

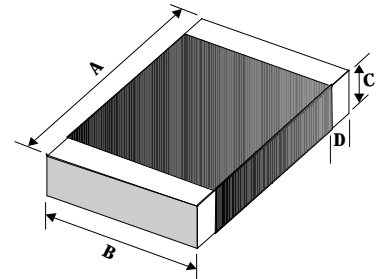
MULTILAYER CHIP INDUCTORS SERIES MIC

FEATURES

100% NO LEAD TERMINAL
 Multilayer technology. Zero percent coupling. High reliability
 High heat resistance. Excellent solderability
 Excellent for both Flow and Reflow soldering process
 Many sizes to choose
 Low cost

SPECIFICATIONS

Inductance range	Size 0603	from 0.047uH to 33uH
	Size 0805	from 0.047uH to 33uH
	Size 1008	from 0.10uH to 33uH
	Size 1206	from 0.047uH to 33uH
	Size 1210	from 0.12uH to 33uH
	Size 1812	from 0.10uH to 33uH
Tolerance	5%, 10%, 20% available	
Test equipment used	HP-4291A, HP-4236A @ specified test frequency	
Rated current	is current obtained when part either have initial L drop 10% or have temperature rise up to 28°C	
Operating temperature	- 55°C to +125°C	
Soldering heat resistance	300°C for 5 seconds	
Terminal construction	Electro-plating with 3 layers : Silver, Nickel, Tin	
Solderability	Recommendation	Preheat @ 150°C for 60 seconds Immerse chip into 235°C solder bath for 5 seconds.
Tape and Reel specifications	8mm or 12mm embossed carrier tape with 178mm reel	
Quantity per reel	0603 & 0805	4000
	1008 & 1206	3000
	1210	2000
	1812	1000

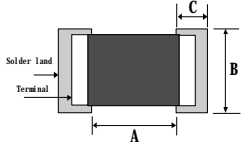


DIMENSIONS IN MILLIMETERS

SIZE	A		B		C		D	
0603	1.6	± 0.15	0.8	± 0.15	0.8	± 0.15	0.3	± 0.2
0805	2.0	± 0.20	1.25	± 0.20	0.85	± 0.20	0.5	± 0.3
1008	2.5	± 0.20	2.0	± 0.20	1.6	± 0.30	0.5	± 0.3
1206	3.2	± 0.20	1.6	± 0.20	1.1	± 0.30	0.5	± 0.3
1210	3.2	± 0.20	2.5	± 0.20	1.3	± 0.20	0.5	± 0.3
1812	4.5	± 0.20	3.2	± 0.20	1.5	± 0.20	0.5	± 0.3

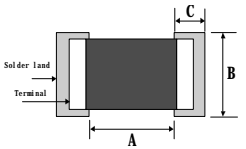
ELECTRICAL SPECIFICATIONS

MIC0603 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)	LAND PATTERN
MIC0603-R047	0.047	20	10	50	0.30	260	50	 <p style="margin-top: 10px;"> A = 1.00mm B = 1.00mm C = 0.50mm </p>
MIC0603-R068	0.068	20	10	50	0.30	250	50	
MIC0603-R082	0.082	20	10	50	0.30	245	50	
MIC0603-R10M	0.10	20	15	25	0.50	240	50	
MIC0603-R12M	0.12	20	15	25	0.50	205	50	
MIC0603-R15M	0.15	20	15	25	0.60	180	50	
MIC0603-R18M	0.18	20	15	25	0.60	165	50	
MIC0603-R22M	0.22	20	15	25	0.80	150	50	
MIC0603-R27M	0.27	20	15	25	0.80	136	50	
MIC0603-R33M	0.33	20	15	25	0.85	125	35	
MIC0603-R39M	0.39	20	15	25	1.00	110	35	
MIC0603-R47M	0.47	20	15	25	1.35	105	35	
MIC0603-R56M	0.56	20	15	25	1.55	96	35	
MIC0603-R68M	0.68	20	15	25	1.70	80	35	
MIC0603-R82M	0.82	20	15	25	2.10	75	35	
MIC0603-1R0K	1.0	10	35	10	0.60	70	25	
MIC0603-1R2K	1.2	10	35	10	0.80	60	25	
MIC0603-1R5K	1.5	10	35	10	0.80	55	25	
MIC0603-1R8K	1.8	10	35	10	0.95	50	25	
MIC0603-2R2K	2.2	10	35	10	1.15	45	15	
MIC0603-2R7K	2.7	10	35	10	1.35	40	15	
MIC0603-3R3K	3.3	10	35	10	1.55	38	15	
MIC0603-3R9K	3.9	10	35	10	1.70	36	15	
MIC0603-4R7K	4.7	10	35	10	2.10	33	15	
MIC0603-5R6K	5.6	10	35	4	1.55	22	15	
MIC0603-6R8K	6.8	10	35	4	1.70	20	15	
MIC0603-8R2K	8.2	10	35	4	2.10	18	15	
MIC0603-100K	10	10	35	2	2.55	17	15	
MIC0603-120K	12	10	35	2	2.75	15	15	
MIC0603-150K	15	10	20	1	1.70	14	15	
MIC0603-180K	18	10	20	1	1.85	13	15	
MIC0603-220K	22	10	20	1	2.15	11	15	
MIC0603-270K	27	10	20	1	2.75	10	15	
MIC0603-330K	33	10	20	1	2.95	9	15	

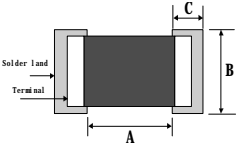
ELECTRICAL SPECIFICATIONS

MIC0805 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)	LAND PATTERN
MIC0805-R047	0.047	20	15	50	0.20	320	300	 <p>A = 1.0mm B = 1.5mm C = 0.5mm</p> <p>NOTE Item 0.47μH to 0.82μH have thickness of 1.25mm</p> <p>Start from 2.7μH, the thickness of inductor is changed from 0.85mm to 1.25mm</p>
MIC0805-R068	0.068	20	15	50	0.20	280	300	
MIC0805-R082	0.082	20	15	50	0.20	255	300	
MIC0805-R10M	0.10	20	20	25	0.30	235	250	
MIC0805-R12M	0.12	20	20	25	0.30	220	250	
MIC0805-R15M	0.15	20	20	25	0.40	200	250	
MIC0805-R18M	0.18	20	20	25	0.40	185	250	
MIC0805-R22M	0.22	20	20	25	0.50	170	250	
MIC0805-R27M	0.27	20	20	25	0.50	150	250	
MIC0805-R33M	0.33	20	20	25	0.55	145	250	
MIC0805-R39M	0.39	20	25	25	0.65	135	200	
MIC0805-R47M	0.47	20	25	25	0.65	125	200	
MIC0805-R56M	0.56	20	25	25	0.75	115	150	
MIC0805-R68M	0.68	20	25	25	0.80	105	150	
MIC0805-R82M	0.82	20	25	25	1.00	100	150	
MIC0805-1R0K	1.0	10	45	10	0.40	75	50	
MIC0805-1R2K	1.2	10	45	10	0.50	65	50	
MIC0805-1R5K	1.5	10	45	10	0.50	60	50	
MIC0805-1R8K	1.8	10	45	10	0.60	55	50	
MIC0805-2R2K	2.2	10	45	10	0.65	50	30	
MIC0805-2R7K	2.7	10	45	10	0.75	45	30	
MIC0805-3R3K	3.3	10	45	10	0.80	41	30	
MIC0805-3R9K	3.9	10	45	10	0.90	38	30	
MIC0805-4R7K	4.7	10	45	10	1.00	35	30	
MIC0805-5R6K	5.6	10	45	4	0.90	32	15	
MIC0805-6R8K	6.8	10	45	4	1.00	29	15	
MIC0805-8R2K	8.2	10	45	4	1.10	26	15	
MIC0805-100K	10	10	45	2	1.15	24	15	
MIC0805-120K	12	10	45	2	1.25	22	15	
MIC0805-150K	15	10	30	1	0.80	19	5	
MIC0805-180K	18	10	30	1	0.90	18	5	
MIC0805-220K	22	10	30	1	1.10	16	5	
MIC0805-270K	27	10	30	1	1.15	14	5	
MIC0805-330K	33	10	30	0.4	1.25	13	5	

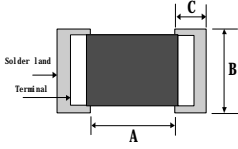
ELECTRICAL SPECIFICATIONS

MIC1008 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)	LAND PATTERN
MIC1008-R10K	0.10	10	40	25.2	0.20	680	570	 <p style="margin-top: 20px;"> A = 1.50mm B = 2.20mm C = 0.50mm </p>
MIC1008-R12K	0.12	10	40	25.2	0.22	650	550	
MIC1008-R15K	0.15	10	40	25.2	0.24	530	500	
MIC1008-R18K	0.18	10	40	25.2	0.26	520	460	
MIC1008-R22K	0.22	10	40	25.2	0.28	390	430	
MIC1008-R27K	0.27	10	40	25.2	0.30	330	420	
MIC1008-R33K	0.33	10	40	25.2	0.32	310	400	
MIC1008-R39K	0.39	10	40	25.2	0.34	290	375	
MIC1008-R47K	0.47	10	40	25.2	0.36	260	350	
MIC1008-R56K	0.56	10	40	25.2	0.38	230	330	
MIC1008-R68K	0.68	10	40	25.2	0.40	200	320	
MIC1008-R82K	0.82	10	40	25.2	0.42	180	290	
MIC1008-1R0K	1.0	10	45	7.96	0.35	150	250	
MIC1008-1R2K	1.2	10	45	7.96	0.40	140	240	
MIC1008-1R5K	1.5	10	45	7.96	0.45	130	230	
MIC1008-1R8K	1.8	10	45	7.96	0.50	120	220	
MIC1008-2R2K	2.2	10	45	7.96	0.55	105	210	
MIC1008-2R7K	2.7	10	45	7.96	0.60	90	200	
MIC1008-3R3K	3.3	10	45	7.96	0.65	80	190	
MIC1008-3R9K	3.9	10	45	7.96	0.70	75	185	
MIC1008-4R7K	4.7	10	45	7.96	0.75	70	180	
MIC1008-5R6K	5.6	10	45	7.96	0.80	60	170	
MIC1008-6R8K	6.8	10	45	7.96	0.85	55	165	
MIC1008-8R2K	8.2	10	45	7.96	0.90	50	160	
MIC1008-100K	10	10	30	2.52	0.95	30	155	
MIC1008-120K	12	10	30	2.52	1.00	27	150	
MIC1008-150K	15	10	30	2.52	1.05	23	140	
MIC1008-180K	18	10	30	2.52	1.10	22	130	
MIC1008-220K	22	10	30	2.52	1.15	21	125	
MIC1008-270K	27	10	30	2.52	1.20	19	115	
MIC1008-330K	33	10	30	2.52	1.25	17	110	

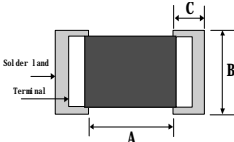
ELECTRICAL SPECIFICATIONS

MIC1206 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATE CURRENT (mA)	LAND PATTERN
MIC1206-R047	0.047	20	20	50	0.15	320	300	 <p style="margin-top: 20px;"> A = 2.2mm B = 1.8mm C = 0.5mm </p>
MIC1206-R068	0.068	20	20	50	0.25	280	300	
MIC1206-R10K	0.10	10	20	25	0.25	235	250	
MIC1206-R12K	0.12	10	20	25	0.30	220	250	
MIC1206-R15K	0.15	10	20	25	0.30	200	250	
MIC1206-R18K	0.18	10	20	25	0.40	185	250	
MIC1206-R22K	0.22	10	20	25	0.40	170	250	
MIC1206-R27K	0.27	10	20	25	0.50	150	250	
MIC1206-R33K	0.33	10	20	25	0.50	145	250	
MIC1206-R39K	0.39	10	25	25	0.60	135	250	
MIC1206-R47K	0.47	10	25	25	0.60	125	200	
MIC1206-R56K	0.56	10	25	25	0.70	115	200	
MIC1206-R68K	0.68	10	25	25	0.80	105	150	
MIC1206-R82K	0.82	10	25	25	0.90	100	100	
MIC1206-1R0K	1.0	10	45	10	0.40	75	100	
MIC1206-1R2K	1.2	10	45	10	0.50	65	50	
MIC1206-1R5K	1.5	10	45	10	0.50	60	50	
MIC1206-1R8K	1.8	10	45	10	0.50	55	50	
MIC1206-2R2K	2.2	10	45	10	0.60	50	50	
MIC1206-2R7K	2.7	10	45	10	0.60	45	50	
MIC1206-3R3K	3.3	10	45	10	0.70	41	50	
MIC1206-3R9K	3.9	10	45	10	0.80	38	50	
MIC1206-4R7K	4.7	10	45	10	0.90	35	50	
MIC1206-5R6K	5.6	10	50	4	0.70	32	25	
MIC1206-6R8K	6.8	10	50	4	0.80	29	25	
MIC1206-8R2K	8.2	10	50	4	0.90	26	25	
MIC1206-100K	10	10	50	2	1.00	24	25	
MIC1206-120K	12	10	50	2	1.05	22	15	
MIC1206-150K	15	10	35	1	0.70	19	5	
MIC1206-180K	18	10	35	1	0.70	18	5	
MIC1206-220K	22	10	35	1	0.90	16	5	
MIC1206-270K	27	10	35	1	0.90	14	5	
MIC1206-330K	33	10	35	0.4	1.05	13	5	

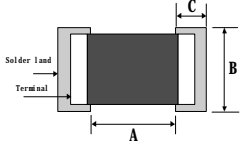
ELECTRICAL SPECIFICATIONS

MIC1210 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)	LAND PATTERN
MIC1210-R12K	0.12	10	35	25.2	0.22	500	450	 <p style="margin-top: 10px;"> A = 2.2mm B = 2.7mm C = 0.5mm </p>
MIC1210-R15K	0.15	10	35	25.2	0.25	450	450	
MIC1210-R18K	0.18	10	35	25.2	0.28	400	450	
MIC1210-R22K	0.22	10	35	25.2	0.30	350	450	
MIC1210-R27K	0.27	10	35	25.2	0.32	320	450	
MIC1210-R33K	0.33	10	35	25.2	0.34	300	450	
MIC1210-R39K	0.39	10	35	25.2	0.36	250	450	
MIC1210-R47K	0.47	10	35	25.2	0.40	220	450	
MIC1210-R56K	0.56	10	35	25.2	0.42	180	450	
MIC1210-R68K	0.68	10	35	25.2	0.46	160	450	
MIC1210-R82K	0.82	10	35	25.2	0.50	140	450	
MIC1210-1R0K	1.0	10	40	7.96	0.40	120	400	
MIC1210-1R2K	1.2	10	40	7.96	0.44	100	390	
MIC1210-1R5K	1.5	10	40	7.96	0.48	85	370	
MIC1210-1R8K	1.8	10	40	7.96	0.52	80	350	
MIC1210-2R2K	2.2	10	40	7.96	0.56	75	320	
MIC1210-2R7K	2.7	10	40	7.96	0.60	70	290	
MIC1210-3R3K	3.3	10	40	7.96	0.64	60	260	
MIC1210-3R9K	3.9	10	40	7.96	0.68	55	250	
MIC1210-4R7K	4.7	10	40	7.96	0.72	50	220	
MIC1210-5R6K	5.6	10	40	7.96	0.76	47	200	
MIC1210-6R8K	6.8	10	40	7.96	0.80	43	180	
MIC1210-8R2K	8.2	10	40	7.96	0.84	40	170	
MIC1210-100K	10	10	35	2.52	0.88	36	150	
MIC1210-120K	12	10	35	2.52	0.92	33	140	
MIC1210-150K	15	10	35	2.52	0.96	30	130	
MIC1210-180K	18	10	35	2.52	1.00	27	120	
MIC1210-220K	22	10	35	2.52	1.04	25	110	
MIC1210-270K	27	10	35	2.52	1.08	20	80	
MIC1210-330K	33	10	35	2.52	1.12	17	70	

ELECTRICAL SPECIFICATIONS

MIC1812 SERIES

PART NUMBER	IND (μ H)	TOL (%)	Q Min	TEST FREQ (MHz)	DCR max (Ω)	SRF min (MHz)	RATED CURRENT (mA)	LAND PATTERN
MIC1812-R10K	0.10	10	35	25.2	0.18	300	800	 <p style="margin-top: 10px;"> A = 3.5mm B = 3.4mm C = 0.5mm </p>
MIC1812-R12K	0.12	10	35	25.2	0.20	280	770	
MIC1812-R15K	0.15	10	35	25.2	0.22	250	730	
MIC1812-R18K	0.18	10	35	25.2	0.24	220	700	
MIC1812-R22K	0.22	10	40	25.2	0.25	200	665	
MIC1812-R27K	0.27	10	40	25.2	0.26	180	625	
MIC1812-R33K	0.33	10	40	25.2	0.28	165	605	
MIC1812-R39K	0.39	10	40	25.2	0.30	150	575	
MIC1812-R47K	0.47	10	40	25.2	0.32	145	545	
MIC1812-R56K	0.56	10	40	25.2	0.36	140	520	
MIC1812-R68K	0.68	10	40	25.2	0.38	135	500	
MIC1812-R82K	0.82	10	40	25.2	0.40	130	475	
MIC1812-1R0K	1.0	10	50	7.96	0.44	100	450	
MIC1812-1R2K	1.2	10	50	7.96	0.48	80	430	
MIC1812-1R5K	1.5	10	50	7.96	0.52	70	410	
MIC1812-1R8K	1.8	10	50	7.96	0.56	60	390	
MIC1812-2R2K	2.2	10	50	7.96	0.60	55	380	
MIC1812-2R7K	2.7	10	50	7.96	0.64	50	370	
MIC1812-3R3K	3.3	10	50	7.96	0.68	45	355	
MIC1812-3R9K	3.9	10	50	7.96	0.72	40	330	
MIC1812-4R7K	4.7	10	50	7.96	0.76	35	315	
MIC1812-5R6K	5.6	10	50	7.96	0.80	33	300	
MIC1812-6R8K	6.8	10	50	7.96	0.84	27	285	
MIC1812-8R2K	8.2	10	50	7.96	0.88	25	270	
MIC1812-100K	10	10	50	2.52	0.92	20	250	
MIC1812-120K	12	10	50	2.52	0.96	18	225	
MIC1812-150K	15	10	50	2.52	1.00	17	200	
MIC1812-180K	18	10	50	2.52	1.04	15	190	
MIC1812-220K	22	10	50	2.52	1.08	13	180	
MIC1812-270K	27	10	50	2.52	1.12	12	170	
MIC1812-330K	33	10	50	2.52	1.16	11	160	