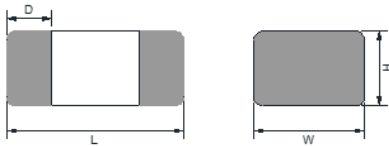


Product outline

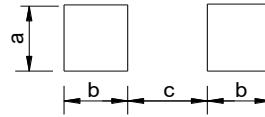
- Ferrite material multilayer chip inductors, miniature size, suitable for SMT process.
- No cross coupling due to magnetic shielded structures.



Dimensions(mm)



Recommended Patterns



Type	L	W	H	D	a	b	c	Packaging (pcs/reel)
1608	1.6±0.2	0.8±0.2	0.8±0.2	0.3±0.2	0.6~1.5	0.2~1.0	0.2~1.0	4000
2012	2.0±0.2	1.2±0.2	0.9±0.2	0.5±0.3	0.9~1.6	0.8~1.2	0.8~1.2	4000
2016	2.0±0.2	1.6±0.2	0.9±0.2	0.5±0.3	0.9~1.6	0.8~1.2	0.8~1.2	4000
2520	2.5±0.2	2.0±0.2	1.0±0.2	0.5±0.3	1.8~2.5	0.8~1.5	0.8~1.5	3000
3216	3.2±0.2	1.6±0.2	0.90±0.2	0.5±0.3	1.8±0.2	0.8±0.2	2.0±0.2	4000

Product Identification

ML 2016 □ 1R0 M □
 ① ② ③ ④ ⑤ ⑥

- ① Multilayer Inductor
- ② Dimensions: 2016=2.0x1.6mm
- ③ Internal control code
- ④ Inductance Value: R47=0.47uH, 4R7=4.7uH, 100=10uH
- ⑤ Tolerance: K=±10%, M=±20%, N=±30%
- ⑥ Characteristic level

ML1608H-B Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	I _{rms} -A max.	SRF MHz Min.
ML1608HR47MB	0.47	±20%	100±30%	1.05	100
ML1608HR56MB	0.56	±20%	120±30%	1.05	100
ML1608H1R0MB	1.0	±20%	200±30%	0.9	98
ML1608H1R8MB	1.8	±20%	240±30%	0.75	95
ML1608H2R2MB	2.2	±20%	240±30%	0.75	95
ML1608H4R7MB	4.7	±20%	500±30%	0.7	65

ML2012H-A Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	I _{rms} -A max.	SRF MHz Min.
ML2012H1R0MA	1.0	±20%	140±25%	0.3	75
ML2012H2R2MA	2.2	±20%	224±25%	0.22	50
ML2012H3R3MA	3.3	±20%	240±25%	0.2	35
ML2012H4R7MA	4.7	±20%	300±25%	0.18	25

ML2012H-B Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	I _{rms} -A max.	SRF MHz Min.
ML2012H1R0MB	1.0	±20%	110±25%	1.15	75
ML2012H2R2MB	2.2	±20%	200±25%	0.95	50
ML2012H3R3MB	3.3	±20%	220±25%	0.8	35
ML2012H4R7MB	4.7	±20%	300±25%	0.75	25
ML2012H6R8MB	6.8	±20%	300±25%	0.6	25

ML2016H-B Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	I _{rms} -A max.	SRF MHz Min.
ML2016H1R0MB	1.0	±20%	100±25%	1.4	70
ML2016H2R2MB	2.2	±20%	155±25%	1.2	50
ML2016H3R3MB	3.3	±20%	200±25%	1.2	40
ML2016H4R7MB	4.7	±20%	255±25%	1.1	30

- ④ Inductance :4284A. or equivalent at 1MHz/0.05V.
 ⑤ DCR: YOKOGAWA TYPE7561, or equivalent.
 ⑥ I_{rms}: based on temperature rise 40°C (Ta=20°C) .

ML2520H-A Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	Isat-A max.	SRF MHz Min.
ML2520H1R0MA	1.0	±20%	80±25%	0.4	70
ML2520H2R2MA	2.2	±20%	120±25%	0.3	55
ML2520H3R3MA	3.3	±20%	144±25%	0.26	30
ML2520H4R7MA	4.7	±20%	180±25%	0.24	25

- ① Inductance :4284A. or equivalent at 1MHz/0.05V.
- ② DCR: YOKOGAWA TYPE7561, or equivalent.
- ③ Isat: based on the inductance drop from the initial value to be 50%.(4991B, test fixture 16200B+16192A, DC source 2400/2410).

ML2520H-B Electrical Characteristics

Part Number	Inductance uH	Tolerance	DCR max. (mΩ)	Irms-A max.	SRF MHz Min.
ML2520H1R0MB	1.0	±20%	60±25%	1.6	70
ML2520H2R2MB	2.2	±20%	100±25%	1.3	55
ML2520H3R3MB	3.3	±20%	140±25%	1.2	30
ML2520H4R7MB	4.7	±20%	180±25%	1.1	25
ML2520H6R8MB	6.8	±20%	220±25%	1.0	25

- ① Inductance :4284A. or equivalent at 1MHz/0.05V.
- ② DCR: YOKOGAWA TYPE7561, or equivalent.
- ③ Irms: based on temperature rise 40℃ (Ta=20℃) .

ML3216P Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (%)	DCR max. (Ω)	Freq./voltage (MHz/mV)	Rated Current(mA)max	SRF min. (MHz)
ML3216P47NMT	0.047	±20	0.15	1MHz/50mV	450	320
ML3216P56NMT	0.056	±20	0.15	1MHz/50mV	450	320
ML3216P68NMT	0.068	±20	0.20	1MHz/50mV	450	280
ML3216P82NMT	0.082	±20	0.20	1MHz/50mV	450	280
ML3216PR10MT	0.10	±20	0.20	1MHz/50mV	350	235
ML3216PR12MT	0.12	±20	0.20	1MHz/50mV	350	220
ML3216PR15MT	0.15	±20	0.20	1MHz/50mV	350	200
ML3216PR18MT	0.18	±20	0.20	1MHz/50mV	350	185
ML3216PR22MT	0.22	±20	0.20	1MHz/50mV	350	170
ML3216PR27MT	0.27	±20	0.20	1MHz/50mV	350	150
ML3216PR33MT	0.33	±20	0.20	1MHz/50mV	350	145
ML3216PR39MT	0.39	±20	0.30	1MHz/50mV	220	135
ML3216PR47MT	0.47	±20	0.30	1MHz/50mV	220	125
ML3216PR56MT	0.56	±20	0.30	1MHz/50mV	220	115
ML3216PR68MT	0.68	±20	0.30	1MHz/50mV	220	105
ML3216PR82MT	0.82	±20	0.30	1MHz/50mV	220	100

All specifications are subject to change without notice.

ML3216P Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (%)	DCR max. (Ω)	Freq./voltage (MHz/mV)	Rated Current(mA)max	SRF min. (MHz)
ML3216P1R0MT	1.0	±20	0.20	1MHz/50mV	250	75
ML3216P1R2MT	1.2	±20	0.20	1MHz/50mV	250	65
ML3216P1R5MT	1.5	±20	0.25	1MHz/50mV	250	60
ML3216P1R8MT	1.8	±20	0.25	1MHz/50mV	250	55
ML3216P2R2MT	2.2	±20	0.30	1MHz/50mV	200	50
ML3216P2R7MT	2.7	±20	0.30	1MHz/50mV	200	45
ML3216P3R3MT	3.3	±20	0.30	1MHz/50mV	200	41
ML3216P3R9MT	3.9	±20	0.35	1MHz/50mV	150	38
ML3216P4R7MT	4.7	±20	0.35	1MHz/50mV	150	35
ML3216P5R6MT	5.6	±20	0.50	1MHz/50mV	100	32
ML3216P6R8MT	6.8	±20	0.50	1MHz/50mV	100	29
ML3216P8R2MT	8.2	±20	0.50	1MHz/50mV	100	26
ML3216P100MT	10	±20	0.50	1MHz/50mV	100	24
ML3216P120MT	12	±20	0.60	1MHz/50mV	100	22
ML3216P150MT	15	±20	0.80	1MHz/50mV	50	19
ML3216P180MT	18	±20	0.80	1MHz/50mV	50	18
ML3216P220MT	22	±20	1.00	1MHz/50mV	50	16
ML3216P270MT	27	±20	1.00	1MHz/50mV	50	14

• Test equipment

Inductance : HP4291A+16193A, or equivalent

Tolerance: M=±20%

SRF: HP8720C, or equivalent

Rdc: YOKOGAWA TYPE7561, or equivalent