

MLI0603H Series

Multilayer Chip Ceramic Inductors

FEATURES

- Monolithic structure for high reliability
- High self-resonant frequency
- Excellent solderability and high heat resistance
- Operate temperature range $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including self temp. rise)
- RoHS compliant



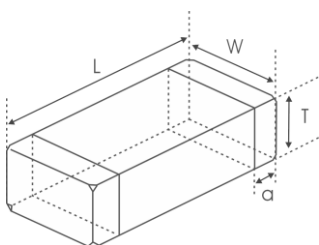
APPLICATIONS

- RF circuit in telecommunication and other equipments

Explanation of Part Number

<u>MLI</u> ①	<u>0603</u> ②	<u>H</u> ③	<u>10N</u> ④	<u>J</u> ⑤	<u>T</u> ⑥	<u>F</u> ⑦	
①	②		④		③	⑦	
Type		External Dimensions (L×W) (mm)		Material Code			
MLI	Chip Ceramic Inductor		0603 [0201] 0.6×0.3		H		
④		⑤		⑥			
Nominal Inductance		Inductance Tolerance		Packing			
Example	Nominal Value		B	$\pm 0.1\text{nH}$		T Tape & Reel	
3N9	3.9nH		C	$\pm 0.2\text{nH}$		⑦	
10N	10nH		S	$\pm 0.3\text{nH}$		Hazardous Substance	
R10	100nH		G	$\pm 2\%$		Free Products	
※R= decimal point, N=nH		H		$\pm 3\%$		F	
		J		$\pm 5\%$			

SHAPE AND DIMENSIONS



Type	L	W	T	a
MLI0603H	0.6 ± 0.03	0.3 ± 0.03	0.3 ± 0.03	0.12 ± 0.05
[0201]	$[.024 \pm .0012]$	$[.012 \pm .0012]$	$[.012 \pm .0012]$	$[.005 \pm .002]$

Unit: mm [inch]

Specification

Part Number	Inductance	Min. Quality Factor	L, Q Test Freq. L/Q	Typical Q @ Freq. (GHz)					Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
Units	nH	-	MHz	-					MHz	Ω	mA
Symbol	L	Q	Freq.	Q					S.R.F	DCR	I _r
MLI0603H-0N6□TF	0.6	13	500	>24	>32	>54	>57	>65	20000	0.06	850
MLI0603H-0N7□TF	0.7	13	500	>24	>32	>54	>57	>65	20000	0.06	800
MLI0603H-0N8□TF	0.8	13	500	>24	>32	>54	>57	>65	18000	0.07	800
MLI0603H-0N9□TF	0.9	13	500	>24	>32	>54	>57	>65	18000	0.07	750
MLI0603H-1N0□TF	1.0	13	500	24	32	54	57	65	17000	0.08	750
MLI0603H-1N1□TF	1.1	13	500	19	26	45	47	55	17000	0.10	750
MLI0603H-1N2□TF	1.2	13	500	19	25	43	44	52	17000	0.10	750
MLI0603H-1N3□TF	1.3	13	500	19	25	40	42	47	17000	0.12	600
MLI0603H-1N4□TF	1.4	13	500	19	24	39	41	47	16000	0.12	600
MLI0603H-1N5□TF	1.5	13	500	19	24	39	41	46	15000	0.12	600
MLI0603H-1N6□TF	1.6	13	500	19	24	39	41	46	15000	0.13	600
MLI0603H-1N7□TF	1.7	13	500	19	24	39	41	46	15000	0.15	600
MLI0603H-1N8□TF	1.8	13	500	19	24	39	41	46	15000	0.15	600
MLI0603H-1N9□TF	1.9	13	500	18	24	38	40	45	12500	0.15	600
MLI0603H-2N0□TF	2.0	13	500	17	24	38	39	44	12500	0.15	600
MLI0603H-2N1□TF	2.1	13	500	17	24	37	39	44	11000	0.15	600
MLI0603H-2N2□TF	2.2	13	500	17	24	38	40	43	11000	0.15	600
MLI0603H-2N3□TF	2.3	13	500	17	24	37	39	43	10000	0.20	500
MLI0603H-2N4□TF	2.4	13	500	17	23	36	38	42	10000	0.20	500
MLI0603H-2N5□TF	2.5	13	500	17	23	35	36	40	10000	0.20	500
MLI0603H-2N6□TF	2.6	13	500	17	22	34	35	39	10000	0.20	500
MLI0603H-2N7□TF	2.7	13	500	17	22	34	35	39	10000	0.20	500
MLI0603H-2N8□TF	2.8	13	500	17	22	34	35	39	9500	0.20	500
MLI0603H-2N9□TF	2.9	13	500	17	22	34	35	39	9500	0.20	500
MLI0603H-3N0□TF	3.0	13	500	17	22	34	35	39	9500	0.25	450
MLI0603H-3N1□TF	3.1	13	500	17	22	34	35	39	8500	0.25	450
MLI0603H-3N2□TF	3.2	13	500	17	22	33	35	39	8200	0.25	450
MLI0603H-3N3□TF	3.3	13	500	18	23	34	36	40	8100	0.25	450
MLI0603H-3N4□TF	3.4	13	500	17	23	33	35	39	8000	0.25	450
MLI0603H-3N5□TF	3.5	13	500	17	23	33	35	39	7900	0.25	450
MLI0603H-3N6□TF	3.6	13	500	16	23	33	35	39	7700	0.30	400
MLI0603H-3N7□TF	3.7	13	500	16	23	33	35	38	7600	0.30	400
MLI0603H-3N8□TF	3.8	13	500	16	22	33	35	38	7500	0.30	400
MLI0603H-3N9□TF	3.9	13	500	16	22	33	35	38	7400	0.30	400
MLI0603H-4N3□TF	4.3	13	500	16	21	32	34	37	6800	0.40	350
MLI0603H-4N7□TF	4.7	13	500	16	22	33	35	38	6200	0.40	350
MLI0603H-5N1□TF	5.1	13	500	17	22	34	36	38	5900	0.40	350
MLI0603H-5N6□TF	5.6	13	500	16	21	33	34	37	5500	0.40	350
MLI0603H-6N2□TF	6.2	13	500	18	23	34	35	37	5100	0.48	300
MLI0603H-6N8□TF	6.8	13	500	17	22	32	33	35	5500	0.50	300
MLI0603H-7N5□TF	7.5	13	500	16	21	31	33	34	4700	0.50	300
MLI0603H-8N2□TF	8.2	13	500	16	21	31	32	34	4300	0.56	250

Part Number	Inductance	Min. Quality Factor	L, Q Test Freq. L/Q	Typical Q @ Freq. (GHz)					Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
Units	nH	-	MHz	-					MHz	Ω	mA
Symbol	L	Q	Freq.	Q					S.R.F	DCR	I _r
MLI0603H-9N1□TF	9.1	13	500	16	20	30	31	32	4100	0.70	250
MLI0603H-10N□TF	10	13	500	16	20	28	29	31	3800	0.70	250
MLI0603H-12N□TF	12	13	500	16	20	27	28	28	3400	0.70	250
MLI0603H-15N□TF	15	13	500	15	19	24	24	23	2600	0.70	250
MLI0603H-18N□TF	18	13	500	15	19	23	24	22	2300	0.80	200
MLI0603H-22N□TF	22	13	500	15	19	22	23	20	2200	1.20	150
MLI0603H-27N□TF	27	13	500	15	19	15	13	8	2000	1.60	140
MLI0603H-33N□TF	33	11	300	14	15	8	5	-	2000	2.20	120
MLI0603H-39N□TF	39	11	300	14	15	6	-	-	1600	2.30	120
MLI0603H-47N□TF	47	11	300	14	15	-	-	-	1500	2.60	100
MLI0603H-56N□TF	56	11	300	13	13	-	-	-	1400	2.80	100
MLI0603H-68N□TF	68	11	300	13	11	-	-	-	1200	3.20	100
MLI0603H-82N□TF	82	10	300	12	10	-	-	-	1100	3.80	100
MLI0603H-R10□TF	100	10	300	12	10	-	-	-	1000	4.00	80
MLI0603H-R12□TF	120	9	300	12	8	-	-	-	1000	5.00	80

※ □: Please specify the inductance tolerance. For $L \leq 4.2\text{nH}$, choose $B = \pm 0.1\text{nH}$, $C = \pm 0.2\text{nH}$ or $S = \pm 0.3\text{nH}$; For $4.2\text{nH} < L < 5.6\text{nH}$, choose, $H = \pm 3\%$, $J = \pm 5\%$. or $S = \pm 0.3\text{nH}$; For $L \geq 5.6\text{nH}$, choose, $H = \pm 3\%$, $J = \pm 5\%$

※: Please refer to "Measurement Notice For RF Inductors".