

FEATURES

MFI-S chip inductors are Mag.Layers' line of high performance wound chip inductors. The MFI-S chip inductors are constructed with a wire wound structure and have a higher current capacity than multilayer chip inductors. MFI-S chip inductors have high quality characteristics suitable for your design needs.

Excellent Inductor Characteristics

MFI-S chip inductors have high Q values and high self-resonant frequencies.

Multiple Size Availability

MFI-S chip inductors are available in two sizes: 252018, 322522

APPLICATIONS

The MFI-S chip inductors can be used in a variety of electronics, including.

- Computers
- Computer Peripherals
- Cordless Phones

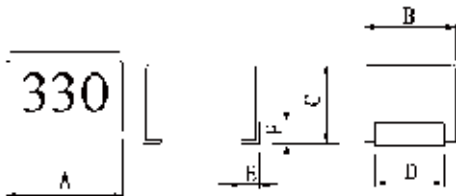
PRODUCT IDENTIFICATION

① ② ③ ④ ⑤ ⑥
MFI - 252018S - 10N M □ □

- ① Product Code
- ② Dimensions Code
- ③ Signal Type
- ④ Inductance Code
- ⑤ Tolerance Code
- ⑥ Pattern Code

PRODUCT DIMENSIONS

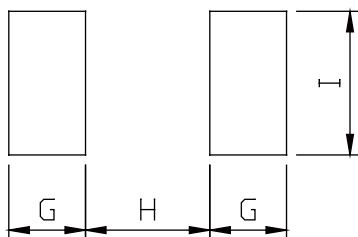
NOTES: DIMENSION IN mm



PART NO.	A	B	C	D	E	F
MFI-252018S	2.5±0.3	2.0±0.2	1.8±0.2	1.4±0.1	0.4Typ.	0.4Typ.
MFI-322522S	3.2±0.3	2.5±0.2	2.2±0.2	1.9±0.1	0.4Typ.	0.6Typ.

LAND PATTERN

NOTES: DIMENSION IN mm



PART NO.	G	H	I
MFI-252018S	1.00	1.50	1.50
MFI-322522S	1.20	2.00	2.00

■ PRODUCT SPECIFICATIONS

Part Number	Inductance (μ H)	Inductance Tolerance	Q Min.	L.Q Test Freq. (MHz)	S.R.F.(MHz) Min.	R _{DC} (Ω) Max.	Rated Current (mA) Max.
MFI-252018S-10N	0.010	M	15	100	2150	0.26	530
MFI-252018S-12N	0.012	M	15	100	2050	0.27	500
MFI-252018S-15N	0.015	M	15	100	2000	0.29	480
MFI-252018S-18N	0.018	M	15	100	1850	0.31	450
MFI-252018S-22N	0.022	M	15	100	1650	0.37	420
MFI-252018S-27N	0.027	M	15	100	1550	0.40	410
MFI-252018S-33N	0.033	M	20	100	1450	0.42	400
MFI-252018S-39N	0.039	M	20	100	1350	0.45	380
MFI-252018S-47N	0.047	M	20	100	1200	0.50	360
MFI-252018S-56N	0.056	M	20	100	1100	0.60	340
MFI-252018S-68N	0.068	M	20	100	1050	0.65	320
MFI-252018S-82N	0.082	M	20	100	900	0.75	300
MFI-252018S-R10	0.10	M	20	100	800	0.80	280
MFI-252018S-R12	0.12	K	30	25.2	700	0.30	550
MFI-252018S-R15	0.15	K	30	25.2	550	0.35	500
MFI-252018S-R18	0.18	K	30	25.2	500	0.40	460
MFI-252018S-R22	0.22	K	30	25.2	450	0.50	430
MFI-252018S-R27	0.27	K	30	25.2	425	0.55	420
MFI-252018S-R33	0.33	K	30	25.2	400	0.60	400
MFI-252018S-R39	0.39	K	30	25.2	375	0.65	375
MFI-252018S-R47	0.47	K	30	25.2	350	0.68	350
MFI-252018S-R56	0.56	K	30	25.2	300	0.75	325
MFI-252018S-R68	0.68	K	30	25.2	270	0.85	300
MFI-252018S-R82	0.82	K	30	25.2	250	1.0	260
MFI-252018S-1R0	1.0	J,K	30	7.96	220	1.1	245
MFI-252018S-1R2	1.2	J,K	30	7.96	180	1.2	230
MFI-252018S-1R5	1.5	J,K	30	7.96	135	1.3	220
MFI-252018S-1R8	1.8	J,K	30	7.96	100	1.45	210
MFI-252018S-2R2	2.2	J,K	30	7.96	75	1.55	200
MFI-252018S-2R7	2.7	J,K	30	7.96	55	1.7	195
MFI-252018S-3R3	3.3	J,K	30	7.96	48	1.9	185
MFI-252018S-3R9	3.9	J,K	30	7.96	43	2.1	180
MFI-252018S-4R7	4.7	J,K	30	7.96	40	2.3	175
MFI-252018S-5R6	5.6	J,K	25	7.96	36	2.5	170
MFI-252018S-6R8	6.8	J,K	25	7.96	33	2.7	165
MFI-252018S-8R2	8.2	J,K	25	7.96	30	3.05	160
MFI-252018S-100	10	J,K	25	2.52	27	3.5	155
MFI-252018S-120	12	J,K	25	2.52	23	3.8	150
MFI-252018S-150	15	J,K	25	2.52	20	4.4	140
MFI-252018S-180	18	J,K	25	2.52	18	4.8	130

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Part Number	Inductance (μ H)	Inductance Tolerance	Q Min.	L.Q Test Freq. (MHz)	S.R.F.(MHz) Min.	R _{DC} (Ω) Max.	Rated Current (mA) Max.
MFI-252018S-220	22	J,K	25	2.52	17	5.5	125
MFI-252018S-270	27	J,K	25	2.52	16	6.3	115
MFI-252018S-330	33	J,K	25	2.52	15	7.1	110
MFI-252018S-390	39	J,K	20	2.52	14	9.5	90
MFI-252018S-470	47	J,K	20	2.52	13	11.1	80
MFI-252018S-560	56	J,K	20	2.52	12	12.1	75
MFI-252018S-680	68	J,K	20	2.52	11	16.6	70
MFI-252018S-820	82	J,K	20	2.52	10	19	66
MFI-252018S-101	100	J,K	15	0.796	9	21	60

1. Please specify the inductance tolerance, J($\pm 5\%$),K($\pm 10\%$),M($\pm 20\%$)

2. IDC:Based on inductance change($\Delta L/L_0: \leq -10\%$) and Based on temperature rise($\Delta T: 20^\circ\text{C}$ Typ.)

■ PRODUCT SPECIFICATIONS

Part Number	Inductance (μ H)	Inductance Tolerance	Q Min.	L.Q Test Freq. (MHz)	S.R.F.(MHz) Min.	R _{DC} (Ω) Max.	Rated Current (mA) Max.
MFI-322522S-10N	0.010	M	15	100	2500	0.13	450
MFI-322522S-12N	0.012	M	17	100	2300	0.14	450
MFI-322522S-15N	0.015	M	19	100	2100	0.16	450
MFI-322522S-18N	0.018	M	21	100	1900	0.18	450
MFI-322522S-22N	0.022	M	23	100	1700	0.20	450
MFI-322522S-27N	0.027	M	23	100	1500	0.22	450
MFI-322522S-33N	0.033	M	25	100	1400	0.24	450
MFI-322522S-39N	0.039	M	25	100	1300	0.27	450
MFI-322522S-47N	0.047	M	26	100	1200	0.30	450
MFI-322522S-56N	0.056	M	26	100	1100	0.33	450
MFI-322522S-68N	0.068	M	27	100	1000	0.36	450
MFI-322522S-82N	0.082	M	27	100	900	0.40	450
MFI-322522S-R10	0.10	M	28	100	700	0.44	450
MFI-322522S-R12	0.12	K,M	30	25.2	500	0.22	450
MFI-322522S-R15	0.15	K,M	30	25.2	450	0.25	450
MFI-322522S-R18	0.18	K,M	30	25.2	400	0.28	450
MFI-322522S-R22	0.22	K,M	30	25.2	350	0.32	450
MFI-322522S-R27	0.27	K,M	30	25.2	320	0.36	450
MFI-322522S-R33	0.33	K,M	30	25.2	300	0.40	450
MFI-322522S-R39	0.39	K,M	30	25.2	250	0.45	450
MFI-322522S-R47	0.47	K,M	30	25.2	220	0.50	450
MFI-322522S-R56	0.56	K,M	30	25.2	180	0.55	450
MFI-322522S-R68	0.68	K,M	30	25.2	160	0.60	450
MFI-322522S-R82	0.82	K,M	30	25.2	140	0.65	450
MFI-322522S-1R0	1.0	J,K	30	7.96	120	0.70	400
MFI-322522S-1R2	1.2	J,K	30	7.96	100	0.75	390
MFI-322522S-1R5	1.5	J,K	30	7.96	85	0.85	370
MFI-322522S-1R8	1.8	J,K	30	7.96	80	0.90	350
MFI-322522S-2R2	2.2	J,K	30	7.96	75	1.0	320
MFI-322522S-2R7	2.7	J,K	30	7.96	70	1.1	290
MFI-322522S-3R3	3.3	J,K	30	7.96	60	1.2	260
MFI-322522S-3R9	3.9	J,K	30	7.96	55	1.3	250
MFI-322522S-4R7	4.7	J,K	30	7.96	50	1.5	220
MFI-322522S-5R6	5.6	J,K	30	7.96	45	1.6	200
MFI-322522S-6R8	6.8	J,K	30	7.96	40	1.8	180
MFI-322522S-8R2	8.2	J,K	30	7.96	35	2.0	170
MFI-322522S-100	10	J,K	30	2.52	30	2.1	150
MFI-322522S-120	12	J,K	30	2.52	20	2.5	140
MFI-322522S-150	15	J,K	30	2.52	20	2.8	130
MFI-322522S-180	18	J,K	30	2.52	20	3.3	120

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MFI-322522S-220	22	J,K	30	2.52	20	3.7	110
MFI-322522S-270	27	J,K	30	2.52	18	5.0	80
MFI-322522S-330	33	J,K	30	2.52	17	5.6	70
MFI-322522S-390	39	J,K	30	2.52	16	6.4	65
MFI-322522S-470	47	J,K	30	2.52	15	7	60
MFI-322522S-560	56	J,K	30	2.52	13	8	55
MFI-322522S-680	68	J,K	30	2.52	12	9	50
MFI-322522S-820	82	J,K	30	2.52	11	10	45
MFI-322522S-101	100	J,K	20	0.796	10	10	40
MFI-322522S-121	120	J,K	20	0.796	10	11	70
MFI-322522S-151	150	J,K	20	0.796	7	15	65
MFI-322522S-181	180	J,K	20	0.796	7	17	60
MFI-322522S-221	220	J,K	20	0.796	7	21	50
MFI-322522S-271	270	J,K	20	0.796	6	28	45
MFI-322522S-331	330	J,K	20	0.796	5	34	40

1. Please specify the inductance tolerance, J($\pm 5\%$),K($\pm 10\%$),M($\pm 20\%$)

2. IDC:Based on inductance change($\Delta L/L_0: \leq -10\%$) and Based on temperature rise($\Delta T: 20^\circ\text{C}$ Typ.)