



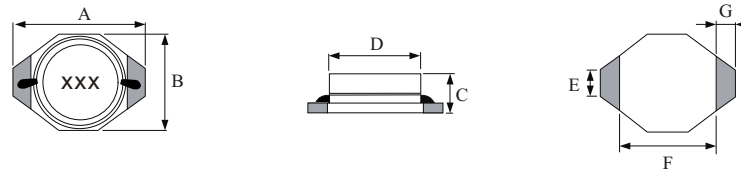
## Features

- The Surface Mount Inductors are designed for the smallest possible size and high performance.
- They are with high energy storage and very Low resistance making them the ideal inductors for DC-DC conversion in following applications

## Applications

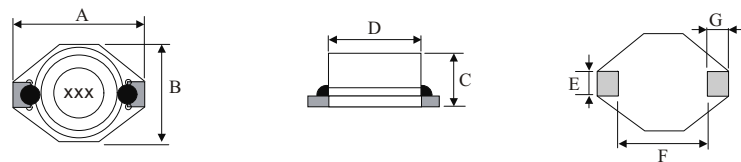
- VGA display card
- Notebook computers PDAs
- Step-up and step-down converters
- Flash Memory programmers, etc.

## ► Dimensions & Configurations (Unit:mm)



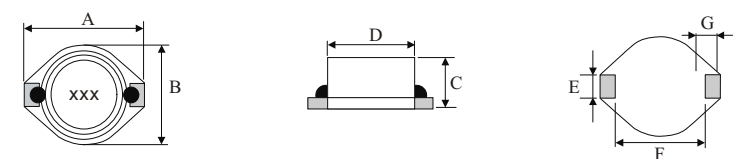
Type	A (max)	B (max)	C	D (max)	E (Max)	F (max)	G (max)
MSS1608	6.60	4.45	2.92	4.906	1.27	4.32	1.02

## ► Dimensions & Configurations (Unit:mm)



Type	A ± 0.3	B ± 0.3	C ± 0.3	D ± 0.3	E ± 0.3	F ± 0.3	G ± 0.3
MSS3316	12.95	9.40	5.21	8.38	2.54	7.62	2.54

## ► Dimensions & Configurations (Unit:mm)



Type	A ± 0.3	B ± 0.3	C ± 0.3	D ± 0.3	E ± 0.3	F ± 0.3	G ± 0.3
MSS5022	18.54	15.24	7.11	12.70	2.54	12.70	2.54
MSS0804	10.5	8.0	3.7	8.0	6.0	2.0	2.1
MSS0805	10.5	8.0	4.5	8.0	6.0	2.0	2.1
MSS1003	12.7	10.1	2.7	10.0	7.6	2.5	2.4
MSS1005	12.7	10.1	4.9	10.0	7.6	2.5	2.4

## ► Electrical Characteristics For MSS1608 Series

Part Number	Inductance [ $\mu$ H]	Test condition	SRF(Typ) [MHz]	Q (min)	DCR(max) [ $\Omega$ ]	SRF(Typ) [MHz]	I <sub>rms</sub> [A]
MSS1608 - 1R0M	1	100KHz,0.1V	200KHz, 0.1V	30	0.040	250	3.00
MSS1608 - 1R5M	1.5	100KHz, 0.1V	200KHz, 0.1V	30	0.045	125	2.80
MSS1608 - 2R2M	2.2	100KHz, 0.1V	200KHz, 0.1V	40	0.050	120	1.80
MSS1608 - 3R3M	3.3	100KHz, 0.1V	200KHz, 0.1V	40	0.055	120	1.60
MSS1608 - 4R7M	4.7	100KHz, 0.1V	200KHz, 0.1V	40	0.060	105	1.40
MSS1608 - 6R8M	6.8	100KHz, 0.1V	200KHz, 0.1V	40	0.065	50	1.20
MSS1608 - 100M	10	100KHz, 0.1V	200KHz, 0.1V	40	0.075	38	1.00
MSS1608 - 150M	15	100KHz, 0.1V	200KHz, 0.1V	40	0.09	33	0.80
MSS1608 - 220M	22	100KHz, 0.1V	200KHz, 0.1V	40	0.11	25	0.70
MSS1608 - 330M	33	100KHz, 0.1V	200KHz, 0.1V	40	0.19	20	0.60
MSS1608 - 470M	47	100KHz, 0.1V	200KHz, 0.1V	40	0.23	20	0.50
MSS1608 - 680M	68	100KHz, 0.1V	200KHz, 0.1V	40	0.29	15	0.40
MSS1608 - 101M	100	100KHz, 0.1V	200KHz, 0.1V	40	0.48	10	0.30
MSS1608 - 151M	150	100KHz, 0.1V	200KHz, 0.1V	40	0.59	9	0.26
MSS1608 - 221M	220	100KHz, 0.1V	200KHz, 0.1V	40	0.77	6	0.22
MSS1608 - 331M	330	100KHz, 0.1V	200KHz, 0.1V	40	1.40	5	0.20
MSS1608 - 471M	470	100KHz, 0.1V	200KHz, 0.1V	40	1.80	4	0.19
MSS1608 - 681M	680	100KHz, 0.1V	200KHz, 0.1V	40	2.20	3	0.18
MSS1608 - 102M	1000	100KHz, 0.1V	200KHz, 0.1V	40	3.40	2	0.15
MSS1608 - 152M	1500	100KHz, 0.1V	200KHz, 0.1V	50	4.20	2	0.12
MSS1608 - 222M	2200	100KHz, 0.1V	200KHz, 0.1V	50	8.50	2	0.10
MSS1608 - 332M	3300	100KHz, 0.1V	200KHz, 0.1V	50	11.00	1	0.08
MSS1608 - 472M	4700	100KHz, 0.1V	200KHz, 0.1V	50	13.90	1	0.06
MSS1608 - 682M	6800	100KHz, 0.1V	200KHz, 0.1V	50	25.00	1	0.04
MSS1608 - 103M	10000	100KHz, 0.1V	200KHz, 0.1V	50	32.80	0.8	0.02

## ▶ Electrical Characteristics For MSS3316 Series

Part Number	L [ $\mu$ H]	DCR(max) [m $\Omega$ ]	SRF(Typ) [MHz]	Isat [A]	Irms [A]
MSS3316 - 1R0M	1	21	140	5.6	5.0
MSS3316 - 1R5M	1.5	22	120	5.2	4.5
MSS3316 - 2R2M	2.2	32	80	5.0	3.8
MSS3316 - 3R3M	3.3	39	70	3.9	3.3
MSS3316 - 4R7M	4.7	54	40	3.2	2.7
MSS3316 - 6R8M	6.8	75	38	2.8	2.2
MSS3316 - 100M	10	101	35	2.4	2.0
MSS3316 - 150M	15	150	25	2.0	1.5
MSS3316 - 220M	22	207	19	1.6	1.3
MSS3316 - 330M	33	334	15	1.4	1.1
MSS3316 - 470M	47	472	13	1.0	0.8
MSS3316 - 680M	68	660	10	0.9	0.7
MSS3316 - 101M	100	1110	7	0.8	0.6
MSS3316 - 151M	150	1550	6	0.6	0.5
MSS3316 - 221M	220	2000	5	0.5	0.37
MSS3316 - 102M	1000	8300	2	0.32	0.17

## ▶ Electrical Characteristics For MSS5022 Series

Part Number	L [ $\mu$ H]	DCR(max) [m $\Omega$ ]	SRF(Typ) [MHz]	Isat [A]	Irms [A]
MSS5022 - 100M	10	40	30	8.0	3.9
MSS5022 - 150M	15	48	20	7.0	3.4
MSS5022 - 220M	22	59	18	6.0	3.1
MSS5022 - 330M	33	75	14	5.0	2.8
MSS5022 - 470M	47	97	10	4.0	2.4
MSS5022 - 680M	68	138	9	3.0	2.0
MSS5022 - 101M	100	207	7	2.4	1.7
MSS5022 - 151M	150	293	6	2.1	1.3
MSS5022 - 221M	220	470	5	1.9	1.1
MSS5022 - 331M	330	780	4	1.1	0.86
MSS5022 - 471M	470	1080	6	1.1	0.73
MSS5022 - 681M	680	1400	2.5	1.0	0.64
MSS5022 - 102M	1000	2010	2	0.8	0.53

## ▶ Electrical Characteristics For MSS0804 Series

Part Number	Inductance [ $\mu$ H]	Test Freq. [Hz]		Q (Ref)	SRF(Typ) [MHz]	DCR(max) [ $\Omega$ ]	IDC(max) [A]
		L	Q				
MSS0804 - 5R0M	5	1K	7.960M	20	45	0.08	1.7
MSS0804 - 7R5M	7.5	1K	7.960M	20	40	0.10	1.4
MSS0804 - 100M	10	1K	2.520M	38	32	0.12	1.2
MSS0804 - 120M	12	1K	2.520M	38	28	0.15	1.1
MSS0804 - 150M	15	1K	2.520M	38	25	0.17	1.0
MSS0804 - 180L	18	1K	2.520M	35	23	0.19	0.90
MSS0804 - 220L	22	1K	2.520M	30	22	0.25	0.80
MSS0804 - 270L	27	1K	2.520M	28	20	0.27	0.70
MSS0804 - 330L	33	1K	2.520M	26	18	0.30	0.65
MSS0804 - 390L	39	1K	2.520M	26	17	0.38	0.60
MSS0804 - 470K	47	1K	2.520M	24	16	0.46	0.55
MSS0804 - 560K	56	1K	2.520M	24	14	0.60	0.50
MSS0804 - 680K	68	1K	2.520M	22	12	0.70	0.45
MSS0804 - 820K	82	1K	2.520M	20	11	0.80	0.40
MSS0804 - 101K	100	1K	0.796M	50	10	0.95	0.37
MSS0804 - 121K	120	1K	0.796M	50	9.0	1.00	0.35
MSS0804 - 151K	150	1K	0.796M	53	8.5	1.30	0.30
MSS0804 - 181K	180	1K	0.796M	53	7.0	1.45	0.28
MSS0804 - 221K	220	1K	0.796M	55	6.0	1.90	0.24
MSS0804 - 271K	270	1K	0.796M	50	5.5	2.15	0.22
MSS0804 - 331K	330	1K	0.796M	60	5.5	2.80	0.19
MSS0804 - 391K	390	1K	0.796M	55	4.5	3.30	0.17
MSS0804 - 471K	470	1K	0.796M	50	4.0	3.60	0.16

## ► Electrical Characteristics For MSS0805 Series

Part Number	Inductance [ $\mu$ H]	Test Freq. [Hz]		Q (Ref)	SRF(Typ) [MHz]	DCR(max) [ $\Omega$ ]	IDC(max) [A]
		L	Q				
MSS0805 - 2R2M	2	1K	7.960M	18	75.0	0.040	2.50
MSS0805 - 3R9M	4	1K	7.960M	20	50.0	0.055	2.10
MSS0805 - 5R6M	6	1K	2.520M	20	40.0	0.065	1.95
MSS0805 - 8R2M	8	1K	2.520M	19	32.0	0.080	1.75
MSS0805 - 100M	10	1K	2.520M	40	28.0	0.100	1.50
MSS0805 - 120M	12	1K	2.520M	40	24.0	0.120	1.40
MSS0805 - 150M	15	1K	2.520M	40	22.0	0.140	1.30
MSS0805 - 180L	18	1K	2.520M	40	19.0	0.160	1.20
MSS0805 - 220L	22	1K	2.520M	38	17.0	0.180	1.10
MSS0805 - 270L	27	1K	2.520M	35	15.5	0.200	1.00
MSS0805 - 330L	33	1K	2.520M	40	13.5	0.240	0.92
MSS0805 - 390L	39	1K	2.520M	35	12.0	0.260	0.84
MSS0805 - 470L	47	1K	2.520M	32	10.5	0.280	0.75
MSS0805 - 560K	56	1K	2.520M	30	9.5	0.380	0.68
MSS0805 - 680K	68	1K	0.796M	28	9.0	0.440	0.60
MSS0805 - 820K	82	1K	0.796M	28	8.5	0.550	0.54
MSS0805 - 101K	100	1K	0.796M	45	7.5	0.600	0.50
MSS0805 - 121K	120	1K	0.796M	42	7.0	0.750	0.45
MSS0805 - 151K	150	1K	0.796M	39	6.5	0.900	0.40
MSS0805 - 181K	180	1K	0.796M	41	4.8	1.050	0.35
MSS0805 - 221K	220	1K	0.796M	38	4.5	1.180	0.30
MSS0805 - 271K	270	1K	0.796M	37	4.2	1.400	0.27
MSS0805 - 331K	330	1K	0.796M	36	3.8	1.800	0.24
MSS0805 - 471K	470	1K	0.796M	34	3.5	2.250	0.20
MSS0805 - 561K	560	1K	0.796M	32	3.0	3.000	0.18
MSS0805 - 681K	680	1K	0.796M	32	2.8	3.400	0.17
MSS0805 - 821K	820	1K	0.796M	35	2.5	4.000	0.16
MSS0805 - 102K	1000	1K	0.796M	35	2.2	5.000	0.15

## ▶ Electrical Characteristics For MSS1003 Series

Part Number	Inductance [ $\mu$ H]	Test Freq. [Hz]		Q (Ref)	SRF(Typ) [MHz]	DCR(max) [ $\Omega$ ]	IDC(max) [A]
		L	Q				
MSS1003 - 1R8M	1.8	1K	7.960M	10	0.038	3.00	3.60
MSS1003 - 2R2M	2.2	1K	7.960M	11	0.045	2.76	3.40
MSS1003 - 3R0M	3	1K	7.960M	11	0.062	2.20	2.60
MSS1003 - 3R9M	3.9	1K	7.960M	10	0.070	2.10	2.40
MSS1003 - 4R7M	4.7	1K	7.960M	10	0.078	1.90	2.30
MSS1003 - 7R5M	7.5	1K	7.960M	10	0.100	1.44	1.70
MSS1003 - 100M	10	1K	2.520M	18	0.145	1.24	1.50
MSS1003 - 120M	12	1K	2.520M	20	0.185	1.10	1.30
MSS1003 - 150M	15	1K	2.520M	20	0.200	1.02	1.20
MSS1003 - 180M	18	1K	2.520M	20	0.270	0.90	1.10
MSS1003 - 220M	22	1K	2.520M	17	0.300	0.80	1.00
MSS1003 - 270M	27	1K	2.520M	17	0.400	0.75	0.90
MSS1003 - 390M	39	1K	2.520M	17	0.560	0.70	0.85
MSS1003 - 470M	47	1K	2.520M	18	0.650	0.65	0.80
MSS1003 - 560M	56	1K	2.520M	18	0.680	0.60	0.72
MSS1003 - 680M	68	1K	2.520M	15	0.800	0.52	0.65
MSS1003 - 820M	82	1K	2.520M	15	1.200	0.48	0.58
MSS1003 - 101M	100	1K	0.796M	20	1.400	0.42	0.52
MSS1003 - 121M	120	1K	0.796M	23	1.520	0.40	0.48
MSS1003 - 151M	150	1K	0.796M	22	1.800	0.35	0.44
MSS1003 - 181M	180	1K	0.796M	23	2.200	0.32	0.40
MSS1003 - 221M	220	1K	0.796M	20	2.200	0.28	0.35
MSS1003 - 271L	270	1K	0.796M	20	3.100	0.26	0.32
MSS1003 - 331L	330	1K	0.796M	26	3.600	0.22	0.28
MSS1003 - 391L	390	1K	0.796M	26	4.600	0.20	0.26
MSS1003 - 471L	470	1K	0.796M	28	5.100	0.18	0.22

## ▶ Electrical Characteristics For MSS1005 Series

Part Number	Inductance [μH]	Test Freq. [Hz]		Q (Ref)	SRF(Typ) [MHz]	DCR(max) [Ω]	IDC(max) [A]
		L	Q				
MSS1005 - 1R0M	1	1K	7.960M	25	120.0	0.017	4.50
MSS1005 - 1R5M	2	1K	7.960M	25	100.0	0.020	3.60
MSS1005 - 2R2M	2	1K	7.960M	25	90.0	0.027	3.10
MSS1005 - 3R0M	3	1K	7.960M	25	80.0	0.030	2.90
MSS1005 - 4R7M	5	1K	7.960M	25	50.0	0.040	2.50
MSS1005 - 7R0M	7	1K	7.960M	22	32.0	0.050	2.20
MSS1005 - 100M	10	1K	2.520M	48	30.0	0.065	2.00
MSS1005 - 120M	12	1K	2.520M	45	25.0	0.080	1.80
MSS1005 - 150M	15	1K	2.520M	40	20.0	0.085	1.70
MSS1005 - 180L	18	1K	2.520M	35	19.0	0.090	1.60
MSS1005 - 220L	22	1K	2.520M	42	18.0	0.100	1.40
MSS1005 - 270L	27	1K	2.520M	40	17.0	0.120	1.30
MSS1005 - 330L	33	1K	2.520M	40	15.0	0.160	1.20
MSS1005 - 390L	39	1K	2.520M	40	13.0	0.180	1.05
MSS1005 - 470L	47	1K	2.520M	35	12.0	0.190	1.00
MSS1005 - 560L	56	1K	2.520M	35	11.0	0.210	0.90
MSS1005 - 680L	68	1K	2.520M	35	9.0	0.340	0.82
MSS1005 - 820L	82	1K	2.520M	35	8.0	0.380	0.75
MSS1005 - 101K	100	1K	0.796M	35	7.5	0.420	0.68
MSS1005 - 121K	120	1K	0.796M	30	7.2	0.460	0.60
MSS1005 - 151K	150	1K	0.796M	28	6.2	0.520	0.55
MSS1005 - 181K	180	1K	0.796M	28	5.8	0.700	0.50
MSS1005 - 221K	220	1K	0.796M	30	5.2	0.800	0.45
MSS1005 - 271K	270	1K	0.796M	30	4.8	1.100	0.40
MSS1005 - 331K	330	1K	0.796M	30	4.5	1.200	0.35
MSS1005 - 391K	390	1K	0.796M	25	4.2	1.400	0.33
MSS1005 - 471K	470	1K	0.796M	40	3.0	1.600	0.30
MSS1005 - 561K	560	1K	0.796M	40	2.7	1.800	0.28
MSS1005 - 681K	680	1K	0.796M	37	2.6	2.300	0.26
MSS1005 - 821K	820	1K	0.796M	37	2.5	2.600	0.24
MSS1005 - 102K	1000	1K	0.252M	65	2.0	3.200	0.22
MSS1005 - 122K	1200	1K	0.252M	58	2.0	3.600	0.20
MSS1005 - 152K	1500	1K	0.252M	53	1.6	5.200	0.17
MSS1005 - 182K	1800	1K	0.252M	65	1.4	5.700	0.16
MSS1005 - 222K	2200	1K	0.252M	55	1.4	6.500	0.14
MSS1005 - 272K	2700	1K	0.252M	55	1.2	8.600	0.12
MSS1005 - 332K	3300	1K	0.252M	50	1.2	10.000	0.10