730SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD0730SC-R10M	0.1	1.5	37	45
SPD0730SC-R22M	0.22	3	23	34
SPD0730SC-R33M	0.33	4.2	20	25
SPD0730SC-R47M	0.47	5.5	16.5	20
SPD0730SC-R56M	0.56	6	16.5	18
SPD0730SC-R68M	0.68	6.3	15	17
SPD0730SC-R82M	0.82	8	13	16
SPD0730SC-1R0M	1	10	12	15
SPD0730SC-1R5M	1.5	15	9.5	12
SPD0730SC-2R2M	2.2	20	8.5	10
SPD0730SC-3R3M	3.3	35	6	9.5
SPD0730SC-4R7M	4.7	40	5.5	9
SPD0730SC-5R6M	5.6	42	5.4	6.5
SPD0730SC-6R8M	6.8	55	4.5	6
SPD0730SC-8R2M	8.2	60	4.4	5.5
SPD0730SC-100M	10	68	4	5.5
SPD0730SC-150M	15	122	3	4
SPD0730SC-220M	22	145	2.5	3
SPD0730SC-330M	33	270	2	2.5
SPD0730SC-470M	47	385	1.5	2

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.
2.All test data is referenced to 25℃ ambient.
3.Inductance is measured at 100KHz. 25℃ ambient.
4.Operating Temperature Range-50℃ to +125℃.
5.DC current (Irms) (A) that will cause an approximate △T of 40℃.
6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.
7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 07XXSC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD0740SC-R68M	0.68	4.8	17	19
SPD0740SC-1R0M	1	6.6	13.5	16
SPD0740SC-1R5M	1.5	10	12.4	12.5
SPD0740SC-2R2M	2.2	18	9	11
SPD0740SC-3R3M	3.3	25	7	9.5
SPD0740SC-4R7M	4.7	30	6.5	8
SPD0740SC-6R8M	6.8	50	5	6.5
SPD0740SC-100M	10	65	4.5	5
SPD0740SC-150M	15	95	3.7	4.5
SPD0740SC-220M	22	125	3.3	4
SPD0740SC-330M	33	240	2.2	3
SPD0740SC-470M	47	320	1.8	2.5
SPD0750SC-R47M	0.47	3.9	20	21
SPD0750SC-R68M	0.68	4.5	16	18
SPD0750SC-R82M	0.82	4.9	15	17
SPD0750SC-1R0M	1	6.6	12	13
SPD0750SC-1R5M	1.5	10	9.5	10
SPD0750SC-2R2M	2.2	12.5	9	9.5
SPD0750SC-3R3M	3.3	22	8.5	9
SPD0750SC-4R7M	4.7	29	6	8
SPD0750SC-6R8M	6.8	41	5.5	6.3
SPD0750SC-8R2M	8.2	48	5.5	5.5
SPD0750SC-100M	10	60	4.5	5.3
SPD0750SC-150M	15	90	3.1	4
SPD0750SC-220M	22	140	2.6	3.5
SPD0750SC-330M	33	200	2.3	3
SPD0750SC-470M	47	290	2	2.6

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1030SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1030SC-R22M	0.22	1.2	33	50
SPD1030SC-R33M	0.33	1.6	23	32
SPD1030SC-R36M	0.36	1.6	23	28
SPD1030SC-R47M	0.47	2.5	22	26
SPD1030SC-R82M	0.82	3.7	18	23
SPD1030SC-1R0M	1	6	15	21
SPD1030SC-2R2M	2.2	9	11	14
SPD1030SC-3R3M	3.3	16	9	12
SPD1030SC-4R7M	4.7	24	7	10
SPD1030SC-8R2M	8.2	45	5	7
SPD1030SC-330M	33	160	2.6	4

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1040SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1040SC-R15M	0.15	0.65	45	75
SPD1040SC-R22M	0.22	1	35	45.5
SPD1040SC-R30M	0.3	1.1	34.5	45
SPD1040SC-R36M	0.36	1.2	31	42
SPD1040SC-R47M	0.47	1.7	30	38
SPD1040SC-R56M	0.56	1.8	25	33
SPD1040SC-R68M	0.68	2.4	23	30
SPD1040SC-R80M	0.8	2.7	22.5	29
SPD1040SC-1R0M	1	3.3	19	26
SPD1040SC-1R5M	1.5	4.2	16	22
SPD1040SC-2R2M	2.2	7	12	16
SPD1040SC-3R3M	3.3	13.2	11	12
SPD1040SC-4R7M	4.7	20	9	12
SPD1040SC-6R8M	6.8	25	6.5	10
SPD1040SC-8R2M	8.2	29	6	9
SPD1040SC-100M	10	30	5.5	7
SPD1040SC-150M	15	45	5.25	6
SPD1040SC-220M	22	72	5	5.5
SPD1040SC-330M	33	110	3.2	5
SPD1040SC-470M	47	158	2.8	4.5
SPD1040SC-680M	68	195	2.5	3
SPD1040SC-101M	100	340	1.5	2

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1050SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1050SC-R22M	0.22	0.8	37	65
SPD1050SC-1R0M	1	3	23	30
SPD1050SC-1R5M	1.5	4.2	16	22
SPD1050SC-2R2M	2.2	6.5	13	18
SPD1050SC-3R3M	3.3	11	11	16
SPD1050SC-4R7M	4.7	14	10	14
SPD1050SC-5R6M	5.6	17	9.5	14
SPD1050SC-6R8M	6.8	18.5	9	12
SPD1050SC-100M	10	28	8	10
SPD1050SC-150M	15	42	6.5	7.5
SPD1050SC-220M	22	50	5.5	6
SPD1050SC-330M	33	86	4.8	5.2
SPD1050SC-470M	47	127	3.7	4.5

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1340SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1340SC-R22M	0.22	0.9	42	50
SPD1340SC-R47M	0.47	2	33	48
SPD1340SC-R68M	0.68	3.5	28	47
SPD1340SC-R82M	0.82	4.5	28	40
SPD1340SC-1R0M	1	7.5	24	35
SPD1340SC-1R5M	1.5	9.5	20	30.5
SPD1340SC-2R2M	2.2	11.5	18	26
SPD1340SC-3R3M	3.3	13	15	21
SPD1340SC-4R7M	4.7	14.5	13	18
SPD1340SC-6R8M	6.8	20	9	14
SPD1340SC-100M	10	25	8	10
SPD1340SC-150M	15	39	6.5	7.5
SPD1340SC-220M	22	51	4.5	6

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1350SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1350SC-R22M	0.22	0.7	50	75
SPD1350SC-R36M	0.36	0.85	42	50
SPD1350SC-R50M	0.5	1.15	38	48
SPD1350SC-R68M	0.68	1.55	33	46
SPD1350SC-R82M	0.82	1.67	30	39
SPD1350SC-1R0M	1	2.2	26	35
SPD1350SC-1R5M	1.5	3.2	23	33
SPD1350SC-2R2M	2.2	5.5	15	23
SPD1350SC-3R3M	3.3	7	14	22
SPD1350SC-4R7M	4.7	9	13	20
SPD1350SC-6R8M	6.8	22	9	14
SPD1350SC-8R2M	8.2	27	7	12
SPD1350SC-100M	10	35	7	11
SPD1350SC-150M	15	36	7	9.2
SPD1350SC-220M	22	60	4.5	6.5
SPD1350SC-330M	33	84	3.5	5.5
SPD1350SC-470M	47	130	3	4.5

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 136XSC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1360SC-4R7M	4.7	9	15	24
SPD1360SC-5R6M	5.6	11	13	22.5
SPD1360SC-6R8M	6.8	13.5	12	19
SPD1360SC-8R2M	8.2	16	11	13.5
SPD1360SC-100M	10	20.7	10	12.5
SPD1360SC-120M	12	23	9	10
SPD1360SC-150M	15	29	8.5	9
SPD1360SC-180M	18	35	7.5	8
SPD1360SC-220M	22	39.5	7	7.5
SPD1360SC-270M	27	56	6	6.5
SPD1360SC-330M	33	75	5.5	6
SPD1360SC-470M	47	90	5.5	5.5
SPD1360SC-680M	68	140	4	4.5
SPD1360SC-101M	100	200	3	3.5
SPD1360SC-121M	120	235	2	3.2
SPD1360SC-151M	150	350	1.5	2.7
SPD1365SC-1R5M	1.5	2.9	25	30
SPD1365SC-4R7M	4.7	8.5	16	24
SPD1365SC-5R6M	5.6	10.5	14	22.5
SPD1365SC-6R8M	6.8	12	13	19
SPD1365SC-8R2M	8.2	14	12	16
SPD1365SC-100M	10	16.5	11	15
SPD1365SC-150M	15	26	9.5	11
SPD1365SC-220M	22	36	8	9
SPD1365SC-330M	33	65	6.5	8
SPD1365SC-470M	47	70	5.5	6.8
SPD1365SC-680M	68	120	4.8	5.2
SPD1365SC-820M	82	135	4	4.5
SPD1365SC-101M	100	170	3.5	4

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

SPD 1770SC Series

Electrical Characteristics

ITEM	INDUCTANCE uH @100KHZ,1.0V,0A(1)	DCR mΩ 25℃ MAX.	HEAT RATING CURRENT DC AMPS (5) TYPICAL(Irms)	SATURATION CURRENT DC AMPS (6) TYPICAL(Isat)
SPD1770SC-2R2M	2.2	2.5	29	34
SPD1770SC-3R3M	3.3	3.95	24	30
SPD1770SC-4R7M	4.7	4.75	21	24
SPD1770SC-6R8M	6.8	7.5	17	22
SPD1770SC-8R2M	8.2	8.7	13	20
SPD1770SC-100M	10	9.9	12	19
SPD1770SC-150M	15	17	11	14.5
SPD1770SC-220M	22	23	8.5	11.5
SPD1770SC-330M	33	37	8	10
SPD1770SC-470M	47	47	6	7.5
SPD1770SC-680M	68	85	5.2	6.5
SPD1770SC-101M	100	130	3.7	5

Note:

1.Tolerance of Inductance: N=±30% ,M=±20%.

2.All test data is referenced to 25℃ ambient.

3.Inductance is measured at 100KHz. 25℃ ambient.

4.Operating Temperature Range-50℃ to +125℃.

5.DC current (Irms) (A) that will cause an approximate △T of 40℃.

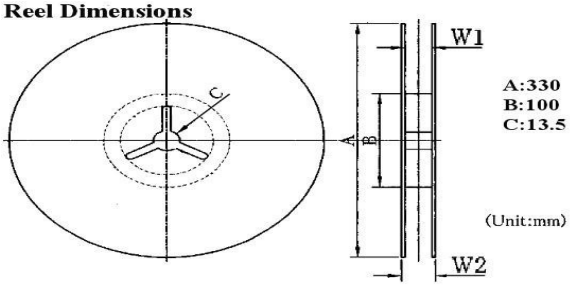
6.DC current (Isat) (A) that will cause Lo to drop approximately 30%.

7.The part Temperature (ambient + temp rise) should not exceed 125℃ under worst case operatingconditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified in the end application.

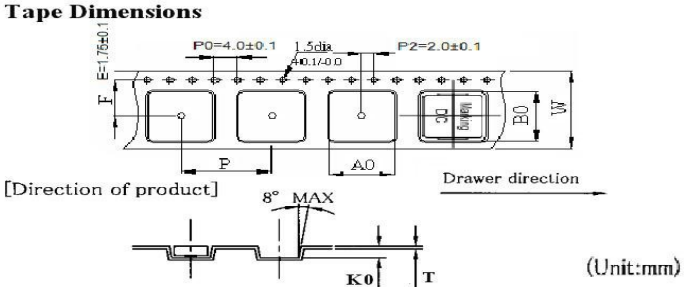
SMD Power chokes- SPD-SC Series

PACKAGING

Reel Dimensions



Tape Dimensions



2.Dimension in mm

TYPE	Ao(mm)	Bo(mm)	Ko(mm)	W(mm)	P(mm)	PCS/REEI	REEL/BOX	
SPD412	4.4±0.1	4.8±0.1	1.5±0.1	12±0.3	8±0.1	4000	8	32000
SPD420	4.4±0.1	4.8±0.1	2.2±0.1	12±0.3	8±0.1	3000	8	24000
SPD5418	5.4±0.1	5.9±0.1	2.3±0.1	12±0.3	8±0.1	2000	8	16000
SPD5430	5.4±0.1	5.9±0.1	3.3±0.1	12±0.3	8±0.1	2000	8	16000
SPD0715	7.1±0.1	7.6±0.1	1.8±0.1	16±0.3	12±0.1	2000	6	12000
SPD0718	7.1±0.1	7.6±0.1	2.5±0.1	16±0.3	12±0.1	1500	6	9000
SPD0724	7.1±0.1	7.6±0.1	2.5±0.1	16±0.3	12±0.1	1000	6	6000
SPD0730	7.1±0.1	7.6±0.1	3.5±0.1	16±0.3	12±0.1	1000	6	6000
SPD0740	7.1±0.1	7.6±0.1	4.5±0.1	16±0.3	12±0.1	1000	6	6000
SPD0750	7.1±0.1	7.6±0.1	5.5±0.1	16±0.3	12±0.1	1000	6	6000
SPD1030	10.5±0.1	11.3±0.1	3.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1040	10.5±0.1	11.3±0.1	4.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1050	10.5±0.1	11.3±0.1	5.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1340	13.0±0.1	14.0±0.1	4.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1350	13.0±0.1	14.0±0.1	5.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1360	13.0±0.1	14.0±0.1	6.5±0.1	24±0.3	16±0.1	500	5	2500
SPD1365	13.2±0.1	14.0±0.1	7.0±0.1	24±0.3	16±0.1	500	5	2500
SPD1770	17.8±0.3	18.3±0.3	7.3±0.3	24±0.3	24±0.1	300	5	1500