



Features

- Low cost and high reliability.
- Wide range of inductance.
- Protect by UL or PVC tube.

Applications

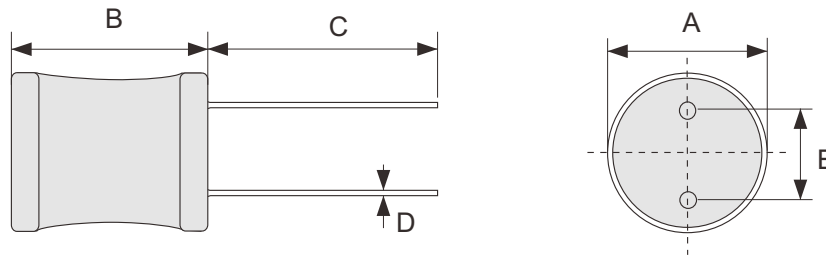
- Power supplies
- DC/DC converters
- General use

General Specifications

- Storage temp range: -40°C to +125°C
- Operating temp range: -40°C to +125°C



▶ Shape and Dimensions (Unit:mm)



Type	A (max)	B (max)	C min	D ± 0.1	E ± 0.5
MCHB0406	5.0	8.0	12.0	0.50	2.0
MCHB0608	7.5	10.0	12.0	0.60	3.0
MCHB0810	9.0	12.0	12.0	0.60	5.0
MCHB0912	10.0	14.0	12.0	0.65	5.0
MCHB1012	11.0	14.0	12.0	0.80	6.0
MCHB1016	11.0	18.0	12.0	0.80	6.0

- Inductance tested at 1kHz, 0.25V
- Inductance tolerance: M:±20%, K: ±10%
- I_{dc}: The DC current at which the inductance decrease 10% of its initial value without current or when $\Delta t = 40^\circ\text{C}$, whichever is lower (T_a=25°C)
- Package: bulk.

► Electrical Characteristics For MCHB0406 Series

Part Number	Inductance [uH]	Q	Q Test Freq. [MHz]	SRF [MHz]	DCR(max) [Ω]	IDC [mA]
MCHB0406-1R0K	1.0	130	7.96	120	0.035	2000
MCHB0406-1R2K	1.2	100	7.96	120	0.058	1950
MCHB0406-1R5K	1.5	100	7.96	120	0.075	1900
MCHB0406-1R8K	1.8	100	7.96	120	0.110	1800
MCHB0406-2R2K	2.2	100	7.96	100	0.120	1750
MCHB0406-2R7K	2.7	100	7.96	80	0.125	1680
MCHB0406-3R3K	3.3	100	7.96	75	0.130	1500
MCHB0406-3R9K	3.9	100	7.96	70	0.135	1450
MCHB0406-4R7K	4.7	100	7.96	50	0.140	1320
MCHB0406-5R6K	5.6	100	7.96	45	0.145	1230
MCHB0406-6R8K	6.8	100	7.96	30	0.15	1150
MCHB0406-8R2K	8.2	100	7.96	22	0.16	1100
MCHB0406-100K	10	80	2.52	20	0.23	1000
MCHB0406-120K	12	80	2.52	17	0.24	970
MCHB0406-150K	15	80	2.52	16	0.25	920
MCHB0406-180K	18	80	2.52	12	0.33	860
MCHB0406-220K	22	80	2.52	10	0.45	800
MCHB0406-270K	27	80	2.52	9.5	0.50	710
MCHB0406-330K	33	80	2.52	8.7	0.70	660
MCHB0406-390K	39	70	2.52	8.2	0.74	600
MCHB0406-470K	47	70	2.52	7.8	0.76	550
MCHB0406-560K	56	50	2.52	7.6	0.80	500
MCHB0406-680K	68	50	2.52	6.8	0.90	470
MCHB0406-820K	82	50	2.52	6.0	0.95	430
MCHB0406-101K	100	45	0.796	6.0	1.0	400
MCHB0406-121K	120	45	0.796	5.5	1.1	370
MCHB0406-151K	150	65	0.796	4.2	1.3	350
MCHB0406-181K	180	65	0.796	3.6	1.5	320
MCHB0406-221K	220	65	0.796	2.8	1.8	300
MCHB0406-271K	270	50	0.796	2.4	1.9	275
MCHB0406-331K	330	50	0.796	2.2	2.2	250
MCHB0406-391K	390	50	0.796	2.0	2.7	220
MCHB0406-471K	470	50	0.796	1.7	3.6	200
MCHB0406-561K	560	50	0.796	1.5	4.2	190
MCHB0406-681K	680	50	0.796	1.3	4.6	170
MCHB0406-821K	820	50	0.796	1.1	5.7	155
MCHB0406-102K	1000	90	0.252	1.0	6.7	150
MCHB0406-122K	1200	90	0.252	0.9	8.2	140
MCHB0406-152K	1500	80	0.252	0.8	13	120
MCHB0406-182K	1800	80	0.252	0.8	15	110
MCHB0406-222K	2200	80	0.252	0.8	17	100
MCHB0406-272K	2700	80	0.252	0.8	19	90
MCHB0406-332K	3300	70	0.252	0.7	26	83
MCHB0406-392K	3900	70	0.252	0.65	30	76
MCHB0406-472K	4700	65	0.252	0.60	45	70
MCHB0406-562K	5600	65	0.252	0.55	48	62
MCHB0406-682K	6800	65	0.252	0.55	56	56
MCHB0406-822K	8200	65	0.252	0.55	62	52
MCHB0406-103K	10000	45	0.0796	0.55	72	47
MCHB0406-123K	12000	45	0.0796	0.5	80	40
MCHB0406-153K	15000	45	0.0796	0.5	120	35
MCHB0406-183K	18000	45	0.0796	0.5	135	30
MCHB0406-223K	22000	45	0.0796	0.5	160	24
MCHB0406-253K	25000	45	0.0796	0.5	180	20

► Electrical Characteristics For MCHB0608 Series

Part Number	Inductance [uH]	Q	Q Test Freq. [MHz]	SRF [MHz]	DCR(max) [Ω]	IDC [mA]
MCHB0608-100K	10	25	2.52	16	0.09	1300
MCHB0608-120K	12	25	2.52	15	0.10	1100
MCHB0608-150K	15	25	2.52	13	0.11	1050
MCHB0608-180K	18	20	2.52	12	0.12	1000
MCHB0608-220K	22	25	2.52	11	0.12	960
MCHB0608-270K	27	25	2.52	10	0.17	920
MCHB0608-330K	33	25	2.52	8.8	0.19	880
MCHB0608-390K	39	20	2.52	8.4	0.22	860
MCHB0608-470K	47	20	2.52	8.2	0.23	830
MCHB0608-560K	56	20	2.52	7.9	0.29	810
MCHB0608-680K	68	20	2.52	7.0	0.37	750
MCHB0608-820K	82	20	2.52	6.5	0.39	740
MCHB0608-101K	100	30	0.796	5.7	0.44	710
MCHB0608-121K	120	30	0.796	5.2	0.64	680
MCHB0608-151K	150	35	0.796	4.7	0.73	600
MCHB0608-181K	180	35	0.796	4.2	0.82	540
MCHB0608-221K	220	35	0.796	3.7	0.92	450
MCHB0608-271K	270	30	0.796	3.5	1.2	420
MCHB0608-331K	330	40	0.796	3.2	1.6	400
MCHB0608-391K	390	25	0.796	2.9	1.9	370
MCHB0608-471K	470	35	0.796	2.4	2.3	340
MCHB0608-561K	560	35	0.796	2.2	2.6	280
MCHB0608-681K	680	45	0.796	2.0	2.8	250
MCHB0608-821K	820	40	0.796	1.6	3.0	230
MCHB0608-102K	1000	70	0.796	1.5	3.3	200
MCHB0608-122K	1200	70	0.252	0.8	3.5	180
MCHB0608-152K	1500	70	0.252	0.7	4.5	160
MCHB0608-182K	1800	70	0.252	0.6	5.0	140
MCHB0608-222K	2200	70	0.252	0.5	6.2	120
MCHB0608-272K	2700	70	0.252	0.4	7.2	100
MCHB0608-332K	3300	70	0.252	0.3	10.5	80
MCHB0608-392K	3900	70	0.252	0.2	11.7	70
MCHB0608-472K	4700	70	0.252	0.18	13.6	60
MCHB0608-562K	5600	70	0.252	0.16	16.6	50
MCHB0608-682K	6800	70	0.252	0.16	19.6	50
MCHB0608-822K	8200	70	0.252	0.16	25.2	40
MCHB0608-103K	10000	70	0.0796	0.14	29.5	40
MCHB0608-123K	12000	70	0.0796	0.14	33.8	40
MCHB0608-153K	15000	70	0.0796	0.14	45.4	30
MCHB0608-183K	18000	70	0.0796	0.14	50.4	30
MCHB0608-223K	22000	70	0.0796	0.12	60.0	30
MCHB0608-303K	30000	70	0.0796	0.12	91.5	20
MCHB0608-333K	33000	70	0.0796	0.12	98.5	20
MCHB0608-393K	39000	70	0.0796	0.12	140	15
MCHB0608-473K	47000	70	0.0796	0.12	160	15

► Electrical Characteristics For MCHB0810 Series

Part Number	Inductance [uH]	Q	Q Test Freq. [MHz]	SRF [MHz]	DCR(max) [Ω]	IDC [mA]
MCHB0810-1R0M	1.0	90	7.96	100	0.02	3400
MCHB0810-1R2M	1.2	90	7.96	90	0.02	3400
MCHB0810-1R5M	1.5	95	7.96	80	0.02	3400
MCHB0810-1R8M	1.8	95	7.96	75	0.03	3300
MCHB0810-2R2M	2.2	100	7.96	70	0.03	3000
MCHB0810-2R7M	2.7	110	7.96	60	0.04	3000
MCHB0810-3R3M	3.3	110	7.96	56	0.04	3000
MCHB0810-3R9M	3.9	110	7.96	52	0.05	2900
MCHB0810-4R7M	4.7	110	7.96	30	0.05	2900
MCHB0810-5R6M	5.6	110	7.96	30	0.06	2600
MCHB0810-6R8M	6.8	90	7.96	20	0.06	2500
MCHB0810-8R2M	8.2	80	7.96	17	0.06	2000
MCHB0810-100K	10	90	2.52	12	0.10	3500
MCHB0810-120K	12	90	2.52	11	0.10	3500
MCHB0810-150K	15	90	2.52	10	0.10	3200
MCHB0810-180K	18	80	2.52	9.0	0.11	3200
MCHB0810-220K	22	70	2.52	8.0	0.13	3000
MCHB0810-270K	27	70	2.52	7.0	0.14	2800
MCHB0810-330K	33	70	2.52	7.0	0.16	2500
MCHB0810-390K	39	70	2.52	6.0	0.16	2250
MCHB0810-470K	47	70	2.52	5.5	0.16	2000
MCHB0810-560K	56	60	2.52	5.5	0.22	1800
MCHB0810-680K	68	60	2.52	5.0	0.23	1500
MCHB0810-820K	82	60	2.52	4.5	0.27	1250
MCHB0810-101K	100	40	0.796	4.5	0.29	1000
MCHB0810-121K	120	40	0.796	4.5	0.33	1000
MCHB0810-151K	150	40	0.796	4.5	0.46	850
MCHB0810-181K	180	40	0.796	4.0	0.51	850
MCHB0810-221K	220	40	0.796	3.5	0.62	800
MCHB0810-271K	270	30	0.796	3.0	0.65	800
MCHB0810-331K	330	30	0.796	3.0	0.79	700
MCHB0810-391K	390	30	0.796	2.5	0.91	700
MCHB0810-471K	470	30	0.796	2.5	1.2	650
MCHB0810-561K	560	30	0.796	2.0	1.2	650
MCHB0810-681K	680	30	0.796	2.0	1.5	550
MCHB0810-821K	820	25	0.796	2.0	1.7	500
MCHB0810-102K	1000	50	0.252	2.0	2.0	450
MCHB0810-122K	1200	45	0.252	1.5	2.3	450
MCHB0810-152K	1500	45	0.252	1.5	2.9	400
MCHB0810-182K	1800	45	0.252	1.5	3.5	400
MCHB0810-222K	2200	50	0.252	1.0	4.2	360
MCHB0810-272K	2700	50	0.252	1.0	5.1	360
MCHB0810-332K	3300	50	0.252	0.9	6.1	280
MCHB0810-392K	3900	50	0.252	0.8	7.8	280
MCHB0810-472K	4700	55	0.252	0.7	11	260
MCHB0810-562K	5600	55	0.252	0.6	11	260
MCHB0810-682K	6800	55	0.252	0.6	14	240
MCHB0810-822K	8200	60	0.252	0.6	15	240
MCHB0810-103K	10000	100	0.0796	0.5	20	180
MCHB0810-123K	12000	100	0.0796	0.4	24	180
MCHB0810-153K	15000	100	0.0796	0.4	28	180
MCHB0810-183K	18000	100	0.0796	0.4	42	140
MCHB0810-223K	22000	100	0.0796	0.3	43	140
MCHB0810-273K	27000	100	0.0796	0.3	55	140
MCHB0810-333K	33000	90	0.0796	0.2	65	140
MCHB0810-393K	39000	90	0.0796	0.2	87	100
MCHB0810-473K	47000	85	0.0796	0.2	98	100
MCHB0810-563K	56000	80	0.0796	0.2	128	100
MCHB0810-683K	68000	70	0.0796	0.2	141	80
MCHB0810-823K	82000	70	0.0796	0.2	161	80
MCHB0810-104K	100000	55	0.0796	0.2	180	80

► Electrical Characteristics For MCHB0912 Series

Part Number	Inductance [uH]	Q	Q Test Freq. [MHz]	SRF [MHz]	DCR(max) [Ω]	IDC [mA]
MCHB0912-100K	10	110	2.52	24	0.04	2800
MCHB0912-120K	12	110	2.52	18	0.04	2700
MCHB0912-150K	15	110	2.52	11	0.05	2300
MCHB0912-180K	18	90	2.52	8.4	0.06	2100
MCHB0912-220K	22	90	2.52	9.2	0.07	2000
MCHB0912-270K	27	90	2.52	7.1	0.10	1700
MCHB0912-330K	33	90	2.52	7.1	0.12	1500
MCHB0912-390K	39	80	2.52	6.9	0.12	1400
MCHB0912-470K	47	70	2.52	6.0	0.13	1300
MCHB0912-560K	56	70	2.52	5.7	0.14	1200
MCHB0912-680K	68	60	2.52	5.4	0.15	1000
MCHB0912-820K	82	50	2.52	4.6	0.16	900
MCHB0912-101K	100	60	0.796	4.0	0.25	700
MCHB0912-121K	120	60	0.796	3.6	0.28	700
MCHB0912-151K	150	55	0.796	3.1	0.32	700
MCHB0912-181K	180	55	0.796	2.8	0.47	600
MCHB0912-221K	220	55	0.796	2.5	0.53	500
MCHB0912-271K	270	50	0.796	2.4	0.60	450
MCHB0912-331K	330	50	0.796	2.0	0.85	400
MCHB0912-391K	390	50	0.796	2.1	0.95	350
MCHB0912-471K	470	40	0.796	1.9	1.1	350
MCHB0912-561K	560	30	0.796	1.8	1.2	300
MCHB0912-681K	680	30	0.796	1.7	1.3	250
MCHB0912-821K	820	30	0.796	1.5	1.4	200
MCHB0912-102K	1000	70	0.252	1.1	2.0	200
MCHB0912-122K	1200	70	0.252	1.0	2.3	180
MCHB0912-152K	1500	70	0.252	1.0	2.9	150
MCHB0912-182K	1800	70	0.252	0.9	3.3	120
MCHB0912-222K	2200	70	0.252	0.7	4.5	110
MCHB0912-272K	2700	70	0.252	0.7	5.5	90
MCHB0912-332K	3300	60	0.252	0.6	5.7	80
MCHB0912-392K	3900	60	0.252	0.6	6.5	60
MCHB0912-472K	4700	60	0.252	0.6	7.2	50
MCHB0912-562K	5600	60	0.252	0.5	9.5	50
MCHB0912-682K	6800	60	0.252	0.5	11	50
MCHB0912-822K	8200	50	0.252	0.4	13	40
MCHB0912-103K	10000	120	0.0796	0.3	16	40
MCHB0912-123K	12000	120	0.0796	0.3	18	40
MCHB0912-153K	15000	110	0.0796	0.3	21	40
MCHB0912-183K	18000	110	0.0796	0.3	23	40
MCHB0912-223K	22000	110	0.0796	0.2	33	35
MCHB0912-273K	27000	100	0.0796	0.2	37	35
MCHB0912-333K	33000	90	0.0796	0.2	42	35
MCHB0912-393K	39000	90	0.0796	0.2	45	30
MCHB0912-473K	47000	80	0.0796	0.2	52	30

▶ Electrical Characteristics For MCHB1012 Series

Part Number	Inductance [uH]	Q	Q Test Freq. [MHz]	SRF [MHz]	DCR(max) [Ω]	IDC [mA]
MCHB1012-103K	10000	100	0.0796	0.35	12	180
MCHB1012-123K	12000	100	0.0796	0.31	13	160
MCHB1012-153K	15000	100	0.0796	0.28	18	140
MCHB1012-183K	18000	80	0.0796	0.26	25	130
MCHB1012-223K	22000	80	0.0796	0.22	30	120
MCHB1012-273K	27000	80	0.0796	0.20	35	110
MCHB1012-333K	33000	80	0.0796	0.19	40	100
MCHB1012-393K	39000	80	0.0796	0.17	50	90
MCHB1012-473K	47000	60	0.0796	0.15	50	80
MCHB1012-563K	56000	40	0.0796	0.13	65	75
MCHB1012-683K	68000	40	0.0796	0.12	70	70
MCHB1012-823K	82000	30	0.0796	0.10	100	60
MCHB1012-104K	100000	30	0.0796	0.10	135	55

► Electrical Characteristics For MCHB1016 Series

Part Number	Inductance [uH]	SRF [MHz]	DCR(max) [Ω]	IDC [A]
MCHB1016-100K	10	30	0.018	6.8
MCHB1016-120K	12	26	0.019	6.2
MCHB1016-150K	15	22	0.022	5.4
MCHB1016-180K	18	15	0.024	5.0
MCHB1016-220K	22	11	0.026	4.7
MCHB1016-270K	27	8.2	0.030	4.2
MCHB1016-330K	33	7.7	0.037	3.8
MCHB1016-390K	39	7.3	0.042	3.5
MCHB1016-470K	47	6.7	0.046	3.2
MCHB1016-560K	56	6.2	0.051	3.0
MCHB1016-680K	68	5.4	0.065	2.6
MCHB1016-820K	82	4.7	0.074	2.4
MCHB1016-101K	100	4.3	0.084	2.2
MCHB1016-121K	120	3.7	0.11	2.0
MCHB1016-151K	150	3.2	0.12	1.8
MCHB1016-181K	180	2.9	0.13	1.6
MCHB1016-221K	220	2.7	0.17	1.4
MCHB1016-271K	270	2.3	0.23	1.3
MCHB1016-331K	330	1.9	0.31	1.2
MCHB1016-391K	390	1.8	0.34	1.1
MCHB1016-471K	470	1.7	0.39	1.0
MCHB1016-561K	560	1.6	0.43	0.9
MCHB1016-681K	680	1.4	0.59	0.82
MCHB1016-821K	820	1.3	0.65	0.77
MCHB1016-102K	1000	1.1	0.85	0.69
MCHB1016-122K	1200	1.0	1.00	0.64
MCHB1016-152K	1500	0.94	1.10	0.57
MCHB1016-182K	1800	0.88	1.40	0.52
MCHB1016-222K	2200	0.73	1.70	0.46
MCHB1016-272K	2700	0.69	2.00	0.42
MCHB1016-332K	3300	0.62	2.50	0.38
MCHB1016-392K	3900	0.59	2.80	0.34
MCHB1016-472K	4700	0.52	3.60	0.32
MCHB1016-562K	5600	0.45	4.50	0.29
MCHB1016-682K	6800	0.43	5.10	0.26
MCHB1016-822K	8200	0.40	6.70	0.24
MCHB1016-103K	10000	0.37	7.70	0.22
MCHB1016-123K	12000	0.34	9.20	0.2
MCHB1016-153K	15000	0.27	11.30	0.17
MCHB1016-183K	18000	0.25	14.20	0.16
MCHB1016-223K	22000	0.22	18.00	0.14
MCHB1016-273K	27000	0.21	20.50	0.13